



Northwest Training and Testing

Final Environmental Impact Statement/
Overseas Environmental Impact Statement

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Northwest Training and Testing Activities Final Environmental Impact Statement/ Overseas Environmental Impact Statement



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APPENDIX D AIR QUALITY EXAMPLE CALCULATIONS

This appendix discusses emission factor development, calculations, and assumptions used in the air quality analyses presented in Section 3.2 (Air Quality) of the Environmental Impact Statement (EIS)/Overseas EIS (OEIS).

D.1 SURFACE OPERATIONS EMISSIONS

Surface operations are activities associated with vessel movements. Fleet training activities use a variety of marine vessels, including cruisers, destroyers, frigates, carriers, submarines, amphibious vessels, and small boats. Testing activities use a variety of marine vessels, including various testing support vessels, work boats, torpedo recovery vessels, unmanned surface vehicles, and small boats. These vessels use diverse propulsion methods, including marine outboard engines, diesel engines, and gas turbines.

D.1.1 MARINE OUTBOARD ENGINES

The United States (U.S.) Environmental Protection Agency (USEPA) has published emissions factors for air pollutants produced by several types of two-stroke and four-stroke outboard engines.

Representative emission factors for two-stroke and four-stroke engines of various horsepower are presented in Table D-1.

Table D-1: United States Environmental Protection Agency Emission Factors for Outboard Engines

Engine		Emissions Factor (grams/hp-hr.)			
Type	Rating (horsepower)	NO _x	CO	VOC	PM
2-Stroke	16–25	4.32	79.32	18.69	0.26
	50–100	4.32	79.32	15.55	0.22
4-Stroke	16–25	5.82	166.46	4.65	0.06
	60–100	5.82	127.94	3.53	0.06

Notes: CO = carbon monoxide, hp = horsepower, hr. = hour, NO_x = nitrogen oxides, VOC = volatile organic compounds, PM = Particulate Matter

Source: U.S. Environmental Protection Agency, 2010, *Exhaust Emissions Factors for Non-Road Engine Modeling-Spark Ignition*. Report No. NR-010f; Office of Mobile Sources, Assessment and Modeling Division, EPA-420-R-10-019.

Emissions for surface craft using outboard engines were calculated using USEPA AP-42 factors, multiplied by the engine horsepower and hours of operation.

$$Emissions = HP \times HR/YR \times EF \times ENG$$

Where:

Emissions = annual surface craft emissions

HP = horsepower (reflective of a particular load factor/engine power setting)

HR/YR = hours per year

EF = air pollutant emission factor for specific engine type

ENG = number of engines per vessel

To obtain the total criteria pollutant emissions for the Proposed Action, emissions were calculated for each training or testing activity, type of surface vessel, and criteria pollutant. These individual estimates of emissions, in units of tons per year, were then summed by criteria pollutant to obtain the aggregate emissions for surface vessel emissions activities.

D.1.2 DIESEL ENGINES

Limited data were available for large marine diesel engines. Therefore, USEPA AP-42 emissions factors for industrial reciprocating engines were used to calculate diesel engine emissions. Other sources of vessel emissions factors included data presented in John J. McMullen Associates, as referenced in previous U.S. Department of the Navy (Navy) EIS/OEIS documentation. Diesel was assumed to be the primary fuel to ensure a conservative estimate. Calculation methods similar to those described for marine outboard engines were used to obtain emissions estimates for diesel engines.

$$\text{Emissions} = \text{HP} \times \text{HR/YR} \times \text{EF} \times \text{ENG}$$

Where:

Emissions = annual surface craft emissions

HP = horsepower (reflective of a particular load factor/engine power setting)

HR/YR = hours per year

EF = air pollutant emission factor for specific engine type

ENG = number of engines per vessel

Diesel engine emission factors were multiplied by the engine horsepower and annual hours of operation to calculate the pollutant emissions per year.

D.2 AIR OPERATIONS EMISSIONS

Fleet training and Naval Air Systems Command testing use various aircraft, including the F/A-18, P-3, SH-60B, MH-60S, and Lear Jet. Research, development, test, and evaluation (RDT&E) air operations use various aircraft, including the 1UH-1N, SH-60B, and MH-60S. Aircraft operations of concern are those that occur from ground level up to 3,000 feet (ft.) (914 meters [m]) above ground level (AGL). The 3,000 ft. (914 m) AGL altitude was assumed to be the ceiling of the mixing zone (known as the atmospheric mixing height) above which any pollutant generated would not contribute to increased pollutant concentrations at ground level. Pollutants emitted by aircraft above 3,000 ft. (914 m) AGL are excluded from the analysis of compliance with National Ambient Air Quality Standards. The pollutant emission rate is a function of the aircraft engine's fuel flow rate and efficiency. Emissions for one complete training activity for a particular aircraft are calculated by knowing the specific engine pollutant emission factors for each mode of operation.

For this EIS/OEIS, emission factors for most military engines were obtained from the Navy's Aircraft Environmental Support Office memoranda and the Federal Aviation Administration's Emissions and Dispersion Modeling System model). For those aircraft for which engine data were unavailable, an applicable surrogate was used. Using these data, as well as number of sorties, pollutant emissions for each aircraft were calculated by applying the equation below.

$$\text{Emissions} = T \times N \times \text{FF} \times \text{EF} \times \text{ENG} \times \text{CF}$$

Where:

Emissions = annual aircraft emissions (pounds [lb.]) (for EF in lb./1,000 gallons [gal.] fuel)

T = time at a specified power setting (hours [hr.]/activity).

N = Number of aircraft operations per year for each type of aircraft

FF = fuel flow at a specified power setting (gal./hr./engine)

EF = pollutant emission factor by engine type and power setting (lb./1,000 gal. of fuel used)

ENG = number of engines per aircraft
CF = conversion factor (0.001)

D.3 ORDNANCE AND MUNITIONS EMISSIONS

Available emissions factors (AP-42, *Compilation of Air Pollutant Emission Factors*) were used. These factors were then multiplied by the net weight of the explosive and the number of items that were used per year. This calculation provides estimates of annual emissions.

$$\text{Emissions} = \text{EXP/YR} \times \text{EF} \times \text{Net Wt}$$

Where:

Emissions = annual ordnance emissions
EXP/YR = number of explosives, propellants, and pyrotechnics items used per year
EF = air pollutant emissions factor per item
Net Wt = net weight of explosive, propellant, or pyrotechnics per ordnance item

D.4 EMISSIONS ESTIMATES SPREADSHEETS

The following spreadsheets are examples of the emissions calculations for aircraft, vessels, and ordnance. Tables D-2, D-3, and D-4 provide example calculations for the air quality calculations for vessels, aircraft, and ordnance, respectively. The examples provided are for baseline training within the Northwest Range Complex. These examples are representative of calculation spreadsheets developed for each range or testing area and of the calculations developed for each alternative analyzed in this EIS/OEIS.

Table D-2: Air Emissions of Vessels during Training, No Action Alternative, Northwest Training and Testing

Air Quality Control Region	Activity	Vessel	Annual Hours	CRITERIA AIR POLLUTANTS (pounds/year)																			
				Below 3,000 feet agl					Below 3,000 feet agl - State					Below 3,000 feet agl - Federal					Below 3,000 feet agl - International				
				CO	NO _x	VOC	SO _x	PM ₁₀	CO	NO _x	VOC	SO _x	PM ₁₀	CO	NO _x	VOC	SO _x	PM ₁₀	CO	NO _x	VOC	SO _x	PM ₁₀
TRAINING																							
Northwest Air Basin, Washington	Anti-Surface Warfare																						
	Gunnery Exercise (Surface-to-Surface) Boat	DDG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		FFG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		AOE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Olympic Region Air Basin, Washington	Anti-Air Warfare																						
	Gunnery Exercise (Surface-to-Air)	DDG	46.08	2,458	1,240	181	489	65	0	0	0	0	0	0	0	0	0	2,458	1,240	181	489	65	
		FFG	136.32	8,182	5,324	793	1,096	293	0	0	0	0	0	0	0	0	0	8,182	5,324	793	1,096	293	
		AOE	11.52	38	227	29	682	137	0	0	0	0	0	0	0	0	0	38	227	29	682	137	
	Anti-Surface Warfare																						
	Gunnery Exercise (Surface-to-Surface) Ship	DDG	20.7	2,208	1,114	162	439	58	0	0	0	0	0	0	0	0	0	2,208	1,114	162	439	58	
	FFG	63	7,563	4,921	733	1,013	271	0	0	0	0	0	0	0	0	0	7,563	4,921	733	1,013	271		
	AOE	1.8	12	71	9	213	43	0	0	0	0	0	0	0	0	0	12	71	9	213	43		
Northwest Oregon Intrastate, Oregon	Anti-Air Warfare																						
	Gunnery Exercise (Surface-to-Air)	DDG	11.52	614	310	45	122	16	0	0	0	0	0	0	0	0	614	310	45	122	16		
		FFG	34.08	2,045	1,331	198	274	73	0	0	0	0	0	0	0	0	2,045	1,331	198	274	73		
		AOE	2.88	10	57	7	171	34	0	0	0	0	0	0	0	0	10	57	7	171	34		
	Anti-Surface Warfare																						
	Gunnery Exercise (Surface-to-Surface) Ship	DDG	12.42	1,325	669	97	264	35	0	0	0	0	0	0	0	0	1,325	669	97	264	35		
	FFG	37.8	4,538	2,953	440	608	163	0	0	0	0	0	0	0	0	4,538	2,953	440	608	163			
	AOE	1.08	7	43	5	128	26	0	0	0	0	0	0	0	0	7	43	5	128	26			
Portland Intrastate, Oregon	Anti-Air Warfare																						
	Gunnery Exercise (Surface-to-Air)	DDG	11.52	614	310	45	122	16	0	0	0	0	0	0	0	614	310	45	122	16			
		FFG	34.08	2,045	1,331	198	274	73	0	0	0	0	0	0	0	2,045	1,331	198	274	73			
		AOE	2.88	10	57	7	171	34	0	0	0	0	0	0	0	10	57	7	171	34			
	Anti-Surface Warfare																						
	Gunnery Exercise (Surface-to-Surface) Ship	DDG	12.42	1,325	669	97	264	35	0	0	0	0	0	0	0	1,325	669	97	264	35			
	FFG	37.8	4,538	2,953	440	608	163	0	0	0	0	0	0	0	4,538	2,953	440	608	163				
	AOE	1.08	7	43	5	128	26	0	0	0	0	0	0	0	7	43	5	128	26				
Southwest Oregon Intrastate, Oregon	Anti-Air Warfare																						
	Gunnery Exercise (Surface-to-Air)	DDG	11.52	614	310	45	122	16	0	0	0	0	0	0	0	614	310	45	122	16			
		FFG	34.08	2,045	1,331	198	274	73	0	0	0	0	0	0	0	2,045	1,331	198	274	73			
		AOE	2.88	10	57	7	171	34	0	0	0	0	0	0	0	10	57	7	171	34			
	Anti-Surface Warfare																						
	Ship	DDG	12.42	1,325	669	97	264	35	0	0	0	0	0	0	0	1,325	669	97	264	35			
	FFG	37.8	4,538	2,953	440	608	163	0	0	0	0	0	0	0	4,538	2,953	440	608	163				
	AOE	1.08	7	43	5	128	26	0	0	0	0	0	0	0	7	43	5	128	26				
Northern California Air Basin, California	Anti-Air Warfare																						
	Gunnery Exercise (Surface-to-Air)	DDG	11.52	614	310	45	122	16	0	0	0	0	0	0	0	614	310	45	122	16			
		FFG	34.08	2,045	1,331	198	274	73	0	0	0	0	0	0	0	2,045	1,331	198	274	73			
		AOE	2.88	10	57	7	171	34	0	0	0	0	0	0	0	10	57	7	171	34			
	Anti-Surface Warfare																						
	Ship	DDG	12.42	1,325	669	97	264	35	0	0	0	0	0	0	0	1,325	669	97	264	35			
	FFG	37.8	4,538	2,953	440	608	163	0	0	0	0	0	0	0	4,538	2,953	440	608	163				
	AOE	1.08	7	43	5	128	26	0	0	0	0	0	0	0	7	43	5	128	26				
TRAINING SUBTOTAL (pounds)				54,617	34,344	5,081	10,197	2,253	0	0	0	0	0	0	0	54,617	34,344	5,081	10,197	2,253			
TRAINING SUBTOTAL (tons)				27.31	17.17	2.54	5.10	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.3	17.2	2.5	5.1	1.1			
TRAINING SUBTOTAL (metric tons)				24.83	15.61	2.31	4.63	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.83	15.61	2.31	4.63	1.02			

NOTES: DDG - Destroyer; FFG - Frigate; AOE - Fast Combat Support Ship; CO - carbon monoxide; NO_x - nitrogen oxides; VOC - volatile organic compounds; SO_x - sulfur oxides; PM₁₀ - particulate matter < 10 microns; ft - feet; agl - above ground level.

Table D-3: Emissions of Aircraft during Training, No Action Alternative, Northwest Training and Testing

Air Quality Control Region	Activity	Aircraft	Annual Hours	CRITERIA AIR POLLUTANTS (pounds/year)																			
				Below 3,000 feet agl					Below 3,000 feet agl - State					Below 3,000 feet agl - Federal					Below 3,000 feet agl - International				
				CO	NO _x	VOC	SO _x	PM ₁₀	CO	NO _x	VOC	SO _x	PM ₁₀	CO	NO _x	VOC	SO _x	PM ₁₀	CO	NO _x	VOC	SO _x	PM ₁₀
TRAINING																							
Olympic Region Air Basin, Washington	Anti-Air Warfare																						
	Air Combat Maneuver	EA-6B	119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		F-16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Missile Exercise (Air-to-Air)	EA-6B	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Missile Exercise (Surface-to-Air)	P-3C	5	28	130	6	6	61	0.3	1.3	0.1	0.1	0.6	0.3	1.3	0.1	0.1	0.6	0.3	1.3	0.1	0.1	0.6
		Learjet	5	77	20	15	1	4	0.8	0.2	0.1	0.0	0.0	0.8	0.2	0.1	0.0	0.0	0.8	0.2	0.1	0.0	0.0
	Anti-Surface Warfare																						
	Missile Exercise (Air-to-Surface)	P-3C	1	11	52	3	2	24	0	0	0	0	0	0	0	0	0	0	11	52	3	2	24
		SH-60B	2	17	18	2	1	11	0	0	0	0	0	0	0	0	0	0	17	18	2	1	11
		S-3B	0	14	4	2	0	3	0	0	0	0	0	0	0	0	0	0	14	4	2	0	3
Northwest Oregon Intrastate, Oregon	Anti-Air Warfare																						
	Missile Exercise (Air-to-Air)	EA-6B	4.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Missile Exercise (Surface-to-Air)	P-3C	1	7	33	2	2	15	0.1	0.3	0.0	0.0	0.2	0.1	0.3	0.0	0.0	0.2	0.1	0.3	0.0	0.0	0.2
	Learjet	1	19	5	4	0	1	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	
Portland Intrastate, Oregon	Anti-Air Warfare																						
	Missile Exercise (Air-to-Air)	EA-6B	4.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0
	Missile Exercise (Surface-to-Air)	P-3C	1	7	33	2	2	15	0.1	0.3	0.0	0.0	0.2	0.1	0.3	0.0	0.0	0.2	0.1	0.3	0.0	0.0	0.2
	Learjet	1	19	5	4	0	1	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	
Southwest Oregon Intrastate, Oregon	Anti-Air Warfare																						
	Missile Exercise (Air-to-Air)	EA-6B	4.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0
	Missile Exercise (Surface-to-Air)	P-3C	1	7	33	2	2	15	0.1	0.3	0.0	0.0	0.2	0.1	0.3	0.0	0.0	0.2	0.1	0.3	0.0	0.0	0.2
	Learjet	1	19	5	4	0	1	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	
Northern California Air Basin, California	Anti-Air Warfare																						
	Missile Exercise (Air-to-Air)	EA-6B	4.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0
	Missile Exercise (Surface-to-Air)	P-3C	1	7	33	2	2	15	0.1	0.3	0.0	0.0	0.2	0.1	0.3	0.0	0.0	0.2	0.1	0.3	0.0	0.0	0.2
	Learjet	1	19	5	4	0	1	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	
TRAINING SUBTOTAL (pounds)				251	374	48	19	171	2	3	0	0	1.3	2	3	0	0	1.3	44	76	6	4	41
TRAINING SUBTOTAL (tons)				0.13	0.19	0.02	0.01	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.00	0.00	0.02
TRAINING SUBTOTAL (metric tons)				0.11	0.17	0.02	0.01	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.02

NOTES: CO - carbon monoxide; NO_x - nitrogen oxides; VOC - volatile organic compounds; SO_x - sulfur oxides; PM₁₀ - particulate matter < 10 microns; agl - above ground level.

Table D-4: Air Emissions of Ordnance during Training, No Action Alternative, Northwest Training and Testing

Air Quality Control Region	Activity	Item	#	NEW (pounds)		CRITERIA AIR POLLUTANTS (pounds/year)																			
				/unit	Total	Below 3,000 feet agl					Below 3,000 feet agl - State					Below 3,000 feet agl - federal					Below 3,000 feet agl - International				
						CO	NO _x	VOC	SO _x	PM ₁₀	CO	NO _x	VOC	SO _x	PM ₁₀	CO	NO _x	VOC	SO _x	PM ₁₀	CO	NO _x	VOC	SO _x	PM ₁₀
Olympic Region Air Basin, Washington	Anti-Air Warfare																								
	Gunnery Exercise (Surface-to-Air)	Large-Cal Projectile	1,210	8.5	10,282	206	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
		Medium-Cal Projectile	6,400	1.6	10,240	205	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	Anti-Surface Warfare																								
	Gunnery Exercise (Surface-to-Surface) Ship	Large-Cal Projectile	720	8.5	6,120	122	220	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
		Medium-Cal Projectile	8,190	1.6	13,104	262	472	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	Small-Cal Projectile	29,250	0.007	205	51	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Puget Sound Air Basin, Washington	Anti-Air Warfare																								
	Gunnery Exercise (Surface-to-Air)	Large-Cal Projectile	302	8.5	2,570	51	31	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
		Medium-Cal Projectile	1,600	1.6	2,560	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	Anti-Surface Warfare																								
	Gunnery Exercise (Surface-to-Surface) Ship	Large-Cal Projectile	432	8.5	3,672	73	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
		Medium-Cal Projectile	4,914	1.6	7,862	157	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	Small-Cal Projectile	17,550	0.007	123	31	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Northwest Oregon Intrastate, Oregon	Anti-Air Warfare																								
	Gunnery Exercise (Surface-to-Air)	Large-Cal Projectile	302	8.5	2,570	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
		Medium-Cal Projectile	1,600	1.6	2,560	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	Anti-Surface Warfare																								
	Gunnery Exercise (Surface-to-Surface) Ship	Large-Cal Projectile	432	8.5	3,672	73	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
		Medium-Cal Projectile	4,914	1.6	7,862	157	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	Small-Cal Projectile	17,550	0.007	123	31	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Portland Intrastate, Oregon	Anti-Air Warfare																								
	Gunnery Exercise (Surface-to-Air)	Large-Cal Projectile	302	8.5	2,570	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
		Medium-Cal Projectile	1,600	1.6	2,560	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	Anti-Surface Warfare																								
	Gunnery Exercise (Surface-to-Surface) Ship	Large-Cal Projectile	432	8.5	3,672	73	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
		Medium-Cal Projectile	4,914	1.6	7,862	157	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	Small-Cal Projectile	17,550	0.007	123	31	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Southwest Oregon Intrastate, Oregon	Anti-Air Warfare																								
	Gunnery Exercise (Surface-to-Air)	Large-Cal Projectile	302	8.5	2,570	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
		Medium-Cal Projectile	1,600	1.6	2,560	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	Anti-Surface Warfare																								
	Gunnery Exercise (Surface-to-Surface) Ship	Large-Cal Projectile	432	8.5	3,672	73	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
		Medium-Cal Projectile	4,914	1.6	7,862	157	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	Small-Cal Projectile	17,550	0.007	123	31	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Northern California Air Basin, California	Anti-Air Warfare																								
	Gunnery Exercise (Surface-to-Air)	Large-Cal Projectile	302	8.5	2,570	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
		Medium-Cal Projectile	1,600	1.6	2,560	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	Anti-Surface Warfare																								
	Gunnery Exercise (Surface-to-Surface) Ship	Large-Cal Projectile	432	8.5	3,672	73	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
		Medium-Cal Projectile	4,914	1.6	7,862	157	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	Small-Cal Projectile	17,550	0.007	123	31	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
TRAINING SUBTOTAL (pounds)					2,666	736	0	0	153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153
TRAINING SUBTOTAL (tons)					1.3	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
TRAINING SUBTOTAL (metric tons)					1.2	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

NOTES: CO - carbon monoxide; NO_x - nitrogen oxides; VOC - volatile organic compounds; SO_x - sulfur oxides; PM₁₀ - particulate matter < 10 microns; agl - above ground level.

D.5 EXAMPLE RECORD OF NON-APPLICABILITY

This appendix provides an example of the documentation that will be prepared for each state potentially impacted by the Proposed Action. The example document includes a Record of Non-Applicability memorandum, a standard form to show Clean Air Act conformity, and sample conformity analyses.

MEMORANDUM FOR THE RECORD

From: _____

Subj: Conformity Analysis for Northwest Training and Testing (NWTT) Environmental Impact Statement/Overseas Environmental Impact Statement – Operations in State of Washington Waters

Ref: (a) 40 CFR, Part 93, Subpart B: Determining Conformity of General Federal Actions to State or Federal Implementation Plans

Encl: (1) Record of Non-Applicability for Northwest Training and Testing in State of Washington Waters

1. Enclosure (1) is a Record of Non-Applicability for those activities associated with Pacific Fleet training and testing activities that are expected to occur annually in State of Washington waters. The Proposed Action would have no new emissions of criteria air pollutants in air quality non-attainment or maintenance areas.

2. If there are any questions or if additional information is needed, please call _____ at _____.

Name

Title

Figure D-1: Sample Record of Non-Applicability Memorandum

NAVY RECORD OF NON-APPLICABILITY FOR CLEAN AIR ACT CONFORMITY

The Proposed Action falls under the Record of Non-Applicability (RONA) category and is documented with this RONA.

Proposed Action: Northwest Training and Testing

Action Proponents: Commander, Pacific Fleet
Naval Sea Systems Command
Naval Air Systems Command

Proposed Action Name: Northwest Training and Testing (NWTT) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS)

Proposed Action and Emissions Summary:

The Proposed Action consists of training and testing activities in the waters of the States of Alaska, Washington, Oregon, and California, as well as in federal and international waters. The Proposed Action would result in no increases in emissions of criteria air pollutants in air quality non-attainment or maintenance areas. Accordingly, the Proposed Action is exempt from the provisions of 40 CFR, Part 93, Subpart B.

Affected Air Basins: Northwest Washington Air Quality Control Region, Puget Sound Air Quality Control Region

Date RONA prepared: _____

RONA prepared by: Naval Facilities Engineering Command, Northwest

Attainment Area Status and Emissions Evaluation Conclusion:

To the best of my knowledge and belief, the information contained within this General Conformity Applicability Analysis is correct and accurate. By signing this statement, I am in agreement with the finding that the total of all reasonably foreseeable direct and indirect emissions that will result from this action is below the de minimis threshold set forth in 40 CFR 93.153. Accordingly, it is my determination that this action conforms to the applicable State Implementation Plan (SIP).

RONA Approval:

Signature: _____

Name/Rank: _____ Date: _____

Position: _____ Commanding Officer: _____ Activity: _____

Enclosure 1

Figure D-2: Sample Record of Non-Applicability Form

Appendix E: Training and Testing Activities Matrices

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APPENDIX E TRAINING AND TESTING ACTIVITIES MATRICES

This appendix contains tables that help to describe each of the training and testing activities in terms of their component parts (Table E-1 and Table E-2) and the stressors associated with each activity (Table E-3 and Table E-4). In addition, Table E-5 provides all of the resources analyzed in the Northwest Training and Testing (NWTT) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) and indicates the stressors that could impact each resource area. For a complete explanation of the stressors used in the analysis, see Section 3.0.5.3 (Identification of Stressors for Analysis) in the NWTT EIS/OEIS.

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E.1 COMPONENTS OF TRAINING ACTIVITIES

Table E-1: Components of Training Activities

Training Activity	Electromagnetic Devices	Aircraft Carriers	Surface Combatants	Amphibious Warfare Ships	Support Craft	Submarines	Towed Devices	Unmanned Surface or Underwater Vehicles	Non-Explosive Small-Caliber Projectiles	Non-Explosive Medium-Caliber Projectiles	Non-Explosive Large-Caliber Projectiles	Non-Explosive Bombs	Non-Explosive Missiles	Non-Explosive Torpedoes	Aircraft Stores or Ballast	Non-Explosive Rockets	Non-Explosive Sonobuoys	Parachutes	Chaff	Flares	High-Explosive Munitions	Targets	Seafloor Devices	Fixed-Wing Aircraft	Rotary-Wing Aircraft	Unmanned Aircraft Systems	Fiber Optic Wire	Guidance Wire
ANTI-AIR WARFARE (AAW)																												
Air Combat Maneuver (ACM)																									✓			
Missile Exercise (Air-to-Air)																					✓	✓			✓		✓	
Gunnery Exercise (Surface-to-Air)		✓	✓							✓	✓												✓	✓		✓		
Missile Exercise (Surface-to-Air)		✓	✓										✓									✓	✓		✓		✓	
ANTI-SURFACE WARFARE (ASUW)																												
Gunnery Exercise (Surface-to-Surface) Ship			✓						✓	✓												✓	✓					
Missile Exercise (Air-to-Surface)													✓									✓	✓		✓	✓		
High-Speed Anti-Radiation Missile (HARM) Exercise (Non-firing)																									✓			
Bombing Exercise (Air-to-Surface)												✓										✓	✓		✓			
Sinking Exercise (SINKEX) ¹			✓			✓																✓	✓		✓	✓		✓
ANTI-SUBMARINE WARFARE (ASW)																												
Tracking Exercise – Submarine						✓	✓	✓															✓					
Tracking Exercise – Surface			✓			✓	✓	✓									✓	✓					✓					
Tracking Exercise – Helicopter						✓		✓									✓	✓					✓			✓		
Tracking Exercise – Maritime Patrol Aircraft						✓		✓						✓			✓	✓					✓		✓			
Tracking Exercise – Maritime Patrol (Extended Echo Ranging Sonobuoys)						✓		✓				✓					✓	✓				✓		✓				
ELECTRONIC WARFARE (EW)																												
Electronic Warfare Operations (EW Ops)		✓	✓			✓																			✓	✓		
MINE WARFARE (MIW)																												
Mine Neutralization – Explosive Ordnance Disposal (EOD)					✓																	✓						
Submarine Mine Exercise						✓																✓		✓				
Civilian Port Defense	✓				✓		✓	✓														✓				✓		✓

¹ SINKEX is proposed for the No Action Alternative only.

Table E-1: Components of Training Activities (continued)

Training Activity	Electromagnetic Devices	Aircraft Carriers	Surface Combatants	Amphibious Warfare Ships	Support Craft	Submarines	Towed Devices	Unmanned Surface or Underwater Vehicles	Non-Explosive Small-Caliber Projectiles	Non-Explosive Medium-Caliber Projectiles	Non-Explosive Large-Caliber Projectiles	Non-Explosive Bombs	Non-Explosive Missiles	Non-Explosive Torpedoes	Aircraft Stores or Ballast	Non-Explosive Rockets	Non-Explosive Sonobuoys	Parachutes	Chaff	Flares	High-Explosive Munitions	Targets	Seafloor Devices	Fixed-Wing Aircraft	Rotary-Wing Aircraft	Unmanned Aircraft Systems	Fiber Optic Wire	Guidance Wire	
NAVAL SPECIAL WARFARE (NSW)																													
Personnel Insertion/Extraction – Submarine					✓	✓																							
Personnel Insertion/Extraction – Non-submarine					✓																				✓	✓			
OTHER TRAINING EXERCISES																													
Maritime Security Operations			✓		✓	✓			✓																				
Precision Anchoring			✓																				✓						
Small Boat Attack					✓				Note 1	Note 1																			
Intelligence, Surveillance, Reconnaissance (ISR)																									✓				
Search and Rescue																										✓			
Surface Ship Sonar Maintenance			✓																										
Submarine Sonar Maintenance						✓																							

Note 1: "Blank" rounds only

E.2 COMPONENTS OF TESTING ACTIVITIES

Table E-2: Components of Testing Activities

Testing Activity	Electromagnetic Devices	Aircraft Carriers	Surface Combatants	Amphibious Warfare Ships	Support Craft	Submarines	Towed Devices	Unmanned Surface or Underwater Vehicles	Non-Explosive Small-Caliber Projectiles	Non-Explosive Medium-Caliber Projectiles	Non-Explosive Large-Caliber Projectiles	Non-Explosive Bombs	Non-Explosive Missiles	Non-Explosive Torpedoes	Aircraft Stores or Ballast	Non-Explosive Rockets	Non-Explosive Sonobuoys	Parachutes	Chaff	Flares	High-Explosive Munitions	Targets	Seafloor Devices	Fixed-Wing Aircraft	Rotary-Wing Aircraft	Unmanned Aircraft Systems	Fiber Optic Wire	Guidance Wire	
Naval Sea Systems Command																													
TORPEDO TESTING																													
Torpedo Non-Explosive Testing			✓		✓	✓								✓			✓						✓					✓	✓
AUTONOMOUS AND NON-AUTONOMOUS VEHICLES																													
Unmanned Underwater Vehicle Testing			✓		✓			✓															✓	✓				✓	✓
Unmanned Aircraft System					✓																					✓			
Unmanned Surface Vehicle			✓		✓			✓															✓	✓					
FLEET TRAINING/SUPPORT																													
Cold Water Training					✓																								
Post-Refit Sea Trial					✓	✓																							
Anti-Submarine Warfare (ASW) Testing			✓			✓	✓										✓	✓					✓	✓		✓	✓		
MAINTENANCE AND MISCELLANEOUS																													
Side Scan/Multibeam Sonar			✓		✓		✓	✓															✓	✓					
Non-Acoustic Tests					✓		✓	✓																					
ACOUSTIC COMPONENT TEST																													
Countermeasures Testing			✓		✓	✓	✓	✓															✓						
Acoustic Test Facility																													
Pierside Integrated Swimmer Defense					✓																								
SYSTEM, SUBSYSTEM, AND COMPONENT TESTING																													
Pierside Acoustic Testing					✓		✓	✓															✓	✓					
Performance Testing At Sea					✓		✓	✓															✓	✓					
Development Training and Testing					✓		✓	✓															✓	✓					
PROOF-OF-CONCEPT TESTING																													
Proof-of-Concept Testing					✓		✓	✓															✓	✓					

Table E-2: Components of Testing Activities (continued)

Testing Activity	Electromagnetic Devices	Aircraft Carriers	Surface Combatants	Amphibious Warfare Ships	Support Craft	Submarines	Towed Devices	Unmanned Surface or Underwater Vehicles	Non-Explosive Small-Caliber Projectiles	Non-Explosive Medium-Caliber Projectiles	Non-Explosive Large-Caliber Projectiles	Non-Explosive Bombs	Non-Explosive Missiles	Non-Explosive Torpedoes	Aircraft Stores or Ballast	Non-Explosive Rockets	Non-Explosive Sonobuoys	Parachutes	Chaff	Flares	High-Explosive Munitions	Targets	Seafloor Devices	Fixed-Wing Aircraft	Rotary-Wing Aircraft	Unmanned Aircraft Systems	Fiber Optic Wire	Guidance Wire	
ACOUSTIC MEASUREMENT TESTS																													
Surface Vessel Acoustic Measurement		✓	✓		✓																								
Underwater Vessel Acoustic Measurement					✓	✓																							
Underwater Vessel Hydrodynamic Performance Measurement					✓	✓																							
Cold Water Training					✓	✓																							
Component System Testing			✓		✓	✓																							
Countermeasures Testing			✓		✓	✓																							
Electromagnetic Measurement			✓		✓	✓																							
Measurement System Repair & Replacement			✓		✓	✓																							
Project Operations (POPS)			✓		✓	✓																							
Target Strength Trial					✓	✓																							
LIFE CYCLE ACTIVITIES																													
Pierside Sonar Testing		✓	✓			✓																							
SHIPBOARD PROTECTION SYSTEMS AND SWIMMER DEFENSE TESTING																													
Pierside Integrated Swimmer Defense		✓	✓		✓																								
UNMANNED VEHICLE TESTING																													
Unmanned Vehicle Development and Payload Testing					✓			✓																✓					
ANTI-SURFACE WARFARE (ASUW)/ANTI-SUBMARINE WARFARE (ASW) TESTING																													
Torpedo (Explosive) Testing			✓		✓	✓								✓			✓	✓			✓	✓		✓	✓				✓
Torpedo (Non-explosive) Testing			✓			✓	✓							✓			✓	✓				✓		✓	✓				✓
Countermeasure Testing		✓	✓		✓		✓							✓															
NEW SHIP CONSTRUCTION																													
Anti-Submarine Warfare (ASW) Mission Package Testing			✓			✓	✓							✓			✓	✓				✓			✓				

Table E-2: Components of Testing Activities (continued)

Testing Activity	Electromagnetic Devices	Aircraft Carriers	Surface Combatants	Amphibious Warfare Ships	Support Craft	Submarines	Towed Devices	Unmanned Surface or Underwater Vehicles	Non-Explosive Small-Caliber Projectiles	Non-Explosive Medium-Caliber Projectiles	Non-Explosive Large-Caliber Projectiles	Non-Explosive Bombs	Non-Explosive Missiles	Non-Explosive Torpedoes	Aircraft Stores or Ballast	Non-Explosive Rockets	Non-Explosive Sonobuoys	Parachutes	Chaff	Flares	High-Explosive Munitions	Targets	Seafloor Devices	Fixed-Wing Aircraft	Rotary-Wing Aircraft	Unmanned Aircraft Systems	Fiber Optic Wire	Guidance Wire	
Naval Air Systems Command																													
ANTI-SUBMARINE WARFARE (ASW)																													
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (Directional Command Activated Sonobuoy System [DICASS])			✓			✓		✓									✓	✓				✓		✓					
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (Multistatic Active Coherent [MAC])			✓			✓		✓									✓	✓				✓		✓					
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (Sound Underwater Signal [SUS])			✓			✓											✓	✓			✓			✓					
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (Improved Extended Echo Ranging [IEER])			✓			✓		✓									✓	✓			✓	✓		✓					
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (High Duty Cycle [HDC])			✓			✓		✓									✓	✓				✓		✓					
ELECTRONIC WARFARE (EW)																													
Flare Test																					✓				✓				

E.3 STRESSORS BY TRAINING ACTIVITY

Table E-3: Stressors by Training Activity

Northwest Training Activity	Biological Resources													Physical Resources						Human Resources									
	Acoustic Stressors						Energy Stressors		Physical Stressors			Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors				Acoustics ¹	Physical Disturbance ¹	Accessibility ²	Airborne Acoustics ²	Physical Disturbance and Strikes ²	Underwater Energy ³	In-Air Energy ³	Physical Interactions ³	
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosions	In-air Explosions	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Cables and Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals									Chemicals
ANTI-AIR WARFARE (AAW)																													
Air Combat Maneuver (ACM)						✓				✓						✓	✓	✓		✓		✓							
Missile Exercise (Air-to-Air)				✓		✓				✓		✓		✓		✓	✓	✓	✓	✓				✓	✓	✓	✓		✓
Gunnery Exercise (Surface-to-Air)				✓	✓	✓	✓			✓	✓	✓				✓	✓	✓	✓	✓				✓	✓	✓	✓		✓
Missile Exercise (Surface-to-Air)				✓		✓	✓			✓	✓	✓				✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		✓
ANTI-SURFACE WARFARE (ASUW)																													
Gunnery Exercise (Surface-to-Surface) Ship – Small-Caliber					✓		✓				✓	✓				✓	✓	✓		✓					✓	✓	✓		✓
Gunnery Exercise (Surface-to-Surface) Ship – Medium and Large Caliber				✓		✓					✓	✓				✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓
Missile Exercise (Air-to-Surface)				✓		✓	✓			✓	✓	✓					✓	✓						✓	✓	✓		✓	✓
High-Speed Anti-Radiation Missile (HARM) Exercise (Non-firing)						✓				✓						✓	✓									✓			
Bombing Exercise (Air-to-Surface)				✓		✓				✓		✓				✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓
Sinking Exercise (SINKEX) ¹				✓		✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
ANTI-SUBMARINE WARFARE (ASW)																													
Tracking Exercise – Submarine	✓						✓				✓														✓			✓	✓
Tracking Exercise – Surface	✓						✓				✓					✓	✓	✓							✓	✓		✓	✓
Tracking Exercise – Helicopter	✓					✓	✓			✓	✓	✓		✓		✓	✓		✓	✓	✓			✓	✓	✓	✓	✓	✓
Tracking Exercise – Maritime Patrol Aircraft	✓					✓	✓	✓		✓	✓	✓		✓		✓	✓		✓	✓	✓			✓	✓	✓	✓	✓	✓
Tracking Exercise – Maritime Patrol (Extended Echo Ranging Sonobuoys)	✓			✓		✓				✓		✓		✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓

¹ SINKEX is proposed for the No Action Alternative only.

Table E-3: Stressors by Training Activity (continued)

Northwest Training Activity	Biological Resources													Physical Resources						Human Resources											
	Acoustic Stressors						Energy Stressors		Physical Stressors			Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors				Acoustics ¹	Physical Disturbance ¹	Accessibility ²	Airborne Acoustics ²	Physical Disturbance and Strikes ²	Underwater Energy ³	In-Air Energy ³	Physical Interactions ³			
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosions	In-air Explosions	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Cables and Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals									Chemicals	Other Materials	
ELECTRONIC WARFARE (EW)																															
Electronic Warfare Operations (EW Ops)						✓	✓			✓	✓						✓	✓								✓	✓	✓			✓
MINE WARFARE (MIW)																															
Mine Neutralization – Explosive Ordnance Disposal (EOD)			✓			✓	✓			✓	✓	✓	✓			✓	✓	✓						✓	✓	✓	✓	✓		✓	
Submarine Mine Exercise	✓									✓	✓	✓															✓		✓		
Civilian Port Defense	✓		✓			✓	✓	✓		✓	✓	✓				✓	✓	✓					✓	✓	✓	✓	✓	✓		✓	
NAVAL SPECIAL WARFARE (NSW)																															
Personnel Insertion/Extraction – Submarine										✓																					
Personnel Insertion/Extraction – Non-submarine						✓			✓							✓	✓	✓								✓					
OTHER TRAINING EXERCISES																															
Maritime Security Operations					✓		✓			✓	✓				✓	✓	✓		✓					✓	✓	✓	✓			✓	
Precision Anchoring							✓			✓		✓				✓	✓							✓	✓	✓	✓			✓	
Small Boat Attack					✓		✓			✓	✓				✓	✓	✓		✓												
Intelligence, Surveillance, Reconnaissance						✓				✓						✓	✓									✓					
Search and Rescue						✓	✓			✓	✓					✓	✓									✓					
Surface Ship Sonar Maintenance	✓						✓			✓						✓	✓														
Submarine Sonar Maintenance	✓						✓			✓																					

¹ Cultural resources stressor

² Socioeconomics stressor

³ Public health and safety stressor

Note: A check indicates events that take place for all alternatives.

E.4 STRESSORS BY TESTING ACTIVITY

Table E-4: Stressors by Testing Activity

Northwest Testing Activity	Biological Resources													Physical Resources						Human Resources									
	Acoustic Stressors						Energy Stressors		Physical Stressors			Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors				Acoustics ¹	Physical Disturbance ¹	Accessibility ²	Airborne Acoustics ²	Physical Disturbance and Strikes ²	Underwater Energy ³	In-Air Energy ³	Physical Interactions ³	
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosions	In-air Explosions	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Cables and Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals									Chemicals
Naval Sea Systems Command																													
TORPEDO TESTING																													
Torpedo Non-Explosive Testing	✓	✓				✓				✓	✓		✓		✓	✓	✓	✓	✓	✓				✓		✓	✓		✓
AUTONOMOUS AND NON-AUTONOMOUS VEHICLES																													
Unmanned Underwater Vehicle Testing		✓				✓	✓	✓		✓	✓	✓	✓		✓	✓	✓		✓	✓	✓		✓	✓		✓		✓	
Unmanned Aircraft System					✓	✓			✓	✓						✓	✓									✓		✓	
Unmanned Surface Vehicle		✓				✓				✓		✓				✓	✓							✓	✓		✓	✓	
FLEET TRAINING/SUPPORT																													
Cold Water Training		✓				✓				✓						✓	✓							✓		✓		✓	
Post-Refit Sea Trial		✓				✓				✓						✓	✓							✓		✓		✓	
Anti-Submarine Warfare (ASW) Testing	✓	✓			✓	✓			✓	✓			✓	✓	✓	✓					✓		✓		✓		✓	✓	
MAINTENANCE AND MISCELLANEOUS																													
Side Scan/Multibeam Sonar		✓				✓				✓		✓				✓	✓							✓	✓		✓	✓	
Non-Acoustic Tests						✓				✓		✓				✓	✓							✓		✓		✓	
ACOUSTIC COMPONENT TEST																													
Countermeasures Testing		✓				✓				✓	✓					✓	✓							✓		✓		✓	
Acoustic Test Facility		✓																											
Pierside Integrated Swimmer Defense		✓				✓				✓						✓	✓												

Table E-4: Stressors by Testing Activity (continued)

Northwest Testing Activity	Biological Resources														Physical Resources						Human Resources								
	Acoustic Stressors						Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors				Acoustics ¹	Physical Disturbance ¹	Accessibility ²	Airborne Acoustics ²	Physical Disturbance and Strikes ²	Underwater Energy ³	In-Air Energy ³	Physical Interactions ³
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosions	In-air Explosions	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Cables and Wires,	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals								
SYSTEM, SUBSYSTEM AND COMPONENT TESTING																													
Pierside Acoustic Testing		✓				✓				✓		✓				✓	✓							✓					
Performance Testing At Sea		✓				✓				✓		✓				✓	✓							✓	✓		✓		✓
Development Training and Testing		✓				✓				✓		✓				✓	✓							✓	✓		✓		✓
PROOF-OF-CONCEPT TESTING																													
Proof-of-Concept Testing		✓				✓				✓		✓				✓	✓							✓	✓		✓		✓
ACOUSTIC MEASUREMENT TESTS																													
Surface Vessel Acoustic Measurement		✓				✓				✓						✓	✓										✓		✓
Underwater Vessel Acoustic Measurement		✓				✓				✓						✓	✓										✓		✓
Underwater Vessel Hydrodynamic Performance Measurement						✓				✓						✓	✓										✓		✓
Cold Water Training		✓				✓				✓						✓	✓										✓		✓
Component System Testing		✓				✓				✓						✓	✓										✓		✓
Countermeasures Testing		✓				✓				✓						✓	✓										✓		✓
Electromagnetic Measurement		✓				✓				✓						✓	✓										✓		✓
Measurement System Repair & Replacement		✓				✓				✓						✓	✓										✓		✓
Project Operations (POPS)		✓				✓				✓						✓	✓										✓		✓
Target Strength Trial		✓				✓				✓						✓	✓										✓		✓
LIFE CYCLE ACTIVITIES																													
Pierside Sonar Testing	✓	✓																											
SHIPBOARD PROTECTION SYSTEMS AND SWIMMER DEFENSE TESTING																													
Pierside Integrated Swimmer Defense		✓																											

Table E-4: Stressors by Testing Activity (continued)

Northwest Testing Activity	Biological Resources													Physical Resources						Human Resources									
	Acoustic Stressors						Energy Stressors		Physical Stressors			Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors				Acoustics ¹	Physical Disturbance ¹	Accessibility ²	Airborne Acoustics ²	Physical Disturbance and Strikes ²	Underwater Energy ³	In-Air Energy ³	Physical Interactions ³	
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosions	In-air Explosions	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Cables and Wires,	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals									Chemicals
UNMANNED VEHICLE TESTING																													
Unmanned Vehicle Development and Payload Testing		✓				✓	✓	✓		✓		✓				✓	✓							✓	✓		✓		✓
ANTI-SURFACE WARFARE (ASUW)/ANTI-SUBMARINE WARFARE (ASW) TESTING																													
Torpedo (Explosive) Testing	✓	✓	✓			✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Torpedo (Non-explosive) Testing	✓	✓				✓	✓			✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓		✓	✓	✓
Countermeasure Testing		✓				✓				✓	✓			✓		✓	✓		✓		✓			✓		✓		✓	
NEW SHIP CONSTRUCTION																													
Anti-Submarine Warfare (ASW) Mission Package Testing	✓	✓				✓				✓	✓			✓	✓	✓	✓									✓		✓	
Naval Air Systems Command																													
ANTI-SUBMARINE WARFARE (ASW)																													
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (DICASS)	✓					✓	✓			✓	✓			✓	✓	✓	✓		✓	✓	✓								
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (Multistatic Active Coherent [MAC])	✓	✓				✓	✓			✓	✓			✓	✓	✓	✓		✓	✓	✓								
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (SUS)	✓		✓			✓	✓			✓	✓			✓	✓	✓	✓		✓	✓	✓								
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (IEER)	✓		✓			✓	✓			✓	✓			✓	✓	✓	✓	✓	✓	✓	✓								
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft (HDC)	✓					✓	✓			✓	✓			✓	✓	✓	✓		✓	✓	✓								
ELECTRONIC WARFARE (EW)																													
Flare Test						✓				✓					✓	✓	✓			✓									

¹ Cultural resources stressor

² Socioeconomics stressor

³ Public health and safety stressor

Notes: (1) A check indicates events that take place for all alternatives. (2) ASDS = Advanced Sea, Air, Land (SEAL) Delivery System

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Appendix F: Acoustic and Explosives Primer

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APPENDIX F ACOUSTIC AND EXPLOSIVES PRIMER

This section introduces basic acoustic principles and terminology describing how sound travels or “propagates” in air and water. These terms and concepts are used when analyzing potential impacts due to acoustic sources and explosives used during naval training and testing. This section briefly explains the transmission of sound; introduces some of the basic mathematical formulas used to describe the transmission of sound; and defines acoustical terms, abbreviations, and units of measurement. Because seawater is a very efficient medium for the transmission of sound, the difference between transmission of sound in water and in air are discussed. Finally, it discusses the various sources of underwater sound, including physical, biological, and anthropogenic sounds.

F.1 TERMINOLOGY/GLOSSARY

Sound is an oscillation in pressure, particle displacement, or particle velocity, as well as the auditory sensation evoked by these oscillations, although not all sound waves evoke an auditory sensation (i.e., they are outside of an animal’s hearing range) (American National Standards Institute S1.1-1994). Sound may be described in terms of both physical and subjective attributes. Physical attributes may be directly measured. Subjective (or sensory) attributes cannot be directly measured and require a listener to make a judgment about the sound. Physical attributes of a sound at a particular point are obtained by measuring pressure changes as sound waves pass. The following material provides a short description of some of the basic parameters of sound.

F.1.1 PARTICLE MOTION AND SOUND PRESSURE

Sound can be described as a vibration traveling through a medium (air or water in this analysis) in the form of a wave. Introducing a vibration from a sound source into water causes the water particles to vibrate, or oscillate about their original position, and collide with each other, transferring the vibration through the water in the form of a wave. As the sound wave travels through the water, the particles of water oscillate but do not actually travel with the wave. The result is a mechanical disturbance (i.e., the sound wave) that propagates away from the sound source.

Sound has two components: particle motion and pressure. Particle motion is quantified as the velocity, amount of displacement (i.e., amplitude), and direction of displacement of the particles in the medium. The pressure component of sound is created when vibrations in the medium compress and then decompress the particles in the medium in an oscillating manner, resulting in fluctuations in pressure that propagate through the medium as a sound wave. The basic unit of sound pressure is the Pascal (Pa) ($1 \text{ Pa} = 1.45 \times 10^{-4}$ pounds per square inch), although the most commonly encountered unit is the micropascal (μPa) ($1 \mu\text{Pa} = 1 \times 10^{-6}$ Pascal). Animals with an eardrum or similar structure directly detect the pressure component of sound. Some marine fish also have specializations to detect pressure changes. Certain animals (e.g., most invertebrates and many marine fish) do not have anatomical structures that enable them to detect the pressure component of sound and are only sensitive to the particle motion component of sound. The particle motion component of sound degrades rapidly with distance from the sound source, such that particle motion is most detectable close to the sound source. Animals without developed anatomical hearing specializations likely cannot detect the pressure component of sound. This difference in acoustic energy sensing mechanisms limits the range at which these animals can detect most sound sources analyzed in this document.

F.1.2 FREQUENCY

The number of oscillations or waves per second is called the frequency of the sound, and the metric is Hertz (Hz). One Hz is equal to one oscillation per second, and 1 kilohertz (kHz) is equal to 1,000 oscillations per second. The inverse of the frequency is the period or duration of one acoustic wave.

Frequency is the physical attribute most closely associated with the subjective attribute “pitch”; the higher the frequency, the higher the pitch. Human hearing generally spans the frequency range from 20 Hz to 20 kHz. The pitch based on these frequencies is subjectively “low” (at 20 Hz) or “high” (at 20 kHz).

Pure tones have a constant, single frequency. Complex tones contain multiple, discrete frequencies, rather than a single frequency. Broadband sounds are spread across many frequencies. The frequency range of a sound is called its bandwidth. A harmonic of a sound at a particular frequency is a multiple of that frequency (e.g., harmonic frequencies of a 2 kHz tone are 4 kHz, 6 kHz, 8 kHz, etc.). A source operating at a nominal frequency may emit several harmonic frequencies at much lower sound pressure levels.

In this document, sounds are generally described as either low- (less than 1 kHz), mid- (1 kHz–10 kHz), high- (greater than 10 kHz–100 kHz), or very high- (greater than 100 kHz) frequency. Hearing ranges of marine animals (e.g., fish, birds, and marine mammals) are quite varied and are species-dependent. For example, some fish can hear sounds below 100 Hz and some species of marine mammals have hearing capabilities that extend above 100 kHz. Discussions of noise and potential impacts must therefore focus not only on the sound pressure, but the composite frequency of the noise and the species considered.

F.1.3 DUTY CYCLE

Duty cycle describes the portion of time that a sound source actually generates sound. It is defined as the percentage of the time during which a sound is generated over a total operational period. For example, if a sound navigation and ranging (sonar) source produces a 1-second ping once every 10 seconds, the duty cycle is 10 percent. Duty cycles vary among different acoustic sources; in general, a low duty cycle is 20 percent or less and a high duty cycle is 80 percent or higher.

F.1.4 LOUDNESS

Sound levels are normally expressed in decibels (dB), a commonly misunderstood term. Although the term decibel always means the same thing, decibels may be calculated in several ways, and the explanations of each can quickly become both highly technical and confusing.

Because mammalian ears can detect large pressure ranges and humans judge the relative loudness of sounds by the ratio of the sound pressures (a logarithmic behavior), sound pressure level is described by taking the logarithm of the ratio of the sound pressure to a reference pressure (American National Standards Institute 1994). Use of a logarithmic scale compresses the wide range of pressure values into a more usable numerical scale. (The softest audible sound has a power of about 0.000000000001 watt/square meter [m^2] and the threshold of pain is around 1 watt/ m^2 . With the advantage of the logarithmic scale, this ratio is efficiently described as 120 dB.)

On the decibel scale, the smallest audible sound (near total silence) is 0 dB. A sound 10 times more powerful is 10 dB. A sound 100 times more powerful than near total silence is 20 dB. A sound 1,000

times more powerful than near total silence is 30 dB. Table F-1 compares common sounds to their approximate decibel rating.

Table F-1: Common In-Air Sounds and their Approximate Decibel Ratings

Source	Source Level (dB re 20 μ Pa)
Near total silence	0
Whisper	15
Normal conversation	60
Lawnmower	90
Car horn	110
Rock concert	120
Gunshot	140

Notes: dB re 20 μ Pa = decibels referenced to 20 micropascals

F.2 PREDICTING HOW SOUND TRAVELS

Sounds are produced throughout a wide range of frequencies, including frequencies beyond the audible range of a given receptor. Most sounds heard in the environment do not consist of a single frequency, but rather a broad band of frequencies differing in sound level. The intensities of each frequency add to generate perceptible sound.

The speed of sound is not affected by the intensity, amplitude, or frequency of the sound, but rather depends wholly on characteristics (e.g., the density and the compressibility) of the medium through which it is passing. Sound travels faster through a medium that is harder to compress. For example, water is more difficult to compress than air, and sound travels approximately 1,100 feet per second (ft./s [340 meters per second {m}/s]) in air and 4,900 ft./s (1,500 m/s) in seawater. The speed of sound in air is primarily influenced by temperature, relative humidity, and pressure, because these factors affect the density and compressibility of air. Generally, the speed of sound in air increases as air temperature increases. Sound travels faster in seawater than in air, because seawater is more difficult to compress than air, making seawater a more efficient medium for the transmission of sound. As with air, the speed of sound in seawater increases with increasing temperature and, to a lesser degree, with increasing pressure and salinity.

In the simple case of sound propagating from a point source without obstruction or reflection, the sound waves take on the shape of an expanding sphere. As spherical propagation continues, the sound energy is distributed over an ever-larger area following the inverse square law: the intensity of a sound wave decreases inversely with the square of the distance between the source and the receptor. For example, doubling the distance between the receptor and a sound source results in a reduction in the intensity of the sound of one-fourth of its initial value; tripling the distance results in one-ninth of the original intensity, and so on (Figure F-1). As expected, sound intensity drops at increasing distance from the point source. In spherical propagation, sound pressure levels drop an average of 6 dB for every doubling of distance from the source. Potential impacts on sensitive receptors, then, are directly related to the distance from the receptor to the noise source, and the intensity of the noise source itself.

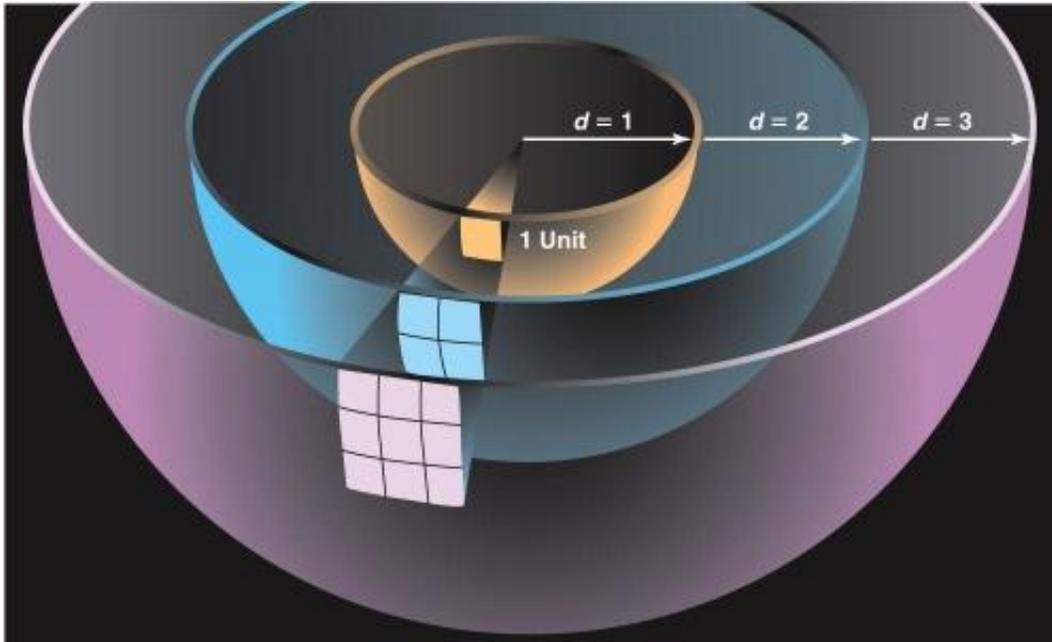


Figure F-1: Graphical Representation of the Inverse Square Relationship in Spherical Spreading

While the concept of a sound wave traveling from its source to a receptor is relatively simple, sound propagation is quite complex because of the simultaneous presence of numerous sound waves of different frequencies and other phenomena such as reflections of sound waves and subsequent constructive (additive) or destructive (cancelling) interferences between reflected and incident waves. Other factors such as refraction, diffraction, bottom types, and surface conditions also affect sound propagation. While simple examples are provided here for illustration, the Navy Acoustic Effects Model used to quantify acoustic exposures to marine mammals and sea turtles takes into account the influence of multiple factors to predict acoustic propagation (Marine Species Modeling Team 2012).

F.2.1 SOUND ATTENUATION AND TRANSMISSION LOSS

As a sound wave passes through a medium, the intensity decreases with distance from the sound source. This phenomenon is known as attenuation or propagation loss. Sound attenuation may be described in terms of transmission loss (TL). The units of transmission loss are dB. The transmission loss is used to relate the source level (SL), defined as the sound pressure level produced by a sound source at a distance of 3.3 feet (ft.) (1 meter [m]), and the received level (RL) at a particular location, as follows:

$$RL = SL - TL$$

The main contributors to sound attenuation are as follows:

- Geometrical spreading of the sound wave as it propagates away from the source
- Sound absorption (conversion of sound energy into heat)
- Scattering, diffraction, multipath interference, boundary effects
- Other nongeometrical effects (Urlick 1983)

F.2.1.1 Spreading Loss

Spreading loss is a geometrical effect representing regular weakening of a sound wave as it spreads out from a source (Campbell et al. 1988). Spreading describes the reduction in sound pressure caused by the increase in surface area as the distance from a sound source increases. Spherical and cylindrical spreading are common types of spreading loss.

As described before, a point sound source in a homogeneous medium without boundaries will radiate spherical waves—the acoustic energy spreads out from the source in the form of a spherical shell. As the distance from the source increases, the shell surface area increases. If the sound power is fixed, the sound intensity must decrease with distance from the source (intensity is power per unit area). The surface area of a sphere is $4\pi r^2$, where r is the sphere radius, so the change in intensity is proportional to the radius squared. This relationship is known as the spherical spreading law. The transmission loss for spherical spreading is:

$$TL = 20\log_{10}r$$

where r is the distance from the source. This is equivalent to a 6 dB reduction in sound pressure level for each doubling of distance from the sound source. For example, calculated transmission loss for spherical spreading is 40 dB at 328.1 ft. (100 m) and 46 dB at 656.2 ft. (200 m).

In cylindrical spreading, spherical waves expanding from the source are constrained by the water surface and the seafloor and take on a cylindrical shape. In this case the sound wave expands in the shape of a cylinder rather than a sphere and the transmission loss is:

$$TL = 10\log_{10}r$$

Cylindrical spreading is an approximation to wave propagation in a water-filled channel with horizontal dimensions much larger than the depth. Cylindrical spreading predicts a 3 dB reduction in sound pressure level for each doubling of distance from the source. For example, calculated transmission loss for cylindrical spreading is 20 dB at 328.1 ft. (100 m) and 23 dB at 656.2 ft. (200 m).

F.2.1.2 Reflection and Refraction

When a sound wave propagating in a medium encounters a second medium with a different density (e.g., the air-water boundary) part of the incident sound will be reflected back into the first medium and part will be transmitted into the second medium (Kinsler et al. 1982). The propagation direction will change as the sound wave enters the second medium; this phenomenon is called refraction. Refraction may also occur within a single medium if the properties of the medium change enough to cause a variation in the sound speed.

Refraction of sound resulting from spatial variations in the sound speed is one of the most important phenomena that affect sound propagation in water (Urlick 1983). The sound speed in the ocean primarily depends on hydrostatic pressure (i.e., depth) and temperature. Sound speed increases with both hydrostatic pressure and temperature. In seawater, temperature has the most important effect on sound speed for depths less than about 984.2 ft. (300 m). Below 4,921.3 ft. (1,500 m), the hydrostatic pressure is the dominant factor because the water temperature is relatively constant. The variation of sound speed with depth in the ocean is called a sound speed profile.

Although the actual variations in sound speed are small, the existence of sound speed gradients in the ocean has an enormous effect on the propagation of sound in the ocean. If one pictures sound as rays emanating from an underwater source, the propagation of these rays changes as a function of the sound speed profile in the water column. Specifically, the directions of the rays bend toward regions of slower sound speed. This phenomenon creates ducts in which sound becomes “trapped,” allowing it to propagate with high efficiency for large distances within certain depth boundaries. During winter months, the reduced sound speed at the surface due to cooling can create a surface duct that efficiently propagates sound such as shipping noise. The deep sound channel or Sound Frequency and Ranging channel is another duct that exists where sound speeds are lowest in the water column (2,000 to 4,000 ft. [600 to 1,200 m] depth at the mid-latitudes). Intense low-frequency underwater sounds, such as explosions, can be detected halfway around the world from their source via the Sound Frequency and Ranging channel (Baggeroer and Munk 1992).

F.2.1.3 Diffraction, Scattering, and Reverberation

Sound waves experience diffraction in much the same manner as light waves. Diffraction may be thought of as the bending of a sound wave around an obstacle. Common examples include sound heard from a source around the corner of a building and sound propagating through a small gap in an otherwise closed door or window. An obstacle or inhomogeneity (e.g., smoke, suspended particles, or gas bubbles) in the path of a sound wave causes scattering if secondary sound spreads out from it in a variety of directions (Pierce 1989). Scattering is similar to diffraction. Normally diffraction is used to describe sound bending or scattering from a single object, and scattering is used when there are multiple objects. Reverberation, or echo, refers to the prolongation of a sound that occurs when sound waves in an enclosed space are repeatedly reflected from the boundaries defining the space, even after the source has stopped emitting.

F.2.1.4 Multipath Propagation

In multipath propagation, sound may not only travel a direct path from a source to a receiver, but also be reflected from the surface or bottom multiple times before reaching the receiver (Urick 1983). At some distances, the reflected wave will be in phase with the direct wave (their waveforms add together) and at other distances the two waves will be out of phase (their waveforms cancel). The existence of multiple sound paths, or rays, arriving at a single point can result in multipath interference, a condition that permits the addition and cancellation between sound waves resulting in the fluctuation of sound levels over short distances. A special case of multipath propagation loss is called the Lloyd mirror effect, where the sound field near the water's surface reaches a minimum because of the destructive interference (cancellation) between the direct sound wave and the sound wave being reflected from the surface. This can cause the sound level to decrease dramatically within the top few meters of the water column.

F.2.1.5 Surface and Bottom Effects

Because the sea surface reflects and scatters sound, it has a major effect on the propagation of underwater sound in applications where either the source or receiver is at a shallow depth (Urick 1983). If the sea surface is smooth, the reflected sound pressure is nearly equal to the incident sound pressure; however, if the sea surface is rough, the amplitude of the reflected sound wave will be reduced.

The sea bottom is also a reflecting and scattering surface, similar to the sea surface. Sound interaction with the sea bottom is more complex, however, primarily because the acoustic properties of the sea bottom are more variable and the bottom is often layered into regions of differing density. For a hard

bottom such as rock, the reflected wave will be approximately in phase with the incident wave. Thus, near the ocean bottom, the incident and reflected sound pressures may add together, resulting in an increased sound pressure near the sea bottom.

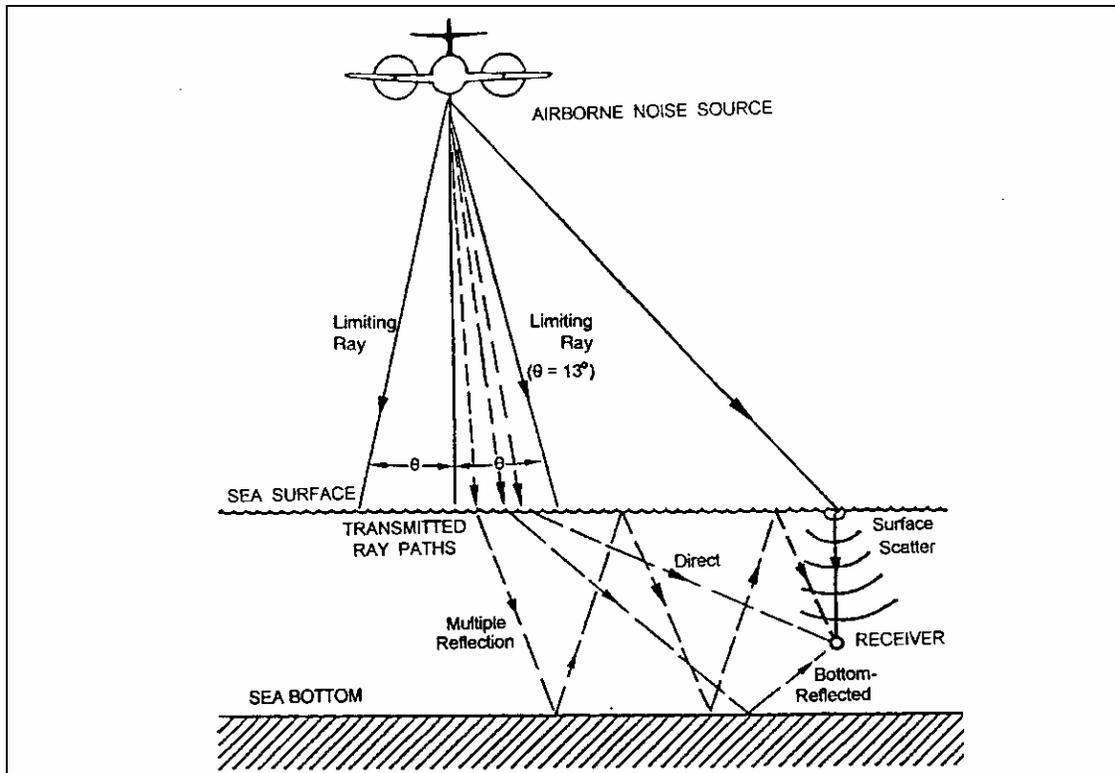
F.2.1.6 Air-Water Interface

Sound from aerial sources such as aircraft, muzzle blasts, and projectile sonic booms, can be transmitted into the water. The most studied of these sources are fixed-wing aircraft and helicopters, which create noise with most energy below 500 Hz. Noise levels in water are highest at the surface and are highly dependent on the altitude of the aircraft and the angle at which the aerial sound encounters the ocean surface. Transmission of the sound once it is in the water is identical to any other sound as described in the section above.

Transmission of sound from a moving airborne source to a receptor underwater is influenced by numerous factors and has been addressed by Young (1973), Urick (1983), Richardson et al. (1995), Eller and Cavanagh (2000), Laney and Cavanagh (2000), and others. Sound is transmitted from an airborne source to a receptor underwater by four principal means: (1) a direct path, refracted upon passing through the air-water interface; (2) direct-refracted paths reflected from the bottom in shallow water; (3) evanescent transmission in which sound travels laterally close to the water surface; and (4) scattering from interface roughness due to wave motion.

Airborne sound is refracted upon transmission into water because sound waves move faster through water than through air (a ratio of about 4:1). When a sound wave hits the surface of the water at angles greater than 13 degrees from vertical, all of the sound is reflected and no sound enters the water. As a result, most of the acoustic energy transmitted into the water from an aircraft arrives through a relatively narrow cone extending vertically downward from the aircraft (Figure F-2). The intersection of this cone with the surface traces a "footprint" directly beneath the flight path, with the width of the footprint being a function of aircraft altitude. Sound may enter the water outside of this cone due to surface scattering and as evanescent waves, which travel laterally near the water surface.

The sound pressure field is actually doubled (+6 dB) at the air-to-water interface because of the large difference in the acoustic properties of water and air. For example, an airborne sound with a sound pressure level of 100 dB re 1 μ Pa at the sea surface becomes 106 dB re 1 μ Pa just below the surface. The pressure and sound levels then decrease with increasing distance as they would for any other in-water noise.



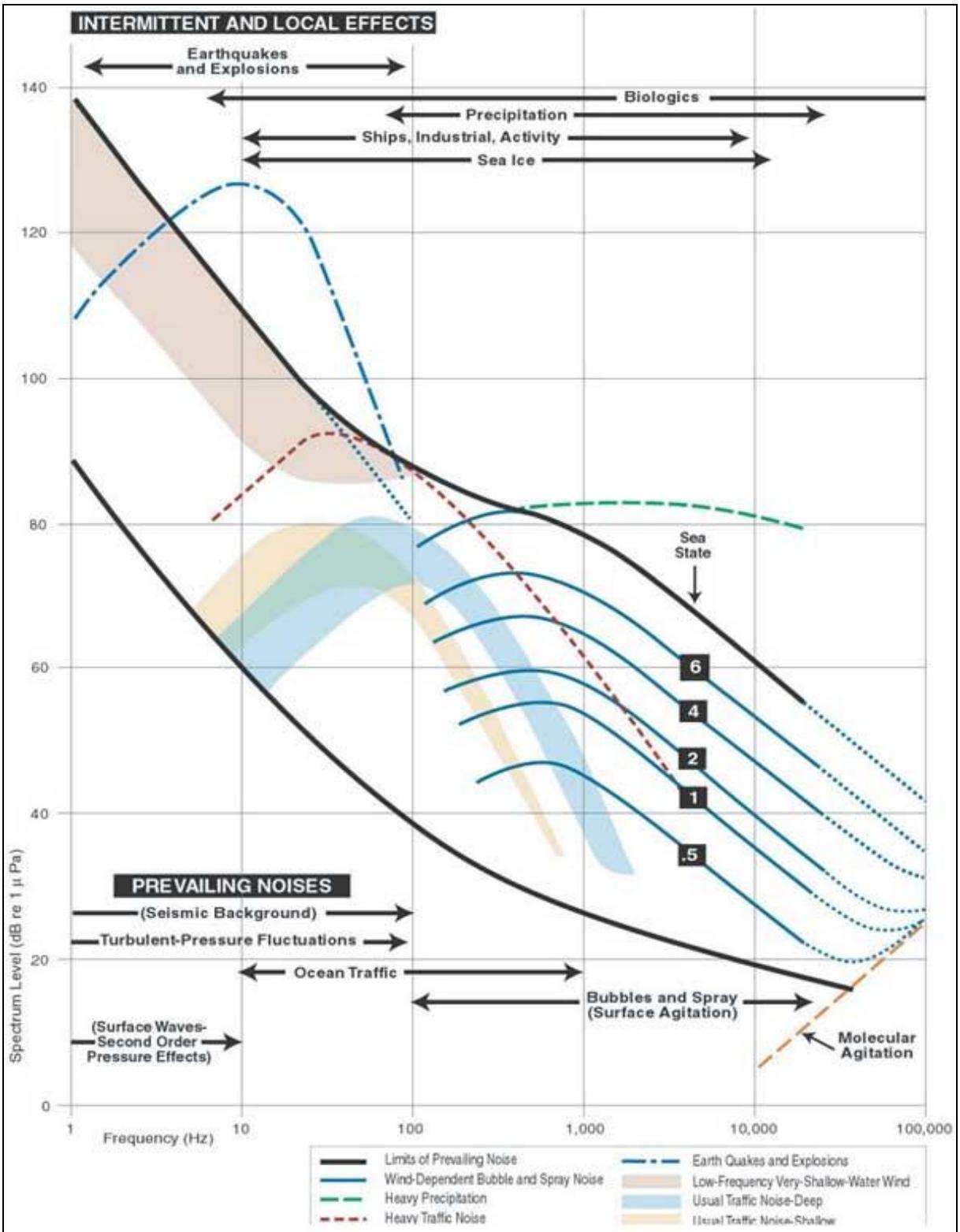
Source: Richardson et al. 1995

Figure F-2: Characteristics of Sound Transmission through the Air-Water Interface

F.3 SOURCES OF SOUND

Ambient noise is the collection of ever-present sounds of both natural and human-generated origin. Ambient noise in the ocean comprises sound generated by natural physical, natural biological, and anthropogenic (human-generated) sources (Figure F-3). Preindustrial physical and biological noise sources in marine environments were often not high enough to interfere with the hearing of marine animals (Richardson et al. 1995). However, the increase in anthropogenic noise sources in recent times is a concern.

Except for sounds generated by some marine species, most natural ocean sound is broadband (composed of a spectrum of numerous frequencies). Virtually the entire frequency spectrum is represented in ambient sound sources (National Research Council 2003, adapted from Wenz 1962). Earthquakes and explosions produce sound signals from 1 Hz to 100 Hz; marine species can produce signals from 100 Hz to more than 10,000 Hz; and commercial shipping, industrial activities, and naval ships have signals between 10 Hz and 10,000 Hz (Figure F-3). Spray and bubbles associated with breaking waves are the major contributions to the ambient sound in the 50–100,000 Hz range. At frequencies greater than 100,000 Hz (or approximately 80,000 Hz in the Inland Waters of the Study Area), “thermal noise” caused by the random motion of water molecules is the primary source. Natural sources, especially from wave and tidal action, can cause coastal environments to have particularly high ambient sound levels.



Source: National Research Council (2003), adapted from Wenz (1962)

Figure F-3: Oceanic Ambient Noise Levels from 1 Hertz to 100,000 Hertz, Including Frequency Ranges for Prevalent Noise Sources

F.3.1 UNDERWATER SOUNDS

Physical, biological, and anthropogenic sounds all contribute to the ambient underwater noise environment. Example source levels for various underwater sounds are shown in Table F-2. Many naturally occurring sounds have source levels similar to anthropogenic sounds.

Table F-2: Source Levels of Common Underwater Sounds

Source	Source Level (dB re 1 μ Pa at 1 m)
Ice breaker ship	193 ¹
Large tanker	186 ¹
Seismic airgun array (32 guns)	259 (peak) ¹
Dolphin whistles	125–173 ¹
Dolphin clicks	194–219 ²
Humpback whale song	144–174 ³
Snapping shrimp	183–189 ⁴
Sperm whale click	236 ⁵
Naval mid-frequency active sonar (SQS-53)	235
Lightning strike	260 ⁶
Seafloor volcanic eruption	255 ⁷

¹ Richardson et al. 1995, ² Rasmussen et al. 2002, ³ Payne and Payne 1985; Thompson et al. 1979, ⁴ Au and Banks 1998, ⁵ Levenson 1974; Watkins 1980, ⁶ Hill 1985, ⁷ Northrop 1974

Note: dB re 1 μ Pa at 1 m = decibels referenced to 1 micropascal at 1 meter

F.3.2 PHYSICAL SOURCES OF UNDERWATER SOUND

Physical processes that create sound in the ocean include rain, wind, waves, sea ice, lightning strikes at the sea surface, undersea earthquakes, and eruptions from undersea volcanoes. Generally, these sound sources contribute to a rise in the ambient sound levels on an intermittent basis. Underwater sound from rain typically is between 1 and 3 kHz. Wind produces frequencies between 100 Hz and 30 kHz, while wave-generated sound is a significant contributor in the infrasonic range (i.e., 1–20 Hz) (Simmonds et al. 2003). Seismic activity results in the production of low-frequency sounds that can be heard for great distances. At short ranges, underwater sounds from earthquakes can extend to frequencies greater than 100 Hz, and the arriving signal can have a very sharp onset, similar to that of an explosion, and can last from a few seconds to a few minutes (National Research Council 2003). Energy from large man-made explosions generates the same types of T-phase waves that seismic sources do and they both can emit energy at frequencies up to 500 Hz (Richardson et al. 1995). Seismically active regions are subject to intense disturbances from strong sounds produced by earthquakes that can kill or injure marine mammals living in the region. The T-phase source signal level (10–30 Hz range) can exceed 200 dB, for a magnitude 4–5 earthquake. On 22 February 2005, a fin whale in the Gulf of California covered 13 kilometers (km) in 26 minutes (mean speed = 30.2 km/hour), in response to a 5.5 Richter scale earthquake (Gallo-Reynoso et al. 2011).

F.3.3 BIOLOGICAL SOURCES OF UNDERWATER SOUND

Marine animals use sound to navigate, communicate, locate food, reproduce, and detect predators and other important environmental cues. Sounds produced by marine species (e.g., some crustaceans and fish) can increase ambient sound levels by nearly 20 dB over the range of a few kHz or over the range of

tens to hundreds of kHz (e.g., dolphin clicks and whistles). For example, reproductive activity, including courtship and spawning, accounts for the majority of sounds produced by fish. During the spawning season, croakers (family Sciaenidae) vocalize for many hours and often dominate the acoustic environment (Ramcharitar et al. 2006). Other species, including baleen whales (Mysticetes) and toothed whales and dolphins (Odontocetes) produce a wide variety of sounds including clicks, whistles, and pulsed sounds. These sounds can include tonal calls, clicks, whistles, and pulsed sounds, which cover a wide range of frequencies depending on the species and sound type produced. For instance, bottlenose dolphin clicks and whistles have a dominant frequency range of 110–130 kHz and 3.5–14.5 kHz, respectively (Au 1993). In addition, sperm whale clicks range in frequency from 0.1 kHz–30 kHz, with dominant energy in two bands (2–4 kHz and 10–16 kHz) (Richardson et al. 1995). Blue and fin whales produce low-frequency moans at frequencies of 10–25 Hz. Colonies of snapping shrimp can generate sounds at frequencies of 2–15 kHz.

F.3.4 ANTHROPOGENIC SOURCES OF UNDERWATER SOUND

In addition to sounds generated during Navy training and testing, other non-Navy activities also introduce similar types of anthropogenic (human-generated) sound into the ocean from a number of sources, including non-military vessel traffic, industrial operations onshore (pile driving), seismic profiling for oil exploration, oil drilling, underwater explosions, and in-air sources that can enter the water. Noise levels resulting from human activities in coastal and offshore areas are increasing; however, there are few historical records of ambient noise data to substantiate the level of increase. Some studies have documented increases in ambient noise off California over the last several decades (Andrew et al. 2002, McDonald et al. 2006, McDonald et al. 2008).

Commercial shipping is the most widespread source of human-made, low-frequency (0–1,000 Hz) noise in the oceans and may contribute more than 75 percent of all human-made sound in the sea (International Council for the Exploration of the Sea 2005), particularly in coastal areas and near shipping lanes (see Figure 3.12-1 for commercial shipping lanes in the Study Area). There are approximately 20,000 large commercial vessels at sea worldwide at any given time. Because low-frequency sounds carry for long distances, a large vessel emitting sound at 6.8 Hz can be detected 75–250 nautical miles away (Polefka 2004). The dominant component of low-frequency ambient noise is commercial tankers, which contribute twice as much noise as cargo vessels and at least 100 times as much noise as research vessels (Hatch et al. 2008). Most of these sounds are produced as a result of propeller cavitation (when air spaces created by the motion of propellers collapse) (Southall et al. 2007).

High-intensity, low-frequency impulse sounds are emitted during seismic surveys to determine the structure and composition of the geological formations below the sea bed to identify potential hydrocarbon reservoirs (i.e., oil and gas exploration) (Simmonds et al. 2003).

F.3.5 AERIAL SOUNDS

Aerial sounds may be produced by physical, biological, or anthropogenic sources. These sounds may be transmitted across the air-water interface as well. Of the physical sources of sound, surf noise is one of the most dominant. The highest sound levels from surf are typically low frequency (below 100 Hz). Biological sources of sound can be a significant contribution to the noise level in coastal environments such as areas occupied by highly vocal sea lions. Anthropogenic noise sources like ships, industrial sites, cars, and airplanes are also potential contributors.

F.3.6 NAVY SOURCES OF SOUND IN THE WATER

Many of the Navy's proposed activities may introduce sound into the ocean. The type of sound will determine how that source is measured and evaluated for potential impacts to the environment. All of the Navy-produced sounds may be categorized as impulse or non-impulse. Impulse sounds feature a very rapid increase to high pressures, followed by a rapid return to the static pressure. Impulse sounds are often produced by processes involving a rapid release of energy or mechanical impacts (Hamernik and Hsueh 1991). Non-impulse sounds lack the rapid rise time and can have longer durations than impulse sounds. Non-impulse sound can be continuous or intermittent. See Figure F-4 for examples of impulse and non-impulse underwater sound sources.

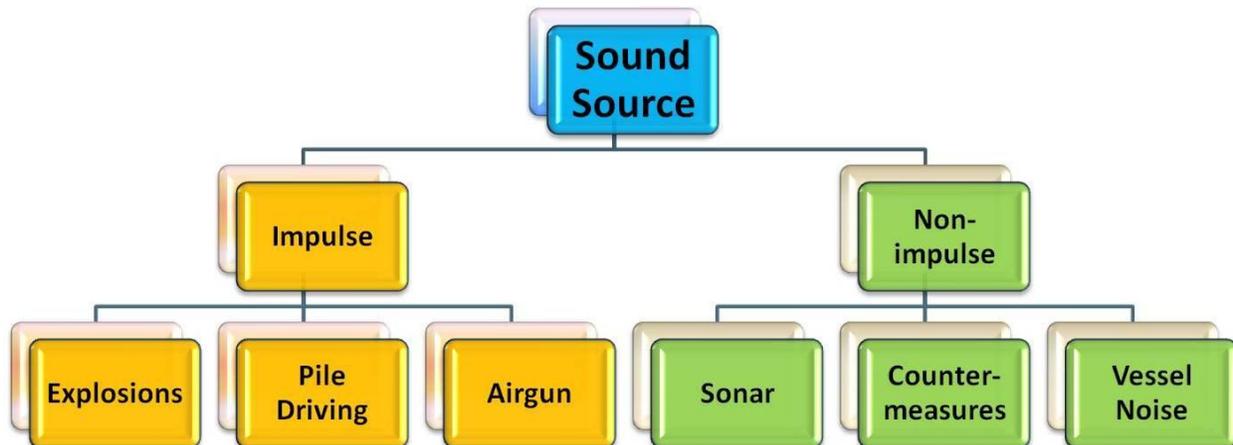


Figure F-4: Examples of Impulse and Non-impulse Sound Sources

F.4 SOUND METRICS

F.4.1 PRESSURE

Various sound pressure metrics are illustrated in Figure F-5 for (a) a non-impulse, and (b) an impulse sound. Sound pressure varies differently with time for non-impulse and impulse sounds. As shown in Figure F-5, the non-impulse sound has a relatively gradual rise in pressure from static pressure (the ambient pressure without the added sound), while the impulse sound has a near-instantaneous rise to a higher peak pressure. The peak pressure shown on both illustrations is the maximum absolute value of the instantaneous sound pressure during a specified time interval, which accounts for the values of peak pressures below the static (ambient) pressure (American National Standards Institute 1994). Peak-to-peak pressure is the difference between the maximum and minimum sound pressures. The root-mean-squared sound pressure is often used to describe the average pressure level of sounds. As the name suggests, this method takes the square root of the average squared sound pressure values over a time interval. The duration of this time interval can have a strong effect on the measured root-mean-squared sound pressure for a given sound, especially where pressure levels vary significantly, as during an impulse. If the analysis duration includes a significant portion of the waveform after the impulse has ended and the pressure has returned to near static, the root-mean-squared level would be relatively low. If the analysis duration includes the highest pressures of the impulse and excludes the portion of the waveform after the impulse has terminated, the root-mean-squared level would be comparatively high. For this reason, it is important to specify the duration used to calculate the root-mean-squared pressure for impulse sounds.

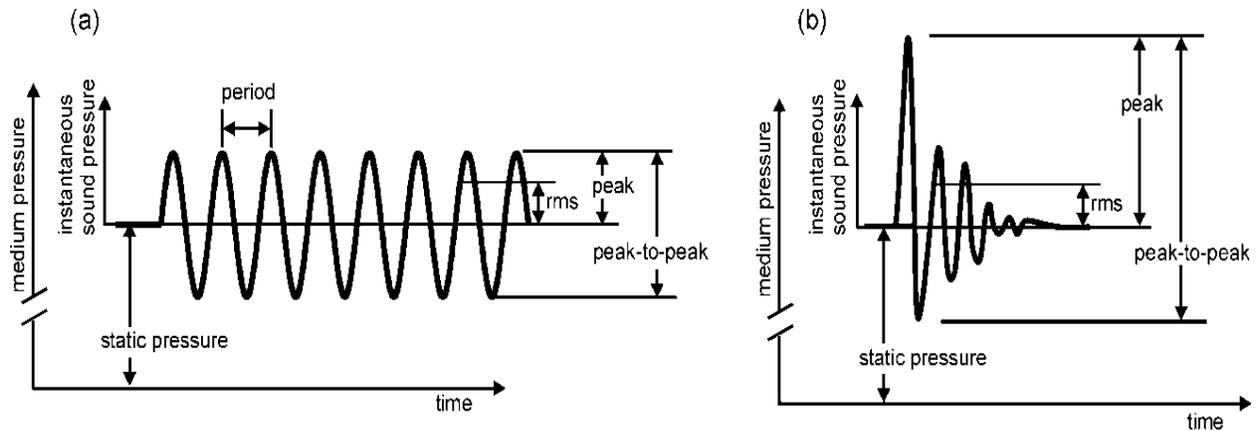


Figure F-5: Various Sound Pressure Metrics for a Hypothetical (a) Pure Tone (Non-Impulse) and (b) Impulse Sound

F.4.1.1 Sound Pressure Level

Because mammalian ears can detect large pressure ranges and humans judge the relative loudness of sounds by the ratio of the sound pressures (a logarithmic behavior), sound pressure level is described by taking the logarithm of the ratio of the sound pressure to a reference pressure (American National Standards Institute 1994). Use of a logarithmic scale compresses the wide range of pressure values into a more usable numerical scale.

Sound levels are normally expressed in dB. To express a pressure X in decibels using a reference pressure X_{ref} , the equation is:

$$20 \log_{10} \left(\frac{X}{X_{ref}} \right)$$

The pressure X is the root-mean-square value of the pressure. When a value is presented in decibels, it is important to specify the value and units of the reference pressure. Normally the decibel value is given, followed by the text “re,” meaning “with reference to,” and the value and unit of the reference pressure. The standard reference pressures are 1 μPa for water and 20 μPa for air (American National Standards Institute 1994). It is important to note that, because of the difference in reference units between air and water, the same absolute pressures would result in different dB values for each medium.

F.4.1.2 Sound Exposure Level

When analyzing effects on marine animals from multiple moderate-level sounds, it is necessary to have a metric that quantifies cumulative exposure(s) (American National Standards Institute 1994). The Sound Exposure Level (SEL) can be thought of as a composite metric that represents both the intensity of a sound and its duration. Individual time-varying noise events (e.g., a series of sonar pings) have two main characteristics: (1) a sound level that changes throughout the event and (2) a period of time during which the source is exposed to the sound. Cumulative SEL provides a measure of the net impact of the entire acoustic event, but it does not directly represent the sound level heard at any given time. Sound

exposure level is determined by calculating the decibel level of the cumulative sum-of-squared pressures over the duration of a sound, with units of dB re 1 micropascal squared seconds ($\mu\text{Pa}^2\text{-s}$) for sounds in water.

Some rules of thumb for SEL are as follows:

- The numeric value of SEL is equal to the sound pressure level of a 1-second sound that has the same total energy as the exposure event. If the sound duration is 1 second, sound pressure level and SEL have the same numeric value (but not the same reference quantities). For example, a 1-second sound with a sound pressure level of 100 dB re 1 μPa has a SEL of 100 dB re 1 $\mu\text{Pa}^2\text{-s}$.
- If the sound duration is constant but the sound pressure level changes, SEL will change by the same number of decibels as the sound pressure level.
- If the sound pressure level is held constant and the duration (T) changes, SEL will change as a function of $10\log_{10}(T)$:
 - $10\log_{10}(10) = 10$, so increasing duration by a factor of 10 raises SEL by 10 dB.
 - $10\log_{10}(0.1) = -10$, so decreasing duration by a factor of 10 lowers SEL by 10 dB.
 - Since $10\log_{10}(2) \approx 3$, so doubling the duration increases SEL by 3 dB.
 - $10\log_{10}(1/2) \approx -3$, so halving the duration lowers SEL by 3 dB.

Figure F-6 illustrates the summation of energy for a succession of sonar pings. In this hypothetical case, each ping has the same duration and sound pressure level. The SEL at a particular location from each individual ping is 100 dB re 1 $\mu\text{Pa}^2\text{-s}$ (red circles). The upper, blue curve shows the running total or cumulative SEL.

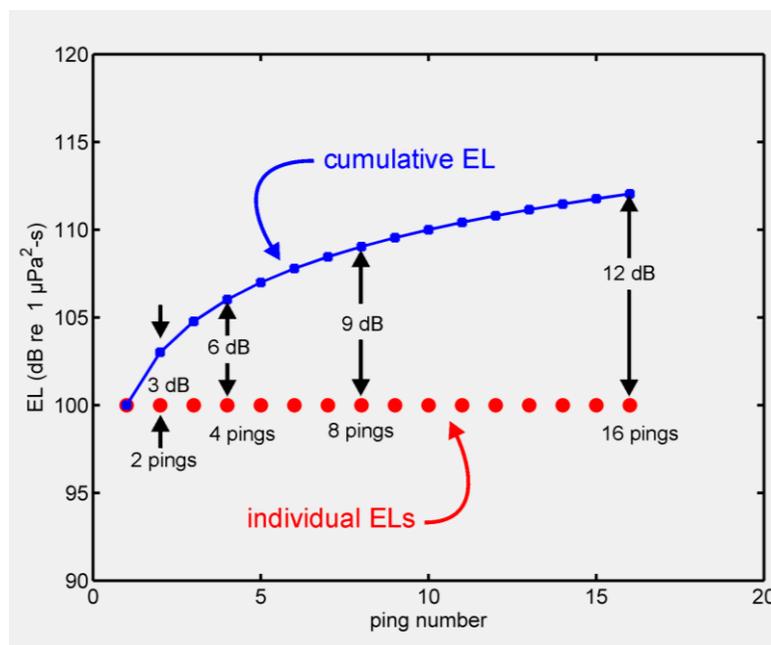


Figure F-6: Summation of Acoustic Energy (Cumulative Exposure Level, or Sound Exposure Level) from a Hypothetical, Intermittently Pinging, Stationary Sound Source (EL = Exposure Level)

After the first ping, the cumulative SEL is 100 dB re 1 $\mu\text{Pa}^2\text{-s}$. Since each ping has the same duration and sound pressure level, receiving two pings is the same as receiving a single ping with twice the duration. The cumulative SEL from two pings is therefore 103 dB re 1 $\mu\text{Pa}^2\text{-s}$. The cumulative SEL from four pings is

3 dB higher than the cumulative SEL from two pings, or 106 dB re $1 \mu\text{Pa}^2\text{-s}$. Each doubling of the number of pings increases the cumulative SEL by 3 dB.

Figure F-7 shows a more realistic example where the individual pings do not have the same sound pressure level or SEL. These data were recorded from a stationary hydrophone as a sound source approached, passed, and moved away from the hydrophone. As the source approached the hydrophone, the received sound pressure level from each ping increased, causing the SEL of each ping to increase. After the source passed the hydrophone, the received sound pressure level and SEL from each ping decreased as the source moved farther away (downward trend of red line), although the cumulative SEL increased with each additional ping received (slight upward trend of blue line). The main contributions are from those pings with the highest individual SELs. Individual pings with SELs 10 dB or more below the ping with the highest level contribute little (less than 0.5 dB) to the total cumulative SEL. This is shown in Figure F-7 where only a small error is introduced by summing the energy from the eight individual pings with SEL greater than 185 dB re $1 \mu\text{Pa}^2\text{-s}$ (black line), as opposed to including all pings (blue line).

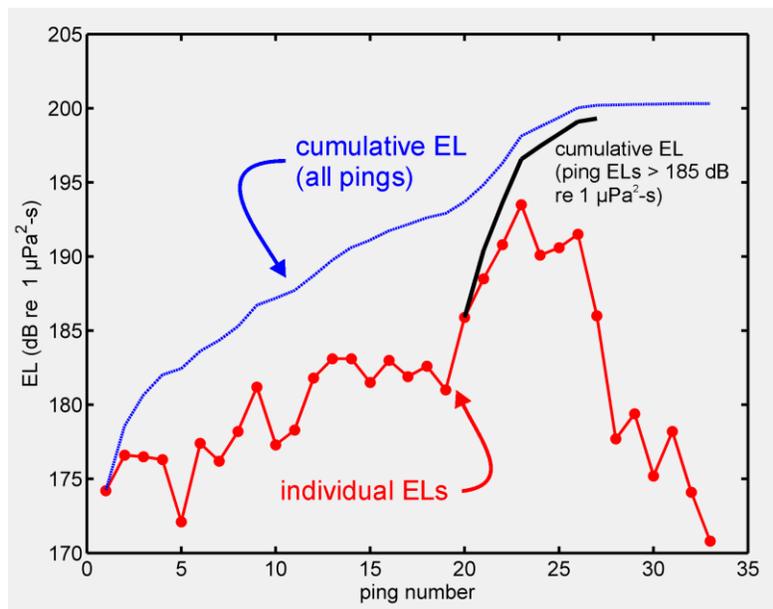


Figure F-7: Cumulative Sound Exposure Level under Realistic Conditions with a Moving, Intermittently Pinging Sound Source (Cumulative Exposure Level = Sound Exposure Level)

Impulse (Pascal-seconds)

Impulse is a metric used to describe the pressure and time component of an intense shock wave from an explosive source. The impulse calculation takes into account the magnitude and duration of the initial peak positive pressure, which is the portion of an impulse sound most likely to be associated with damage. Specifically, impulse is the time integral of the initial peak positive pressure with units of Pascal-seconds. The peak positive pressure for an impulse sound is shown in Figure F-5 as the first and largest pressure peak above static pressure. This metric is used to assess potential injurious effects from explosives.

F.4.2 LOUDNESS AND AUDITORY WEIGHTING FUNCTIONS

Animals, including humans, are not equally sensitive to sounds across their entire hearing range. The subjective judgment of a sound level by a receiver such as an animal is known as loudness. Two sounds received at the same sound pressure level (an objective measurement), but at two different frequencies, may be perceived by an animal at two different loudness levels depending on its hearing sensitivity (lowest sound pressure level at which a sound is first audible) at the two different frequencies. Furthermore, two different species may judge the relative loudness of the two sounds differently.

Auditory weighting functions are a method common in human hearing risk analysis to account for differences in hearing sensitivity at various frequencies. This concept can be applied to other species as well. When used in analyzing the impacts of sound on an animal, auditory weighting functions adjust received sound levels to emphasize ranges of best hearing and de-emphasize ranges of less or no sensitivity. A-weighted sound levels, often seen in units of “dBA” (A-weighted decibels), are frequency-weighted to account for the sensitivity of the human ear to a barely audible sound. Many measurements of sound in air appear as A-weighted decibels in the literature because the intent of the authors is often to assess noise impacts on humans.

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Appendix G: Biological Resource Methods

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APPENDIX G BIOLOGICAL RESOURCE METHODS

The analysis of impacts on biological resources focused on the likelihood of encountering the stressor, the primary stimulus, response, and recovery of individual organisms. Where appropriate, the differential potential of biological resources to overlap with stressors was considered at the level of specific geographic areas (large marine ecosystems, open ocean areas, range complexes, operating areas, and other training and testing areas). Additionally, the differential impacts of training versus testing activities that introduce stressors to the resource were considered.

G.1 CONCEPTUAL FRAMEWORK FOR ASSESSING EFFECTS FROM SOUND-PRODUCING ACTIVITIES

This conceptual framework describes the different types of effects that are possible and the potential relationships between sound stimuli and long-term consequences for the individual and population. The conceptual framework is central to the assessment of acoustic-related effects and is consulted multiple times throughout the process. It describes potential effects and the pathways by which an acoustic stimulus or sound-producing activity can potentially affect animals. The conceptual framework qualitatively describes costs to the animal (e.g., expended energy or missed feeding opportunity) that may be associated with specific reactions. Finally, the conceptual framework outlines the conditions that may lead to long-term consequences for the individual and population if the animal cannot fully recover from the short-term effects. Within each biological resource section (e.g., marine mammals, birds, and fish), the detailed methods to predict effects to specific taxa are derived from this conceptual framework.

An animal is considered “exposed” to a sound if the received sound level at the animal’s location is above the background ambient noise level within a similar frequency band. A variety of effects may result from exposure to sound-producing activities. The severity of these effects can vary greatly between minor effects that have no real cost to the animal, to more severe effects that may have lasting consequences. Whether a marine animal is significantly affected must be determined from the best available scientific data regarding the potential physiological and behavioral responses to sound-producing activities and the possible costs and long-term consequences of those responses.

The major categories of potential effects are:

- Direct trauma
- Auditory fatigue
- Auditory masking
- Behavioral reactions
- Physiological stress

Direct trauma refers to injury to organs or tissues of an animal as a direct result of an intense sound wave or shock wave impinging upon or passing through its body. Potential impacts on an animal’s internal tissues and organs are assessed by considering the characteristics of the exposure and the response characteristics of the tissues. Trauma can be mild and fully recoverable, with no long-term repercussions to the individual or population, or more severe, with the potential for lasting effects or, in some cases, mortality.

Auditory fatigue may result from over-stimulation of the delicate hair cells and tissues within the auditory system. The most familiar effect of auditory fatigue is hearing loss, also called a noise-induced threshold shift, meaning an increase in the hearing threshold.

Audible natural and artificial sounds can potentially result in auditory masking, a condition that occurs when noise interferes with an animal's ability to hear other sounds and may affect the animal's ability to communicate, such as requiring the animal to adjust the frequency or loudness of its call. Masking occurs when the perception of a sound is interfered with by a second sound, and the probability of masking increases as the two sounds increase in similarity and the masking sound increases in level. It is important to distinguish auditory fatigue, which persists after the sound exposure, from masking, which occurs only during the sound exposure.

Marine animals naturally experience physiological stress as part of their normal life histories. Changing weather and ocean conditions, exposure to diseases and naturally occurring toxins, lack of prey availability, social interactions with conspecifics (members of the same species), and interactions with predators all contribute to the stress a marine animal naturally experiences. The physiological response to a stressor, often termed the stress response, is an adaptive process that helps an animal cope with changing external and internal environmental conditions. However, too much of a stress response can be harmful to an animal, resulting in physiological dysfunction. In some cases, naturally occurring stressors can have profound impacts on animals. Sound-producing activities have the potential to provide additional stress, which must be considered, not only for its direct impact on an animal's behavior but also for contributing to an animal's chronic stress level.

A sound-producing activity can cause a variety of behavioral reactions in animals ranging from very minor and brief, to more severe reactions such as aggression or prolonged flight. The acoustic stimuli can cause a stress reaction (e.g., startle or annoyance); they may act as a cue to an animal that has experienced a stress reaction in the past to similar sounds or activities, or that acquired a learned behavioral response to the sounds from conspecifics. An animal may choose to deal with these stimuli or ignore them based on the severity of the stress response, the animal's past experience with the sound, as well as other stimuli present in the environment. If an animal chooses to react to the acoustic stimuli, then the behavioral responses fall into two categories: alteration of an ongoing behavior pattern or avoidance. The specific type and severity of these reactions helps determine the costs and ultimate consequences to the individual and population.

G.1.1 FLOWCHART

Figure G-1 is a flowchart that diagrams the process used to evaluate the potential effects on marine animals from sound-producing activities. The shape and color of each box on the flowchart represent either a decision point in the analysis (green diamonds); specific processes such as responses, costs, or recovery (blue rectangles); external factors to consider (purple parallelograms); and final outcomes for the individual or population (orange ovals and rectangles). Each box is labeled for reference throughout the following sections. For simplicity, *sound* is used here to include not only acoustic waves but also shock waves generated from explosive sources. The supporting text clarifies those instances where it is necessary to distinguish between the two phenomena.

Box A1, the *Sound-Producing Activity*, is the source of the sound stimuli and therefore the starting point in the analysis. Each of the five major categories of potential effects (i.e., direct trauma, auditory fatigue, masking, behavioral response, and stress) are presented as pathways that flow from left to right across the diagram. Pathways are not exclusive, and each must be followed until it can be concluded that an

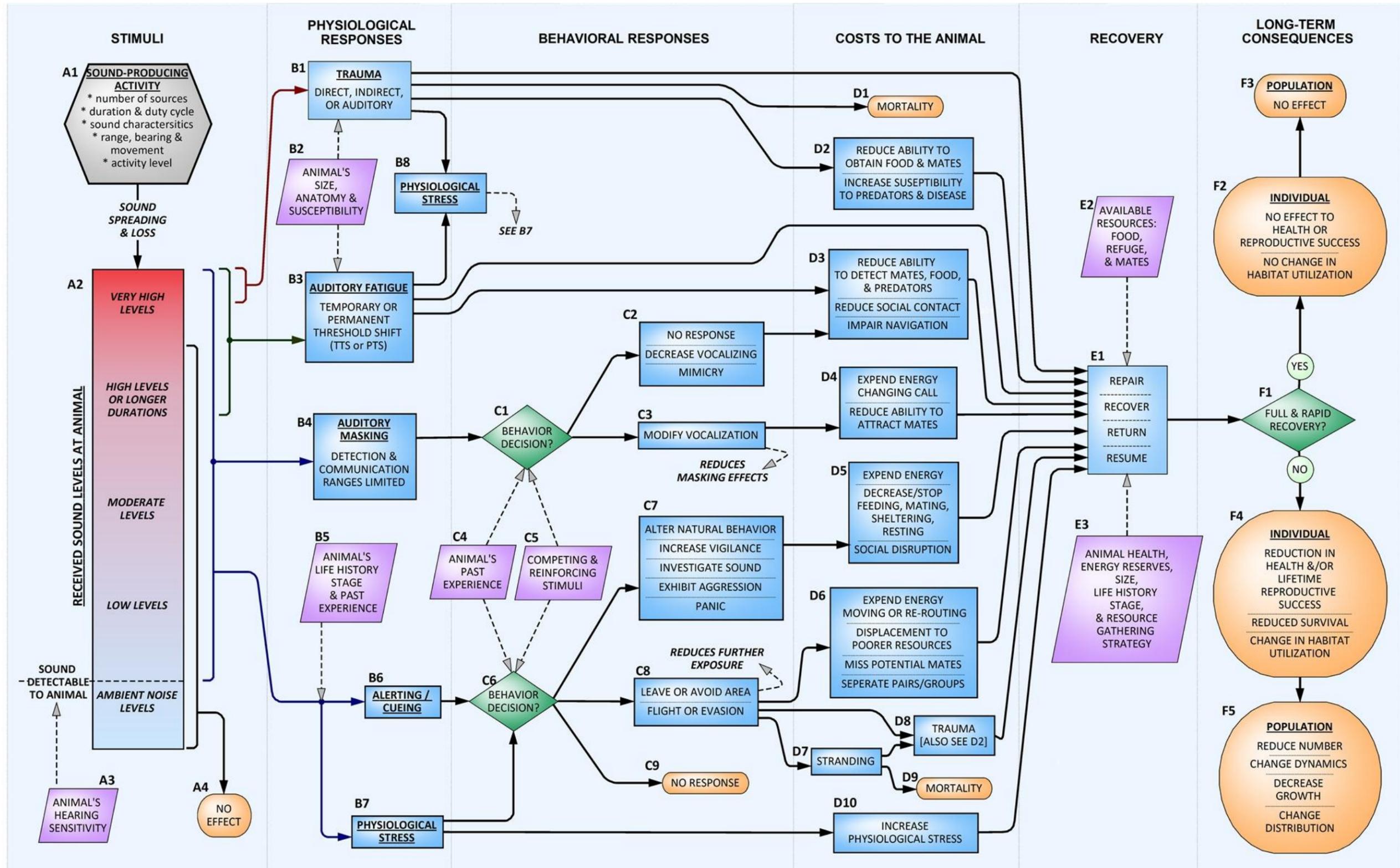


Figure G-1: Flow Chart of the Evaluation Process of Sound-Producing Activities

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animal is not at risk for that specific effect. The vertical columns show the steps in the analysis used to examine each of the effects pathways. These steps proceed from the Stimuli, to the Physiological Responses, to any potential Behavioral Responses, to the Costs to the Animal, to the Recovery of the animal, and finally to the Long-Term Consequences for the Individual and Population.

G.1.2 STIMULI

The first step in predicting whether a sound-producing activity is capable of causing an effect on a marine animal is to define the *Stimuli* experienced by the animal. The *Stimuli* include the *sound-producing activity*, the surrounding acoustical environment, and the characteristics of the sound when it reaches the animal, and whether the animal can detect the sound.

Sounds emitted from a *sound-producing activity* (Box A1) travel through the environment to create a spatially variable sound field. There can be any number of individual sound sources in a given activity, each with its own unique characteristics. For example, a Navy training exercise may involve several ships and aircraft, several types of sonar, and several types of ordnance. Each of the individual sound sources has unique characteristics: source level, frequency, duty cycle, duration, and rise-time (i.e., impulse vs. non-impulse). Each source also has a range, depth/altitude, bearing and directionality, and movement relative to the animal.

Environmental factors such as temperature, salinity, bathymetry, bottom type, and sea state all impact how sound spreads through the environment and how sound decreases in amplitude between the source and the receiver (individual animal). Mathematical calculations and computer models are used to predict how the characteristics of the sound will change between the source and the animal under a range of realistic environmental conditions for the locations where sound-producing activities occur.

The details of the overall activity may also be important to place the potential effects into context and help predict the range of severity of the probable reactions. The overall activity level (e.g., number of ships and aircraft involved in exercise); the number of sound sources within the activity; the activity duration; and the range, bearing, and movement of the activity relative to the animal are all considered.

The *received sound at the animal* and the number of times the sound is experienced (i.e., repetitive exposures) (Box A2) determines the range of possible effects. Sounds that are higher than the ambient noise level and within an *animal's hearing sensitivity range* (Box A3) have the potential to cause effects. Very high exposure levels may have the potential to cause trauma; high-level exposures, long-duration exposures, or repetitive exposures may potentially cause auditory fatigue; lower-level exposures may potentially lead to masking; all perceived levels may lead to stress; and many sounds, including sounds that are not detectable by the animal, would have *no effect* (Box A4).

G.1.3 PHYSIOLOGICAL RESPONSES

Physiological Responses include direct trauma, hearing loss, auditory masking, and stress. The magnitude of the involuntary response is predicted based on the characteristics of the acoustic stimuli and the characteristics of the animal (species, susceptibility, life history stage, size, and past experiences).

G.1.3.1 Trauma

Physiological responses to sound stimulation may range from mechanical vibration (with no resulting adverse effects) to tissue trauma (injury). Direct *trauma* (Box B1) refers to the direct injury of tissues and

organs by sound waves impinging upon or traveling through an animal's body. Marine animals' bodies, especially their auditory systems, are well adapted to large hydrostatic pressures and large, but relatively slow, pressure changes that occur with changing depth. However, mechanical trauma may result from exposure to very-high-amplitude sounds when the elastic limits of the auditory system are exceeded or when animals are exposed to intense sounds with very rapid rise times, such that the tissues cannot respond adequately to the rapid pressure changes. Trauma to marine animals from sound exposure requires high received levels. Trauma effects therefore normally only occur with very-high-amplitude, often impulse, sources, and at relatively close range, which limits the number of animals likely exposed to trauma-inducing sound levels.

Direct trauma includes both auditory and non-auditory trauma. Auditory trauma is the direct mechanical injury to hearing-related structures, including tympanic membrane rupture, disarticulation of the middle ear ossicles, and trauma to the inner ear structures such as the organ of Corti and the associated hair cells. Auditory trauma differs from auditory fatigue in that the latter involves the overstimulation of the auditory system at levels below those capable of causing direct mechanical damage. Auditory trauma is always injurious but can be temporary. One of the most common consequences of auditory trauma is hearing loss (see below).

Non-auditory trauma can include hemorrhaging of small blood vessels and the rupture of gas-containing tissues such as the lung, swim bladder, or gastrointestinal tract. After the ear (or other sound-sensing organs), these are usually the most sensitive organs and tissues to acoustic trauma. An *animal's size and anatomy* are important in determining its *susceptibility to trauma* (Box B2), especially non-auditory trauma. Larger size indicates more tissue to protect vital organs that might be otherwise susceptible (i.e., there is more attenuation of the received sound before it impacts non-auditory structures). Therefore, larger animals should be less susceptible to trauma than smaller animals. In some cases, acoustic resonance of a structure may enhance the vibrations resulting from noise exposure and result in an increased susceptibility to trauma. Resonance is a phenomenon that exists when an object is vibrated at a frequency near its natural frequency of vibration, or the particular frequency at which the object vibrates most readily. The size, geometry, and material composition of a structure determine the frequency at which the object will resonate. The potential for resonance is determined by comparing the sound frequencies with the resonant frequency and damping of the tissues. Because most biological tissues are heavily damped, the increase in susceptibility from resonance is limited.

Vascular and tissue bubble formation resulting from sound exposure is a hypothesized mechanism of indirect trauma to marine animals. The risk of bubble formation from one of these processes, called rectified diffusion, is based on the amplitude, frequency, and duration of the sound (Crum and Mao 1996) and an animal's tissue nitrogen gas saturation at the time of the exposure. Rectified diffusion is the growth of a bubble that fluctuates in size because of the changing pressure field caused by the sound wave. An alternative, but related hypothesis, has also been suggested: stable microbubbles could be destabilized by high-level sound exposures such that bubble growth then occurs through static diffusion of gas out of gas-supersaturated tissues. Bubbles have also been hypothesized to result from changes in the dive behavior of marine mammals as a result of sound exposure (Jepson et al. 2003). Vascular bubbles produced by this mechanism would not be a physiological response to the sound exposure, but a cost to the animal because of the change in behavior (Section G.1.5, Costs to the Animal). Under either of these hypotheses, several things could happen: (1) bubbles could grow to the extent that vascular blockage (emboli) and tissue hemorrhage occur, (2) bubbles could develop to the extent that a complement immune response is triggered or the nervous tissue is subjected to enough localized pressure that pain or dysfunction occurs, or (3) the bubbles could be cleared by the lung

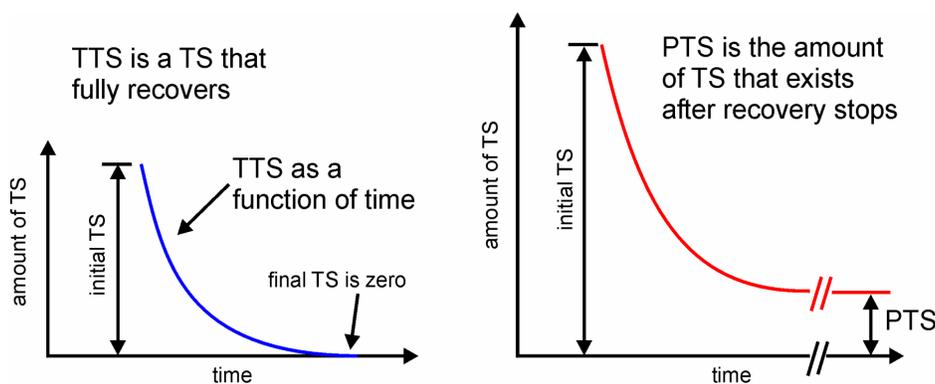
without negative consequence to the animal. Although rectified diffusion is a known phenomenon, its applicability to diving marine animals exposed to sound is questionable; animals would need to be highly supersaturated with gas and very close to a high-level sound source (Crum et al. 2005). The other two hypothesized phenomena are largely theoretical and have not been demonstrated under realistic exposure conditions.

G.1.3.2 Auditory Fatigue

Auditory fatigue is a reduction in hearing ability resulting from overstimulation to sounds. The mechanisms responsible for auditory fatigue differ from auditory trauma and may consist of a variety of mechanical and biochemical processes, including physical damage or distortion of the tympanic membrane and cochlear hair cell stereocilia, oxidative stress-related hair cell death, changes in cochlear blood flow, and swelling of cochlear nerve terminals resulting from glutamate excitotoxicity (Henderson et al. 2006; Kujawa and Liberman 2009). Although the outer hair cells are the most prominent target for fatigue effects, severe noise exposures may also result in inner hair cell death and loss of auditory nerve fibers (Henderson et al. 2006). Auditory fatigue is possibly the best studied type of effect from sound exposures in marine and terrestrial animals, including humans. The characteristics of the received sound stimuli are used and compared to the *animal's hearing sensitivity* and susceptibility to noise (Box A3) to determine the potential for auditory fatigue.

Auditory fatigue manifests itself as hearing loss, called a noise-induced threshold shift. A threshold shift may be either permanent threshold shift (PTS) or temporary threshold shift (TTS). Note that the term "auditory fatigue" is often used to mean a TTS; however, in this analysis, a more general meaning to differentiate fatigue mechanisms (e.g., metabolic exhaustion and distortion of tissues) from auditory trauma mechanisms (e.g., physical destruction of cochlear tissues occurring at the time of exposure) is used.

The distinction between PTS and TTS is based on whether there is a complete recovery of hearing sensitivity following a sound exposure. If the threshold shift eventually returns to zero (the animal's hearing returns to pre-exposure value), the threshold shift is a TTS. If the threshold shift does not return to zero but leaves some finite amount of threshold shift, then that remaining threshold shift is a PTS. Figure G-2 shows one hypothetical threshold shift that completely recovers, a TTS, and one that does not completely recover, leaving some PTS.



Notes: TTS = temporary threshold shift, TS = threshold shift, PTS = permanent threshold shift

Figure G-2: Two Hypothetical Threshold Shifts

The relationship between TTS and PTS is complicated and poorly understood, even in humans and terrestrial mammals, where numerous studies failed to delineate a clear relationship between the two. Relatively small amounts of TTS (e.g., less than 40–50 decibels (dB) measured 2 minutes after exposure) will recover with no apparent long-term effects; however, terrestrial mammal studies revealed that large amounts of TTS (e.g., approximately 40 dB measured 24 hours after exposure) can result in permanent neural degeneration, despite the hearing thresholds returning to normal (Kujawa and Liberman 2009). The amounts of TTS induced by Kujawa and Liberman were described as being “at the limits of reversibility.” It is unknown whether smaller amounts of TTS can result in similar neural degeneration, or if effects would translate to other species such as marine animals.

The amplitude, frequency, duration, and temporal pattern of the sound exposure are important parameters for predicting the potential for auditory fatigue. Duration is particularly important because auditory fatigue is exacerbated with prolonged exposure time. The frequency of the sound also plays an important role in susceptibility to hearing loss. Experiments show that animals are most susceptible to *fatigue* (Box B3) within their most sensitive hearing range. Sounds outside of an animal’s audible frequency range do not cause fatigue.

The greater the degree of threshold shift, the smaller the ocean space within which an animal can detect biologically relevant sounds and communicate. This is referred to as reducing an animal’s “acoustic space.” This reduction can be estimated given the amount of threshold shift incurred by an animal.

G.1.3.3 Auditory and Communication Masking

Auditory masking occurs if the noise from an activity interferes with an animal’s ability to detect, understand, elicit, or recognize biologically relevant sounds of interest (Box B4). “Noise” refers to unwanted or unimportant sounds that mask an animal’s ability to hear “sounds of interest” and affect an animal’s ability to generate sounds (or call). A sound of interest refers to a sound that is potentially being detected. Sounds of interest include echolocation clicks; sounds from predators; natural, abiotic sounds that may aid in navigation; and reverberation, which can give an animal information about its location and orientation within the ocean. Sounds of interest are frequently generated by conspecifics such as offspring, mates, and competitors.

The frequency, received level, and duty cycle of the sound determine the potential degree of auditory masking. Similar to hearing loss, the greater the degree of masking, the smaller the ocean space within which an animal can detect biologically relevant sounds.

G.1.3.4 Physiological Stress

If a sound is detected (i.e., heard or sensed) by an animal, a *stress* response can occur (Box B7); or the sound can *cue or alert* the animal (Box B6) without a direct, measurable stress response. If an animal suffers trauma or auditory fatigue, a *physiological stress* response will occur (Box B8). A stress response is a physiological change resulting from a stressor that is meant to help the animal deal with the stressor. The generalized stress response is characterized by a release of hormones (Reeder and Kramer 2005); however, it is now acknowledged that other chemicals produced in a stress response (e.g., stress markers) exist. For example, a release of reactive oxidative compounds, as occurs in noise-induced hearing loss (Henderson et al. 2006), occurs in response to some acoustic stressors. Stress hormones include those produced by the sympathetic nervous system, norepinephrine and epinephrine (i.e., the catecholamines), which produce elevations in the heart and respiration rate, increase awareness, and increase the availability of glucose and lipid for energy. Other stress hormones are the glucocorticoid steroid hormones cortisol and aldosterone, which are produced by the adrenal gland. These hormones

are classically used as an indicator of a stress response and to characterize the magnitude of the stress response (Hennessy et al. 1979). Oxidative stress occurs when reactive molecules, called reactive oxygen species, are produced in excess of molecules that counteract their activity (i.e., antioxidants).

An acute stress response is traditionally considered part of the startle response and is hormonally characterized by the release of the catecholamines. Annoyance type reactions may be characterized by the release of either or both catecholamines and glucocorticoid hormones. Regardless of the physiological changes that make up the stress response, the stress response may contribute to an animal's decision to alter its behavior. Alternatively, a stimulus may not cause a measurable stress response but may act as an alert or cue to an animal to change its behavior. This response may occur because of learned associations; the animal may have experienced a stress reaction in the past to similar sounds or activities (Box C4), or it may have learned the response from conspecifics. The severity of the stress response depends on the *received sound level* at the animal (Box A2); the details of the *sound-producing activity* (Box A1); the *animal's life history stage* (e.g., juvenile or adult; breeding or feeding season) (Box B5); and the *animal's past experience* with the stimuli (Box B5). These factors would be subject to individual variation, as well as variation within an individual over time.

An *animal's life history stage* is an important factor to consider when predicting whether a stress response is likely (Box B5). An animal's life history stage includes its level of physical maturity (e.g., larva, infant, juvenile, sexually mature adult) and the primary activity in which it is engaged such as mating, feeding, or rearing/caring for young. Animals engaged in a critical life activity such as mating or feeding may have a lesser stress response than an animal engaged in a more flexible activity such as resting or migrating (i.e., an activity that does not necessarily depend on the availability of resources). The animal's past experiences with the stimuli or similar stimuli are another important consideration. Prior experience with a stressor may be of particular importance because repeated experience with a stressor may dull the stress response via acclimation (St. Aubin and Dierauf 2001) or increase the response via sensitization.

G.1.4 BEHAVIORAL RESPONSES

Any number of *Behavioral Responses* can result from a physiological response. An animal responds to the stimulus based on a number of factors in addition to the severity of the physiological response. An animal's experience with the sound (or similar sounds), the context of the acoustic exposure, and the presence of other stimuli contribute to determining its reaction from a suite of possible behaviors.

Behavioral responses fall into two major categories: alterations in natural behavior patterns and avoidance. These types of reactions are not mutually exclusive, and many overall reactions may be combinations of behaviors or a sequence of behaviors. Severity of behavioral reactions can vary drastically between minor and brief reorientations of the animal to investigate the sound, to severe reactions such as aggression or prolonged flight. The type and severity of the behavioral response will determine the cost to the animal.

G.1.4.1 Trauma and Auditory Fatigue

Direct trauma and auditory fatigue increases the animal's *physiological stress* (Box B8), which feeds into the *stress* response (Box B7). Direct trauma and auditory fatigue increase the likelihood or severity of a behavioral response and *increase* an animal's overall physiological stress level (Box D10).

G.1.4.2 Auditory Masking

A behavior decision is made by the animal when the animal detects increased background noise, or possibly when the animal recognizes that biologically relevant sounds are being masked (Box C1). An *animal's past experience* with the sound-producing activity or similar acoustic stimuli can affect its choice of behavior during auditory masking (Box C4). *Competing and reinforcing stimuli* may also affect its decision (Box C5).

An animal can choose a passive behavioral response when coping with auditory masking (Box C2). It may simply not respond and keep conducting its current natural behavior. An animal may also decide to stop calling until the background noise decreases. These passive responses do not present a direct energetic cost to the animal; however, auditory masking will continue, depending on the acoustic stimuli.

An animal can choose to actively compensate for auditory masking (Box C3). An animal can vocalize more loudly to make its signal heard over the masking noise. An animal may also shift the frequency of its vocalizations away from the frequency of the masking noise. This shift can actually reduce the masking effect for the animal and other animals that are "listening" in the area. For example, in marine mammals, vocalization changes have been reported from exposure to anthropogenic noise sources such as sonar, vessel noise, and seismic surveying. Changes included mimicry of the sound, cessation of vocalization, increases and decreases in vocalization length, increases and decreases in vocalization rate, and increases in vocalization frequency and level, while other animals showed no significant changes in the presence of anthropogenic sound.

An *animal's past experiences* can be important in determining what behavior decision it may make when dealing with auditory masking (Box C4). Past experience can be with the sound-producing activity itself or with similar acoustic stimuli. For example, an animal may learn over time the best way to modify its vocalizations to reduce the effects of masking noise.

Other *stimuli* present in the environment can influence an animal's behavior decision (Box C5). These stimuli can be other acoustic stimuli not directly related to the sound-producing activity; they can be visual, olfactory, or tactile stimuli; the stimuli can be conspecifics or predators in the area; or the stimuli can be the strong drive to engage in a natural behavior. Competing stimuli can suppress any potential behavioral reaction. For example, an animal involved in mating or foraging may not react with the same degree of severity as it may have otherwise. Reinforcing stimuli reinforce the behavioral reaction caused by acoustic stimuli. For example, awareness of a predator in the area coupled with the acoustic stimuli may elicit a stronger reaction than the acoustic stimuli itself otherwise would have. The visual stimulus of seeing ships and aircraft, coupled with the acoustic stimuli, may also increase the likelihood or severity of a behavioral response.

G.1.4.3 Behavioral Reactions and Physiological Stress

A *physiological stress* response (Box B7) such as an annoyance or startle reaction, or a *cueing or alerting* reaction (Box B6) may cause an animal to make a *behavior decision* (Box C6). Any exposure that produces an injury or auditory fatigue is also assumed to produce a *stress* response (Box B7) and increase the severity or likelihood of a behavioral reaction. Both an animal's past experience (Box C4) and *competing and reinforcing stimuli* (Box C5) can affect an animal's behavior decision. The decision can result in three general types of behavioral reactions: *no response* (Box C9), *area avoidance* (Box C8), or *alteration of a natural behavior* (Box C7).

Little data exist that correlate specific behavioral reactions with specific stress responses. Therefore, in practice the likely range of behavioral reactions is estimated from the acoustic stimuli instead of the magnitude of the stress response. It is assumed that a stress response must exist to alter a natural behavior or cause an avoidance reaction. Estimates of the types of behavioral responses that could occur for a given sound exposure can be determined from the literature.

An *animal's past experiences* can be important in determining what behavior decision it may make when dealing with a stress response (Box C4). Past experience can be with the sound-producing activity itself or with similar sound stimuli. Bejder et al. (2009) define habituation as, "a process involving a reduction in response over time as individuals learn that there are neither adverse nor beneficial consequences of the occurrence of the stimulus." An animal habituated to a particular stimulus may have a lesser (or no) behavioral response to the stimulus compared to the first time the animal encountered the stimulus. Sensitization is the opposite of habituation, and refers to an increase over time in an animal's behavioral response to a repeated or continuous stimulus (Bejder et al. 2009). An animal sensitized to a particular stimulus exhibits an increasingly intense response to the stimulus (e.g., fleeing faster or farther), because there are significant consequences for the animal. A related behavioral response, tolerance, refers to an animal's ability to endure, or tolerate, a disturbance without a defined response. Habituation and sensitization are measured by the tolerance levels exhibited by animals; habituated animals show a progressively increasing tolerance to stimuli whereas sensitized animals show a progressively decreasing tolerance to stimuli (Bejder et al. 2009).

Other *stimuli* (Box C5) present in the environment can influence an animal's *behavior decision* (Box C6). These stimuli can be other acoustic stimuli not directly related to the sound-producing activity, such as visual stimuli; the stimuli can be conspecifics or predators in the area, or the stimuli can be the strong drive to engage or continue in a natural behavior. Competing stimuli tend to suppress any potential behavioral reaction. For example, an animal involved in mating or foraging may not react with the same degree of severity as an animal involved in less-critical behavior. Reinforcing stimuli reinforce the behavioral reaction caused by acoustic stimuli. For example, the awareness of a predator in the area coupled with the acoustic stimuli may elicit a stronger reaction than the acoustic stimuli themselves otherwise would have.

The visual stimulus of seeing human activities such as ships and aircraft maneuvering, coupled with the acoustic stimuli, may also increase the likelihood or severity of a behavioral response. It is difficult to separate the stimulus of the sound from the visual stimulus of the ship or platform creating the sound. The sound may act as a cue, or as one stimulus of many that the animal is considering when deciding how to react. An activity with several platforms (e.g., ships and aircraft) may elicit a different reaction than an activity with a single platform, both with similar acoustic footprints. The total number of vehicles and platforms involved, the size of the activity area, and the distance between the animal and activity are important considerations when predicting behavioral responses.

An animal may reorient or become more *vigilant* if it detects a sound-producing activity (Box C7). Some animals may *investigate* the sound using other sensory systems (e.g., vision), and perhaps move closer to the sound source. *Reorientation, vigilance, and investigation* all require the animal to divert attention and resources and therefore slow or stop their presumably beneficial natural behavior. This can be a very brief diversion, after which the animal continues its natural behavior, or an animal may not resume its natural behaviors until after a longer period when the animal has habituated to or learned to tolerate the sound or the activity has concluded. An intentional change via an orienting response represents

behaviors that would be considered mild disruption. More severe alterations of natural behavior would include *aggression or panic*.

An animal may choose to *leave or avoid an area* where a sound-producing activity is taking place (Box C8). Avoidance is the displacement of an individual from an area. A more severe form of this comes in the form of flight or evasion. A flight response is a dramatic change in normal movement to a directed and rapid movement away from the detected location of a sound source. Avoidance of an area can help the animal avoid further acoustic effects by avoiding or reducing further exposure.

An animal may choose *not to respond* to a sound-producing activity (Box C9). The physiological stress response may not rise to the level that would cause the animal to modify its behavior. The animal may have habituated to the sound or simply learned through past experience that the sound is not a threat. In this case a behavioral effect would not be predicted. An animal may choose not to respond to a sound-producing activity in spite of a physiological stress response. Some combination of competing stimuli may be present such as a robust food patch or a mating opportunity that overcomes the stress response and suppresses any potential behavioral responses. If the noise-producing activity persists over long periods or reoccurs frequently, the stress felt by animals could increase their chronic stress levels.

G.1.5 COSTS TO THE ANIMAL

The potential costs to a marine animal from an involuntary or behavioral response include no measurable cost, expended energy reserves, increased stress, reduced social contact, missed opportunities to secure resources or mates, displacement, and stranding or severe evasive behavior (which may potentially lead to secondary trauma or death). Animals suffer costs on a daily basis from a host of natural situations such as dealing with predator or competitor pressure. If the costs to the animal from an acoustic-related effect fall outside of its normal daily variations, then individuals must recover from significant costs to avoid long-term consequences.

G.1.5.1 Trauma

Trauma or injury to an animal may *reduce its ability to secure food by reducing its mobility* or the efficiency of its sensory systems, make the injured individual *less attractive to potential mates*, or increase *an individual's chances of contracting diseases or falling prey to a predator* (Box D2). A severe trauma can lead to the *death* of the individual (Box D1).

G.1.5.2 Auditory Fatigue and Auditory Masking

Auditory fatigue and masking can impair an animal's ability to hear biologically important sounds (Box D3), especially fainter and distant sounds. Sounds could belong to conspecifics such as other individuals in a social group (i.e., pod, school, etc.), potential mates, potential competitors, or parents/offspring. Biologically important sounds could also be an animal's own biosonar echoes used to detect prey, predators, and the physical environment. Therefore, auditory masking or a hearing loss could reduce an animal's ability to contact social groups, offspring, or parents; and reduce opportunities to detect or attract more distant mates. Animals may also use sounds to gain information about their physical environment by detecting the reverberation of sounds in the underwater space or sensing the sound of crashing waves on a nearby shoreline. These cues could be used by some animals to migrate long distances or navigate their immediate environment. Therefore, an animal's ability to navigate may be impaired if the animal uses acoustic cues from the physical environment to help identify its location.

Auditory masking and fatigue both effectively reduce the animal's acoustic space and the ocean volume in which detection and communication are effective.

An animal that *modifies its vocalization* in response to auditory masking could incur a cost (Box D4). Modifying vocalizations may cost the animal energy from its finite energy budget. Additionally, shifting the frequency of a call can make an animal appear to be less-fit to conspecifics. For example, songbirds that shift their calls up an octave to compensate for increased background noise attract fewer or less desirable mates. Larger animals are typically capable of producing lower-frequency sounds than smaller conspecifics. Therefore, lower-frequency sounds are usually an indicator of a larger and presumably more fit and experienced potential mate.

Auditory masking or auditory fatigue may also lead to no measurable costs for an animal. Masking could be of short duration or intermittent so that continuous or repeated biologically important sounds are received by the animal between masking noise. Auditory fatigue could also be inconsequential for an animal if the frequency range affected is not critical for that animal to hear within, or the auditory fatigue is of such short duration (a few minutes) that there are no costs to the individual.

G.1.5.3 Behavioral Reactions and Physiological Stress

An animal that alters its natural behavior in response to stress or an auditory cue may slow or cease its presumably beneficial natural behavior and instead *expend energy* reacting to the sound-producing activity (Box D5). Beneficial natural behaviors include *feeding, breeding, sheltering, and migrating*. The cost of feeding disruptions depends on the energetic requirements of individuals and the potential amount of food missed during the disruption. Alteration in breeding behavior can result in delaying reproduction. The costs of a brief interruption to migrating or sheltering are less clear. Most behavior alterations also require the animal to expend energy for a non-beneficial behavior. The amount of energy expended depends on the severity of the behavioral response.

An animal that avoids a sound-producing activity may *expend additional energy moving around the area, be displaced to poorer resources, miss potential mates, or have social interactions* affected (Box D6). Avoidance reactions can cause an animal to expend energy. The amount of energy expended depends on the severity of the behavioral response. Missing potential mates can result in delaying reproduction. Social groups or pairs of animals, such as mates or parent/offspring pairs, could be separated during a severe behavioral response such as flight. Offspring that depend on their parents may die if they are permanently separated. Splitting up an animal group can result in a reduced group size, which can have secondary effects on individual foraging success and susceptibility to predators.

Some severe behavioral reactions can lead to *stranding* (Box D7) or secondary *trauma* (Box D8). Animals that take prolonged flight, a severe avoidance reaction, may injure themselves or strand in an environment for which they are not adapted. Some *trauma* is likely to occur to an animal that strands (Box D8). Trauma can *reduce the animal's ability to secure food and mates, and increase the animal's susceptibility to predation and disease* (Box D2). An animal that strands and does not return to a hospitable environment quickly will likely *die* (Box D9).

Elevated stress levels may occur whether or not an animal exhibits a behavioral response (Box D10). Even while undergoing a stress response, competing stimuli (e.g., food or mating opportunities) may overcome an animal's initial stress response during the behavior decision. Regardless of whether the animal displays a behavioral reaction, this tolerated stress could incur a cost to the animal. Reactive oxygen species produced during normal physiological processes are generally counterbalanced by

enzymes and antioxidants; however, excess stress can result in an excess production of reactive oxygen species, leading to damage of lipids, proteins, and nucleic acids at the cellular level (Sies 1997; Touyz 2004).

G.1.6 RECOVERY

The predicted recovery of the animal (Box E1) is based on the cost of any masking or behavioral response and the severity of any involuntary physiological reactions (e.g., direct trauma, hearing loss, or increased chronic stress). Many effects are fully recoverable upon cessation of the sound-producing activity, and the vast majority of effects are completely recoverable over time; whereas a few effects may not be fully recoverable. The availability of resources and the characteristics of the animal play a critical role in determining the speed and completeness of recovery.

Available resources fluctuate by season, location, and year and can play a major role in an animal's rate of recovery (Box E2). Plentiful *food* can aid in a quicker recovery, whereas recovery can take much longer if food resources are limited. If many potential *mates* are available, an animal may recover quickly from missing a single mating opportunity. *Refuge* or shelter is also an important resource that may give an animal an opportunity to recover or repair after an incurred cost or physiological response.

An animal's health, energy reserves, size, life history stage, and resource gathering strategy affect its speed and completeness of recovery (Box E3). Animals that are in good health and have abundant energy reserves before an effect will likely recover more quickly. Adult animals with stored energy reserves (e.g., fat reserves) may have an easier time recovering than juveniles that expend their energy growing and developing and have less in reserve. Large individuals and large species may recover more quickly, also due to having more potential for energy reserves. Animals that gather and store resources, perhaps fasting for months during breeding or offspring rearing seasons, may have a more difficult time recovering from being temporarily displaced from a feeding area than an animal that feeds year round.

Damaged tissues from mild to moderate trauma may heal over time. The predicted recovery of direct trauma is based on the severity of the trauma, availability of resources, and characteristics of the animal. After a sustained injury an animal's body attempts to *repair* tissues. The animal may also need to *recover* from any potential costs due to a decrease in resource gathering efficiency and any secondary effects from predators or disease (Box E1). Moderate to severe trauma that does not cause mortality may never fully heal.

Small to moderate amounts of hearing loss may recover over a period of minutes to days, depending on the nature of the exposure and the amount of initial threshold shift. Severe noise-induced hearing loss may not fully recover, resulting in some amount of permanent hearing loss.

Auditory masking only occurs when the sound source is operating; therefore, direct masking effects stop immediately upon cessation of the sound-producing activity (Box E1). Natural behaviors may *resume* shortly after or even during the acoustic stimulus after an initial assessment period by the animal. Any energetic expenditures and missed opportunities to find and secure resources incurred from masking or a behavior alteration may take some time to *recover*.

Animals displaced from their normal habitat due to an avoidance reaction may *return* over time and *resume* their natural behaviors, depending on the severity of the reaction and how often the activity is repeated in the area. In areas of repeated and frequent acoustic disturbance, some animals may habituate to or learn to tolerate the new baseline or fluctuations in noise level. More sensitive species,

or animals that may have been sensitized to the stimulus over time due to past negative experiences, may not return to an area. Other animals may return but not resume use of the habitat in the same manner as before the acoustic-related effect. For example, an animal may return to an area to feed or navigate through it to get to another area, but that animal may no longer seek that area as refuge or shelter.

Frequent milder physiological responses to an individual may accumulate over time if the time between sound-producing activities is not adequate to give the animal an opportunity to fully recover. An increase in an animal's chronic stress level is also possible if stress caused by a sound-producing activity does not return to baseline between exposures. Each component of the stress response is variable in time, and stress hormones return to baseline levels at different rates. For example, adrenaline is released almost immediately and is used or cleared by the system quickly, whereas glucocorticoid and cortisol levels may take long periods (i.e., hours to days) to return to baseline.

G.1.7 LONG-TERM CONSEQUENCES TO THE INDIVIDUAL AND THE POPULATION

The magnitude and type of effect and the speed *and completeness of recovery* must be considered in predicting long-term consequences to the individual animal and its population (Box E). Animals that recover quickly and completely from explosive or acoustic-related effects will likely *not suffer reductions in their health or reproductive success, or experience changes in habitat utilization* (Box F2). *No population-level effects* would be expected if individual animals do not suffer reductions in their lifetime reproductive success or change their habitat utilization (Box F3).

Animals that do not recover quickly and fully could suffer *reductions in their health and lifetime reproductive success*; they could be permanently displaced or *change how they utilize the environment*; or they could *die* (Box F1).

Severe injuries can lead to reduced survivorship (longevity), elevated stress levels, and prolonged alterations in behavior that can reduce an animal's lifetime reproductive success. An animal with decreased energy stores or a lingering injury may be less successful at mating for one or more breeding seasons, thereby decreasing the number of offspring produced over its lifetime.

An animal whose hearing does not recover quickly and fully could suffer a reduction in lifetime reproductive success, because it may no longer be able to detect the calls of a mate as well as it could prior to losing hearing sensitivity (Box F1). This example underscores the importance of the frequency of sound associated with the hearing loss and how the animal relies on those frequencies (e.g., for mating, navigating, detecting predators). An animal with decreased energy stores or a PTS may be less successful at mating for one or more breeding seasons, thereby decreasing the number of offspring it can produce over its lifetime.

As mentioned above, the involuntary reaction of masking ends when the acoustic stimuli conclude. The direct effects of auditory masking could have long-term consequences for individuals if the activity was continuous or occurred frequently enough; however, most of the proposed training and testing activities are normally spread over vast areas and occur infrequently in a specific area.

Missed mating opportunities can have a direct effect on reproductive success. Reducing an animal's energy reserves over longer periods can directly reduce its health and reproductive success. Some species may not enter a breeding cycle without adequate energy stores, and animals that do breed may have a decreased probability of offspring survival. Animals displaced from their preferred habitat, or

those who utilize it differently, may no longer have access to the best resources. Some animals that leave or flee an area during a noise-producing activity, especially an activity that is persistent or frequent, may not return quickly or at all. This can further reduce an individual's health and lifetime reproductive success.

Frequent disruptions to natural behavior patterns may not allow an animal to fully recover between exposures, which increase the probability of causing long-term consequences to individuals. Elevated chronic stress levels are usually a result of a prolonged or repeated disturbance. Excess stress produces reactive molecules in an animal's body that can result in cellular damage (Sies 1997; Touyz 2004). Chronic elevations in the stress levels (e.g., cortisol levels) may produce long-term health consequences that can reduce lifetime reproductive success.

These long-term consequences to the individual can lead to consequences for the *population* (Box F5). Population *dynamics and abundance* play a role in determining how many individuals would need to suffer long-term consequences before there was an effect on the population (Box G1). Long-term abandonment or a change in the utilization of an area by enough individuals can *change the distribution* of the population. Death has an immediate effect in that no further contribution to the population is possible, which reduces the animal's lifetime reproductive success.

Carrying capacity describes the theoretical maximum number of animals of a particular species that the environment can support. When a population nears its carrying capacity, the lifetime reproductive success in individuals may decrease due to finite resources or predator-prey interactions. *Population growth* is naturally limited by available resources and predator pressure. If one, or a few animals, in a population are removed or gather fewer resources, then other animals in the population can take advantage of the freed resources and potentially increase their health and lifetime reproductive success. Abundant populations that are near their carrying capacity (theoretical maximum abundance) that suffer effects to a few individuals may not be affected overall.

Populations that are reduced well below their carrying capacity (e.g., threatened or endangered species populations) may suffer greater consequences from any lasting effects to even a few individuals. Population-level consequences can include a change in the population dynamics, a decrease in the growth rate, or a change in geographic distribution. Changing the dynamics of a population (the proportion of the population within each age group or the ratio of sexually mature individuals) or their geographic distribution can also have secondary effects on population growth rates.

G.2 CONCEPTUAL FRAMEWORK FOR ASSESSING EFFECTS FROM ENERGY-PRODUCING ACTIVITIES

G.2.1 STIMULI

G.2.1.1 Magnitude of the Energy Stressor

Regulations do not provide threshold criteria to determine the significance of the potential effects from activities that involve the use of varying electromagnetic frequencies or lasers. Many organisms, primarily marine vertebrates, have been studied to determine their thresholds for detecting electromagnetic fields, as reviewed by Normandeau et al. (2011); however, there are no data on predictable responses to exposure above or below detection thresholds. The types of electromagnetic fields discussed are those from mine neutralization activities (magnetic influence minesweeping). The only types of lasers considered for analysis were low to moderate lasers (e.g., targeting systems,

detection systems, laser light detection and ranging) that do not pose a risk to organisms (Swope 2010), and therefore will not be discussed further.

G.2.1.2 Location of the Energy Stressor

Evaluation of potential energy exposure risks considered the spatial overlap of the resource occurrence and electromagnetic field and high energy laser use. Wherever appropriate, specific geographic areas of potential impact were identified. The greatest potential electromagnetic energy exposure is at the source, where intensity is greatest. The strength of the electromagnetic field decreases by the inverse square law (e.g., if the distance from sensor to source increases by a factor of three, the field strength is reduced by a factor of nine [$3^2 = 9$]). The greatest potential for high energy laser exposure is at the ocean's surface, where high energy laser intensity is greatest. As the laser penetrates the water, 96 percent of the beam is absorbed, scattered, or otherwise lost (Zorn et al. 2000; Ulrich 2004).

G.2.1.3 Behavior of the Organism

Evaluation of potential energy exposure risk considered the behavior of the organism, especially where the organism lives and feeds (e.g., surface, water column, seafloor). The analysis for electromagnetic devices considered those species with the ability to perceive or detect electromagnetic signals. The analysis for high energy lasers particularly considered those species known to inhabit the surface of the ocean.

G.2.2 IMMEDIATE RESPONSE AND COSTS TO THE INDIVIDUAL

Many different types of organisms (e.g., some invertebrates, fishes, turtles, birds, mammals) are sensitive to electromagnetic fields (Normandeau et al. 2011). An organism that encounters a disturbance in an electromagnetic field could respond by moving toward the source, moving away from it, or not responding at all. The types of electromagnetic devices used in the Proposed Action simulate the electromagnetic signature of a vessel passing through the water column, so the expected response would be similar to that of vessel movement. However, since there would be no actual strike potential, a physiological response would be unlikely in most cases. Recovery of an individual from encountering electromagnetic fields would be variable, but since the physiological response would likely be minimal, as reviewed by Normandeau et al. (2011), any recovery time would also be minimal.

Very little data are available to analyze potential impacts on organisms from exposure to high energy lasers. As with humans, the greatest laser-related concern for marine species is damage to an organism's ability to see. High energy lasers may also burn the skin, but the threshold energy level for eye damage is considerably lower, so the analysis considered that lower threshold. Recovery of the individual from eye damage or skin lesion caused by high energy lasers would be based on the severity of the injury and the incidence of secondary infection. Very few studies of this impact are available.

G.2.3 LONG-TERM CONSEQUENCES TO THE INDIVIDUAL AND POPULATION

Long-term consequences are considered in terms of a resource's existing population level, growth and mortality rates, other stressors on the resource from the Proposed Action, cumulative impacts on the resource, and the ability of the population to recover from or adapt to impacts. Impacts of multiple or repeated stressors on individuals are cumulative. When stressors are chronic, an organism may experience reduced growth, health, or survival, which could have population-level impacts (Billard et al. 1981), especially in the case of endangered species.

G.3 CONCEPTUAL FRAMEWORK FOR ASSESSING EFFECTS FROM PHYSICAL DISTURBANCE OR STRIKE

G.3.1 STIMULI

G.3.1.1 Size and Weight of the Objects

To determine the likelihood of a strike and the potential impacts on an organism or habitat that would result from a physical strike, the size and weight of the striking object relative to the organism or habitat must be considered. Most small organisms and early life stages would simply be displaced by the movement generated by a large object moving through, or falling into, the water because they are planktonic (floating organisms) and move with the water; however, animals that occur at or near the surface could be struck. A larger nonplanktonic organism could potentially be struck by an object since it may not be displaced by the movement of the water. Sessile (nonmobile) organisms and habitats could be struck by the object, albeit with less force, on the seafloor. The weight of the object is also a factor that would determine the severity of a strike. A strike by a heavy object would be more severe than a strike by a low-weight object (e.g., a parachute, flare end cap, or chaff canister).

G.3.1.2 Location and Speed of the Objects

Evaluation of potential physical disturbance or strike risk considered the spatial overlap of the resource occurrence and potential striking objects. Analysis of impacts from physical disturbance or strike stressors focuses on proposed activities that may cause an organism or habitat to be struck by an object moving through the air (e.g., aircraft), water (e.g., vessels, in-water devices, towed devices), or dropped into the water (e.g., non-explosive practice munitions and seafloor devices). The area of operation, vertical distribution, and density of these items also play central roles in the likelihood of impact. Wherever appropriate, specific geographic areas of potential impact are identified. Analysis of potential physical disturbance or strike risk also considered the speed of vessels as a measure of intensity. Some vessels move slowly, while others are capable of high speeds.

G.3.1.3 Buoyancy of the Objects

Evaluation of potential physical disturbance or strike risk in the ocean considered the buoyancy of targets or expended materials during operation, which will determine whether the object will be encountered at the surface, within the water column, or on the seafloor. Once landed on the water surface, buoyant objects have the potential to strike plants and organisms that occur on the sea surface and negatively buoyant objects may strike plants and organisms within the water column or on the seafloor.

G.3.1.4 Behavior of the Organism

Evaluation of potential physical disturbance or strike risk considered where organisms occur and if they occur in the same geographic area and vertical distribution as those objects that pose strike risks.

G.3.2 IMMEDIATE RESPONSE AND COSTS TO THE INDIVIDUAL

Before being struck, some organisms would sense a pressure wave through the water and respond by remaining in place, moving away from the object, or moving toward it. An organism displaced a small distance by movements from an object falling into the water nearby would likely continue on with no response. However, others could be disturbed and may exhibit a generalized stress response. If the object actually hit the organism, direct injury in addition to stress may result. The function of the stress response in vertebrates is to rapidly raise the blood sugar level to prepare the organism to flee or fight.

This generally adaptive physiological response can become a liability if the stressor persists and the organism cannot return to its baseline physiological state.

Most organisms would respond to sudden physical approach or contact by darting quickly away from the stimulus. Other species may respond by freezing in place or seeking refuge. In any case, the individual must stop whatever it was doing and divert its physiological and cognitive attention to responding to the stressor. The energy costs of reacting to a stressor depend on the specific situation, but in all cases the caloric requirements of stress reactions reduce the amount of energy available to the individual for other functions such as predator avoidance, reproduction, growth, and metabolism.

The ability of an organism to return to what it was doing following a physical strike (or near miss resulting in a stress response) is a function of fitness, genetic, and environmental factors. Some organisms are more tolerant of environmental or human-caused stressors than others and become acclimated more easily. Within a species, the rate at which an individual recovers from a physical disturbance or strike may be influenced by its age, sex, reproductive state, and general condition. An organism that has reacted to a sudden disturbance by swimming at burst speed would tire after some time; its blood hormone and sugar levels may not return to normal for 24 hours. During the recovery period, the organism may not be able to attain burst speeds and could be more vulnerable to predators. If the individual were not able to regain a steady state following exposure to a physical stressor, it may suffer depressed immune function and even death.

G.3.3 LONG-TERM CONSEQUENCES TO THE POPULATION

Long-term consequences are considered in terms of a resource's existing population level, growth and mortality rates, other stressors on the resource from the Proposed Action, cumulative impacts on the resource, and the ability of the population to recover from or adapt to impacts. Impacts of multiple or repeated stressors on individuals are cumulative. When stressors are chronic, an organism may experience reduced growth, health, or survival, which could have population-level impacts (Billard et al. 1981), especially in the case of endangered species.

G.4 CONCEPTUAL FRAMEWORK FOR ASSESSING EFFECTS FROM ENTANGLEMENT

G.4.1 STIMULI

G.4.1.1 Physical Properties of the Objects

For an organism to become entangled in military expended materials, the materials must have certain properties, such as the ability to form loops and a high breaking strength. Some items could have a relatively low breaking strength on their own, but that breaking strength could be increased if multiple loops were wrapped around an entangled organism.

G.4.1.2 Location of the Objects

Evaluation of potential entanglement risk considered the spatial overlap of the resource occurrence and military expended materials. Distribution and density of expended items play a central role in the likelihood of impact. Wherever appropriate, specific geographic areas of potential impact are identified.

G.4.1.3 Buoyancy of Objects

Evaluation of potential entanglement risk considered the buoyancy of military expended materials to determine whether the object will be encountered within the water column (including the surface) or on the seafloor. Less buoyant materials, such as torpedo guidance wires, sink rapidly to the seafloor. More

buoyant materials include less dense items (e.g., parachutes) that are weighted and would sink slowly to the seafloor and could be entrained in currents.

G.4.1.4 Behavior of the Organism

Evaluation of potential entanglement risk considered the general behavior of the organism, including where the organism typically occurs (e.g., surface, water column, seafloor). The analysis particularly considered those species known to become entangled in nonmilitary expended materials (e.g., “marine debris”) such as fishing lines, nets, rope, and other derelict fishing gear that often entangle marine organisms.

G.4.2 IMMEDIATE RESPONSE AND COSTS TO THE INDIVIDUAL

The potential impacts of entanglement on a given organism depend on the species and size of the organism. Species that have protruding snouts, fins, or appendages are more likely to become entangled than smooth-bodied organisms. Also, items could get entangled by an organism's mouth, if caught on teeth or baleen, with the rest of the item trailing alongside the organism. Materials similar to fishing gear, which is designed to entangle an organism, would be expected to have a greater entanglement potential than other materials. An entangled organism would likely try to free itself of the entangling object and in the process may become even more entangled, possibly leading to a stress response. The net result of being entangled by an object could be disruption of the normal behavior, injury due to lacerations, and other sublethal or lethal impacts.

G.4.3 LONG-TERM CONSEQUENCES TO THE INDIVIDUAL AND POPULATION

Consequences of entanglement could range from an organism successfully freeing itself from the object or remaining entangled indefinitely, possibly resulting in lacerations and other sublethal or lethal impacts. Stress responses or infection from lacerations could lead to latent mortality. The analysis will focus on reasonably foreseeable long-term consequences of the direct impact, particularly those that could impact the fitness of an individual. Changes in an individual's growth, survival, annual reproductive success, or lifetime reproductive success could have population-level impacts if enough individuals are impacted. This population-level impact would vary among species and taxonomic groups.

G.5 CONCEPTUAL FRAMEWORK FOR ASSESSING EFFECTS FROM INGESTION

G.5.1 STIMULI

G.5.1.1 Size of the Objects

To assess the ingestion risk from military expended materials, this analysis considered the size of the object relative to the animal's ability to swallow it. Some items are too large to be ingested (e.g., non-explosive practice bombs and most targets) and impacts from these items are not discussed further. However, these items may potentially break down into smaller ingestible pieces over time. Items that are of ingestible size when they are introduced into the environment are carried forward for analysis within each resource section where applicable.

G.5.1.2 Location of the Objects

Evaluation of potential ingestion risk considered the spatial overlap of the resource occurrence and military expended materials. The distribution and density of expended items play a central role in the likelihood of impact. Wherever appropriate, specific geographic areas of potential impact were identified.

G.5.1.3 Buoyancy of the Objects

Evaluation of potential ingestion risk considered the buoyancy of military expended materials to determine whether the object will be encountered within the water column (including the surface) or on the seafloor. Less buoyant materials, such as solid metal materials (e.g., projectiles or ordnance fragments), sink rapidly to the seafloor. More buoyant materials include less dense items (e.g., target fragments and parachutes) that may be caught in currents and gyres or entangled in floating *Sargassum*. These materials can remain in the water column for an indefinite period of time before sinking. However, parachutes are weighted and would generally sink, unless that sinking is suspended, in the scenario described here.

G.5.1.4 Feeding Behavior

Evaluation of potential ingestion risk considered the feeding behavior of the organism, including where (e.g., surface, water column, seafloor) and how (e.g., filter feeding) the organism feeds and what it feeds on. The analysis particularly considered those species known to ingest nonfood items (e.g., plastic or metal items).

G.5.2 IMMEDIATE RESPONSE AND COSTS TO THE INDIVIDUAL

Potential impacts of ingesting foreign objects on a given organism depend on the species and size of the organism. Species that normally eat spiny hard-bodied invertebrates would be expected to have tougher mouths and guts than those that normally feed on softer prey. Materials similar in size and shape to the normal diet of an organism may be more likely to be ingested without causing harm to the animal; however, some general assumptions were made. Relatively small objects with smooth edges, such as shells or small-caliber projectiles, might pass through the digestive tract without causing harm. A small sharp-edged item may cause the individual immediate physical distress by tearing or cutting the mouth, throat, or stomach. If the object is rigid and large (relative to the individual's mouth and throat), it may block the throat or obstruct digestive processes. An object may even be enclosed by a cyst in the gut lining. The net result of ingesting large foreign objects is disruption of the normal feeding behavior, which could be sublethal or lethal.

G.5.3 LONG-TERM CONSEQUENCES TO THE INDIVIDUAL AND POPULATION

The consequences of ingesting nonfood items could be nutrient deficiency, bioaccumulation, uptake of toxic chemicals, compaction, and mortality. The analysis focused on reasonably foreseeable long-term consequences of the direct impact, particularly those that could impact the fitness of an individual. Changes in an individual's growth, survival, annual reproductive success, or lifetime reproductive success could have population-level impacts if enough individuals were impacted. This population-level impact would vary among species and taxonomic groups.

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Appendix H: Statistical Probability Analysis for Estimating Direct Air Strike Impact and Number of Potential Exposures

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APPENDIX H STATISTICAL PROBABILITY ANALYSIS FOR ESTIMATING DIRECT AIR STRIKE IMPACT AND NUMBER OF POTENTIAL EXPOSURES

This appendix discusses the methods and results for calculating the probability of a direct strike of an animal from any military items from the proposed training and testing activities falling toward (or directed at) the sea surface. For the purposes of this appendix, military items include non-explosive practice munitions, sonobuoys, acoustic countermeasures, and targets. Only marine mammals within the Offshore Area of the Northwest Training and Testing Study Area (Study Area) will be analyzed using these methods because the majority of activities that could impact marine mammals through strike impacts will occur in the Offshore Area and not in the Inland waters. Furthermore, the analysis conducted here does not account for explosive munitions because impacts from explosives are analyzed within the United States Department of the Navy (Navy) Acoustic Effects Model.

H.1 DIRECT IMPACT ANALYSIS

A statistical probability was calculated to estimate the impact probability (P) and number of exposures (T) associated with direct impact of military items on marine mammals on the sea surface within the specified training or testing area (R) in which the activities are occurring. The analysis does not account for lookouts and other mitigations the Navy uses to avoid marine mammal strikes. The statistical probability analysis is based on probability theory and modified Venn diagrams with rectangular “footprint” areas for the individual animal (A) and total impact (I) inscribed inside the training or testing area (R). The analysis assumes: (1) that all animals would be at or near the surface 100 percent of the time, when in fact, marine mammals spend the majority of their time underwater; and (2) that the animals are stationary, which does not account for any movement or any potential avoidance of the training or testing activity.

1. $A = \text{length} * \text{width}$, where the individual animal’s width (breadth) is assumed to be 20 percent of its length for marine mammals. This product for A is multiplied by the number of animals N_a in the specified training or testing area (i.e., product of the highest average seasonal animal density [D] and training or testing area [R]: $N_a = D * R$) to obtain the total animal footprint area ($A * N_a = A * D * R$) in the training or testing area. As a worst case scenario, the total animal footprint area is calculated for the species with the highest average seasonal density in the training or testing area with the highest use of military items within the entire Study Area.
2. $I = N_{mun} * \text{length} * \text{diameter}$, where N_{mun} = total annual number of military items for each type, and “length” and “diameter” refer to the individual military equipment dimensions. For each type, the individual impact footprint area is multiplied by the total annual number of military items to obtain the type-specific impact footprint area ($I = N_{mun} * \text{length} * \text{diameter}$). Each training or testing activity uses one or more different types of military items, each with a specific number and dimensions, and several training and testing activities occur in a given year. When integrating over the number of military items types for the given activity (and then over the number of activities in a year), these calculations are repeated (accounting for differences in dimensions and numbers) for all military items types used, to obtain the type-specific impact footprint area (I). These impact footprint areas are summed over all military items types for the given activity, and then summed (integrated) over all activities to obtain the total impact footprint area resulting from all activities occurring in the training or testing area in a given year. As a worst case scenario, the total impact footprint area is calculated for the training or testing area with the highest use of military items within the entire Study Area.

Though marine mammals are not randomly distributed in the environment, a random point calculation was chosen due to the intensive data needs that would be required for a calculation that incorporated more detailed information on an animal's or military item's spatial occurrence.

The analysis is expected to provide an overestimation of the probability of a strike for the following reasons: (1) it calculates the probability of a single military item (of all the items expended over the course of the year) hitting a single animal at its species' highest seasonal density; (2) it does not take into account the possibility that an animal may avoid military activities; (3) it does not take into account the possibility that an animal may not be at the water surface; (4) it does not take into account that most projectiles fired during training and testing activities are fired at targets, and so only a very small portion of those projectiles that miss the target would hit the water with their maximum velocity and force; and (5) it does not quantitatively take into account the Navy avoiding animals that are sighted through the implementation of mitigation measures.

The likelihood of an impact is calculated as the probability (P) that the animal footprint (A) and the impact footprint (I) will intersect within the training or testing area (R). This is calculated as the area ratio A/R or I/R, respectively. Note that A (referring to an **individual** animal footprint) and I (referring to the impact footprint resulting from the **total** number of military items N_{mun}) are the relevant quantities used in the following calculations of single-animal impact probability [P], which is then multiplied by the number of animals to obtain the number of exposures (T). The probability that the random point in the training or testing area is within both types of footprints (i.e., A and I) depends on the degree of overlap of A and I. The probability that I overlaps A is calculated by adding a buffer distance around A based on one-half of the impact area (i.e., $0.5*I$), such that an impact (center) occurring anywhere within the combined (overlapping) area would impact the animal. Thus, if L_i and W_i are the length and width of the impact footprint such that $L_i*W_i = 0.5*I$ and $W_i/L_i = L_a/W_a$ (i.e., similar geometry between the animal footprint and impact footprint), and if L_a and W_a are the length and width (breadth) of the individual animal such that $L_a*W_a = A$ (= individual animal footprint area), then, assuming a purely static, rectangular scenario (Scenario 1), the total area $A_{tot} = (L_a + 2*L_i)*(W_a + 2*W_i)$, and the buffer area $A_{buffer} = A_{tot} - L_a*W_a$.

Four scenarios were examined with respect to defining and setting up the overlapping combined areas of A and I:

1. **Scenario 1:** Purely static, rectangular scenario. Impact is assumed to be static (i.e., direct impact effects only; non-dynamic; no explosions or scattering of military items after the initial impact). Hence the impact footprint area (I) is assumed to be rectangular and given by the product of military items length and width (multiplied by the number of military items). $A_{tot} = (L_a + 2*L_i)*(W_a + 2*W_i)$ and $A_{buffer} = A_{tot} - L_a*W_a$.
2. **Scenario 2:** Dynamic scenario with end-on collision, in which the length of the impact footprint (L_i) is enhanced by $R_n = 5$ military items lengths to reflect forward momentum. $A_{tot} = (L_a + (1 + R_n)*L_i)*(W_a + 2*W_i)$ and $A_{buffer} = A_{tot} - L_a*W_a$.
3. **Scenario 3:** Dynamic scenario with broadside collision, in which the width of the impact footprint (W_i) is enhanced by $R_n = 5$ military items lengths to reflect forward momentum. $A_{tot} = (L_a + 2*W_i)*(W_a + (1 + R_n)*L_i)$ and $A_{buffer} = A_{tot} - L_a*W_a$.
4. **Scenario 4:** Purely static, radial scenario, in which the rectangular animal and impact footprints are replaced with circular footprints while conserving area. Define the radius (R_a) of the circular

individual animal footprint such that $\pi * R_a^2 = L_a * W_a$, and define the radius (R_i) of the circular impact footprint such that $\pi * R_i^2 = 0.5 * L_i * W_i = 0.5 * I$. Then $A_{tot} = \pi * (R_a + R_i)^2$ and $A_{buffer} = A_{tot} - \pi * R_a^2$ (where $\pi = 3.1415927$).

Static impacts (Scenarios 1 and 4) assume no additional areal coverage effects of scattered military items beyond the initial impact. For dynamic impacts (Scenarios 2 and 3), the distance of any scattered military items must be considered by increasing the length (Scenario 2) or width (Scenario 3), depending on orientation (broadside versus end-on collision), of the impact footprint to account for the forward horizontal momentum of the falling object. Forward momentum typically accounts for five object lengths, resulting in a corresponding increase in impact area. Significantly different values may result from these two types of orientation. Both of these types of collision conditions can be calculated each with 50 percent likelihood (i.e., equal weighting between Scenarios 2 and 3, to average these potentially different values).

Impact probability P is the probability of impacting one animal with the given number, type, and dimensions of all military items used in training or testing activities occurring in the area per year, and is given by the ratio of total area (A_{tot}) to training or testing area (R): $P = A_{tot}/R$. Number of exposures is $T = N * P = N * A_{tot}/R$, where N = number of animals in the training or testing area per year (given as the product of the animal density [D] and range size [R]). Thus, $N = D * R$ and hence $T = N * P = N * A_{tot}/R = D * A_{tot}$. Using this procedure, P and T were calculated for each of the four scenarios, for Endangered Species Act (ESA)-listed marine mammals and the marine mammals with the highest average seasonal density (used as the annual density value) and for each military item type. The scenario-specific P and T values were averaged over the four scenarios (using equal weighting) to obtain a single scenario-averaged annual estimate of P and T .

H.2 PARAMETERS FOR ANALYSIS

Impact probabilities (P) and number of exposures (T) were estimated by the analysis for the following parameters:

1. **Three proposed alternatives:** No Action Alternative, Alternative 1, and Alternative 2. Animal densities, animal dimensions, and military item dimensions are the same for the three alternatives.
2. **One training or testing area:** The Offshore Area was chosen because it constitutes the area with the highest estimated numbers and concentrations of military expended materials for each alternative, and would, thus, provide a reasonable comparison for all other areas with fewer expended materials. Although a small number of munitions and other items are dropped from the air in the inland waters of Puget Sound (within the Dabob Bay Range Complex Site), none are expended in the western Behm Canal (Alaska).
3. **The following types of munitions or other items:**
 - (a) **Small-caliber projectiles:** up to and including 0.50 caliber rounds
 - (b) **Medium-caliber projectiles:** larger than 0.50 caliber rounds but smaller than 57-millimeter (mm) projectiles
 - (c) **Large-caliber projectiles:** includes projectiles greater than or equal to a 57 mm projectile
 - (d) **Missiles:** includes rockets and jet-propelled munitions

- (e) **Bombs:** non-explosive practice bombs and mine shapes, ranging from 10 to 2,000 pounds (4.5 to 907.2 kilograms)
 - (f) **Torpedoes:** includes aircraft deployed torpedoes
 - (g) **Sonobuoys:** includes aircraft deployed sonobuoys
4. **Animal species of interest:** the seven species of ESA-listed marine mammals and the non-ESA listed marine mammal species with the highest average seasonal density in the training and testing area of interest.

H.3 INPUT DATA

Input data for the direct strike analysis include animal species likely to be in the area and military items proposed for use under each of the three alternatives. Animal species data include: (1) species ID and status (i.e., threatened, endangered, or neither), (2) highest average seasonal density estimate for the species of interest, and (3) adult animal dimensions (length and width) for the species with the highest density. The animal's dimensions are used to calculate individual animal footprint areas ($A = \text{length} \times \text{width}$), and animal densities are used to calculate the number of exposures (T) from the impact probability (P): $T = N \times P$. Military items data include: (1) military items category (e.g., projectile, bomb, rocket, target), (2) military items dimensions (length and width), and (3) total number of military items used annually.

Military items input data, specifically the quantity (e.g., numbers of guns, bombs, and rockets), are different in magnitude among the three proposed alternatives (No Action Alternative, Alternative 1, and Alternative 2). All animal species input data, the military items identification and category, and military items dimensions, are the same for the three alternatives, only the quantities (i.e., total number of military items) are different.

H.4 OUTPUT DATA

Estimates of impact probability (P) and number of exposures (T) for a given species of interest, were made for the specified training or testing area with the highest annual number of military items used for each of the three alternatives. The calculations derived P and T from the highest annual number of military items used in the Study Area for the given alternative. Differences in P and T among the alternatives arise from different numbers of events (and therefore military items) for the three alternatives.

Results for marine mammals are presented in Table H-1. The probabilities shown in the table are for any single year.

Table H-1: Estimated Annual Marine Mammal Exposures from Direct Strike of Munitions and Other Items by Area and Alternative

Northwest Training and Testing Range						
Offshore Area						
Species	Training			Testing		
	No Action	Alternative 1	Alternative 2	No Action	Alternative 1	Alternative 2
Blue whale	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Fin whale	0.00001	0.00002	0.00002	< 0.00001	< 0.00001	< 0.00001
Humpback whale	0.00018	0.00024	0.00024	< 0.00001	0.00001	0.00001
Killer whale	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
North Pacific right whale	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Sei whale	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Sperm whale	0.00006	0.00008	0.00008	< 0.00001	< 0.00001	< 0.00001
Pacific white-sided Dolphin ¹	0.00015	0.00019	0.00019	< 0.00001	< 0.00001	0.00001

¹ This is a non-Endangered Species Act-listed marine mammal species with the highest average seasonal density in the training and testing area of interest.

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Appendix I: Public Participation

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APPENDIX I PUBLIC PARTICIPATION

This appendix includes information about the public's participation in the development of the Northwest Training and Testing Activities (NWT) Environmental Impact Statement (EIS)/Overseas EIS (OEIS).

I.1 PROJECT WEBSITE

A public website was established specifically for this project, <http://www.NWTTEIS.com/>. This website address was published in the *Notice of Intent to Prepare an Environmental Impact Statement and Overseas Impact Statement* (Notice of Intent) and has subsequently been re-printed in all newspaper advertisements, agency letters, and public postcards. The Scoping Meeting Fact Sheets and various other materials have been available on the project website throughout the course of the project.

I.2 GENERAL SUMMARY OF THE SCOPING PERIOD

The public scoping period began with the issuance of the Notice of Intent in the *Federal Register* on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the United States (U.S.) Department of the Navy's (Navy's) notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS.

I.2.1 NOTIFICATION LETTERS TO TRIBAL GOVERNMENTS

Notification letters were distributed to Tribal governments on 23 February 2012, to 46 federally recognized tribes and tribal groups. Recipients included (* indicates a non-federally recognized tribal group):

Washington

Chinook Indian Nation*
Confederated Tribes of the Chehalis Reservation
Cowlitz Indian Tribe
Hoh Indian Tribe of the Hoh Indian Reservation
Jamestown S'Klallam Tribe
Lower Elwha Klallam Tribe*
Lummi Tribe of the Lummi Reservation
Makah Indian Tribe of the Makah Indian Reservation
Muckleshoot Indian Tribe of the Muckleshoot Reservation
Nisqually Indian Tribe of the Nisqually Reservation
Nooksack Indian Tribe of Washington
Northwest Indian Fisheries Commission*
Point No Point Treaty Council*
Port Gamble Indian Community of Port Gamble Reservation
Puyallup Tribe of the Puyallup Reservation
Quileute Tribe of the Quileute Reservation
Quinault Indian Nation
Samish Indian Tribe
Sauk-Suiattle Indian Tribe of Washington
Shoalwater Bay Tribe of the Shoalwater Bay Indian Reservation
Skagit River System Cooperative*

Skokomish Indian Tribe of the Skokomish Reservation
Snoqualmie Tribe
Squaxin Island Tribe of the Squaxin Island Reservation
Stillaguamish Tribe of Washington
Suquamish Indian Tribe of the Port Madison Reservation
Swinomish Indians of the Swinomish Reservation
Tulalip Tribes of the Tulalip Reservation
Upper Skagit Indian Tribe

Oregon

Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians
Confederated Tribes of Grand Ronde Community of Oregon
Confederated Tribes of Siletz Indians of Oregon
Confederated Tribes of the Warm Springs Reservation
Coquille Tribe of Oregon
Cow Creek Band of Umpqua Indians of Oregon
Klamath Tribes

California

Cahto Indian Tribe of the Laytonville Rancheria
Cher-Ae Heights Indian Community of the Trinidad Rancheria
Coyote Valley Band of Pomo Indians
Elk Valley Rancheria
Hoopa Valley Tribe
Hopland Band of Pomo Indians of the Hopland Rancheria
Karuk Tribe
Pinoleville Pomo Nation
Potter Valley Tribe
Redwood Valley Rancheria of Pomo Indians of California
Robinson Rancheria of Pomo Indians of California
Round Valley Indian Tribes of the Round Valley Reservation
Scotts Valley Band of Pomo Indians of California
Sherwood Valley Rancheria of Pomo Indians of California
Smith River Rancheria
Tolowa Nation*
Wiyot Tribe
Yurok Tribe of the Yurok Reservation

Alaska

Cape Fox Corporation*
Central Council of the Tlingit and Haida Indian Tribes of Alaska
Ketchikan Indian Community
Metlakatla Indian Community, Annette Island Reserve
Organized Village of Saxman
Sealaska*

I.2.2 PUBLIC SCOPING NOTIFICATION

The Navy made significant efforts at notifying the public to ensure maximum public participation during the scoping process. A summary of these efforts follows.

I.2.2.1 Scoping Notification Letters

Letters conveying the Navy's Notice of Intent/Notice of Scoping Meeting were distributed on 29 February 2012, to 748 federal, state, and local elected officials and government agencies. Recipients included:

Federal

U.S. Senators (Washington, Oregon, California, Alaska) and Staff

U.S. Representatives (Washington Districts 1, 2, 3, 6, 7, 8, and 9; Oregon Districts 1, 2, 3, 4, and 5; California Districts 1 and 2; and Alaska At-Large District) and Staff

Battelle Pacific Northwest Laboratory

Federal Aviation Administration

Washington, D.C., Headquarters

Western Pacific Region

Marine Mammal Commission

U.S. Army Corps of Engineers

Washington, D.C., Headquarters

Seattle District

U.S. Department of Commerce

Washington, D.C., Headquarters

National Oceanic and Atmospheric Administration (NOAA)

National Marine Fisheries Service

Northwest Fisheries Science Center

Maryland Offices

Office of Habitat Conservation

Washington Habitat Branch

Office of Protected Resources

Northwest Region

National Marine Protected Areas Center

Olympic Coast National Marine Sanctuary

Pacific Fishery Management Council

U.S. Department of Homeland Security

U.S. Coast Guard

District 13

District 17

Office of Operating and Environmental Standards

U.S. Army National Guard

Oregon Division

U.S. Department of the Interior

Bureau of Indian Affairs

Northwest Regional Office

Bureau of Land Management

Coos Bay District Office

Oregon/Washington State Office

Spokane District Office
Bureau of Ocean Energy Management, Regulation, and Enforcement
Pacific Outer Continental Shelf Region
Bureau of Safety and Environmental Enforcement
Pacific Outer Continental Shelf Region
Office of Regulation
National Park Service
Olympic National Park
Office of Environmental Policy and Compliance
Portland Region
U.S. Environmental Protection Agency
National Environmental Policy Act (NEPA) Compliance Division
Region X (Seattle)
Environmental Review and Sediment Management Unit
Washington, D.C., Headquarters
U.S. Fish and Wildlife Service
Pacific Regional Office
Washington Maritime Wildlife Refuge Complex
Western Washington Office
U.S. Forest Service
Pacific Northwest Region Office
U.S. Geological Survey
Alaska Science Center
Northwest Area Office
Pacific Northwest Region Office
Southwest Area Office
Western Fisheries Research Center

State of Washington

Office of the Governor
State Senators (Districts 1, 2, 7, 10, 19, 21, 23, 24, 25, 26, 27, 28, 29, 31, 32, 35, 38, 39, and 44) and Staff
State Representatives (Districts 1, 2, 7, 10, 19, 21, 23, 24, 25, 26, 27, 28, 29, 31, 32, 35, 38, 39, and 44)
and Staff
Coastal Advisory Body on Ocean Policy
Puget Sound Partnership
Department of Agriculture
Policy and Communications Department
Department of Archaeology and Historic Preservation
Department of Ecology
Southwest Regional Office
Department of Fish and Wildlife
Region 6
Department of Natural Resources
Fish and Wildlife Commission
Parks and Recreation Commission

State of Oregon

Office of the Governor

State Senators (Districts 1, 5, 16, 28, and 29) and Staff
State Representatives (1, 9, 10, 31, 32, 57) and Staff
Department of Fish and Wildlife
Department of Forestry
Department of Land Conservation and Development
Department of Parks and Recreation
Department of State Lands
Military Department
Department of Environmental Quality
 Water Quality Division
Water Resources Department
Pacific States Marine Fisheries Commission

State of California

Office of the Governor
State Senators (Districts 1, 2, and 4) and Staff
State Assembly Members (District 1) and Staff
California Coastal Commission
 San Francisco Headquarters
 North Coast District Office
Department of Fish and Game
Environmental Protection Agency
Resources Agency
Department of Toxic Substances Control

State of Alaska

Office of the Governor
State Senators (Districts A, B, and C) and Staff
State Representatives (Districts 1, 2, 3, 4, and 5) and Staff
Alaska Marine Highway
Department of Natural Resources
 Division of Forestry
 Division of Geological and Geophysical Surveys
 Division of Mining, Land and Water
 Division of Oil and Gas
 Division of Parks and Outdoor Recreation
 Office of History and Archaeology
 Public Information Center
Department of Commerce
 Community and Economic Development
 Division of Community and Regional Affairs
Department of Environmental Conservation
 Division of Administrative Services
 Division of Air Quality
 Division of Environmental Health
 Division of Spill and Prevention Response
 Division of Water
Department of Fish and Game

Commercial Fisheries Division
Division of Wildlife Conservation
Habitat Division
Sport Fish Division
Sportfishing
Subsistence Division
Wildlife Conservation Division
Department of Military and Veterans Affairs
Department of Transportation and Public Facilities
Division of Ports and Harbors
Juneau Office
Statewide Aviation Office
Regulatory Commission of Alaska

Local – Washington

City of Aberdeen
City of Bremerton
City of Everett
City of Hoquiam
City of Oak Harbor
City of Ocean Shores
City of Port Townsend
City of Poulsbo
City of Tacoma
City of Westport
County of Clallam
County of Ferry
County Grays Harbor
County of Island
County of Jefferson
County of Kitsap
County of Pacific
County of Pierce
County of San Juan
County of Snohomish
Friday Harbor Airport

Local – Oregon

City of Astoria
City of Bandon
City of Bay City
City of Brookings
City of Cannon Beach
City of Coos Bay
City of Depoe Bay
City of Garibaldi
City of Gearhart
City of Gold Beach

City of Lakeside
City of Lincoln
City of Manzanita
City of Nehalem
City of Newport
City of North Bend
City of Port Orford
City of Reedsport
City of Rockaway Beach
City of Seaside
City of Tillamook
City of Waldport
City of Warrenton
City of Wheeler
City of Yachats
County of Clatsop
County of Coos
County of Curry
County of Lane
County of Lincoln
County of Tillamook
Depoe Bay Nearshore Action Team
Port Orford Watershed Council

Local – California

City of Arcata
City of Crescent
City of Eureka
City of Fort Bragg
City of Point Arena
City of Trinidad
County of Del Norte
County of Humboldt
County of Mendocino
Humboldt County Democratic Central Committee

Local – Alaska

City of Ketchikan
Ketchikan Gateway Borough

I.2.2.2 Postcard Mailers

On 28 February 2012, postcards were mailed to 1,925 organizations and individuals on the NWTT project mailing list, which was compiled, validated, and updated from previous Navy NEPA projects in the Northwest. Postcards included the scoping meeting dates, locations, and times.

I.2.2.3 Press Releases

Three press releases were distributed by the Navy Region Northwest Public Affairs Office to media outlets, elected officials and other potentially interested parties. The news releases were distributed on

27 February 2012, 5 March 2012, and 15 March 2012, respectively, and announced the intent to prepare an EIS/OEIS and provided notice of the open house information sessions. The press releases included information about the Proposed Action and its purpose and need; open house information session locations, dates, and times; and project website and comment submittal information.

I.2.2.4 Notification Flier

A notification flier was distributed to 37 locations in Washington, 18 locations in Oregon, 26 locations in Northern California, and 7 locations in Alaska to be posted in areas frequented by the local community. The flier provided information on the Proposed Action, open house information session locations, dates and times, project website and information on comment submittal. The fliers were mailed on 8 March 2012 and follow-up phone calls were made to ensure posting.

I.2.2.5 Newspaper Display Advertisements

Advertisements were made to announce the scoping meetings in the following counties, cities and newspapers on the dates indicated below:

Kitsap County, Statewide <i>The Seattle Times</i> Monday, Feb. 27, 2012 Tuesday, Feb. 28, 2012 Wednesday, Feb. 29, 2012 Wednesday, Mar. 7, 2012 Wednesday, Mar. 14, 2012 Thursday, Mar. 15, 2012 Friday, Mar. 16, 2012	Snohomish County <i>The Everett Herald</i> Monday, Feb. 27, 2012 Tuesday, Feb. 28, 2012 Wednesday, Feb. 29, 2012 Tuesday, Mar. 6, 2012 Tuesday, Mar. 13, 2012 Wednesday, Mar. 14, 2012 Thursday, Mar. 15, 2012	Island County <i>Whidbey News-Times</i> Wednesday, Feb. 29, 2012 Saturday, Mar. 3, 2012 Wednesday, Mar. 7, 2012 Saturday, Mar. 10, 2012
Kitsap County <i>The Kitsap Sun</i> Monday, Feb. 27, 2012 Tuesday, Feb. 28, 2012 Wednesday, Feb. 29, 2012 Thursday, Mar. 8, 2012 Tuesday, Mar. 13, 2012 Wednesday, Mar. 14, 2012 Thursday, Mar. 15, 2012	Clallam/Jefferson County <i>Peninsula Daily News</i> Monday, Feb. 27, 2012 Tuesday, Feb. 28, 2012 Wednesday, Feb. 29, 2012 Monday, Mar. 5, 2012 Monday, Mar. 12, 2012 Tuesday, Mar. 13, 2012 Wednesday, Mar. 14, 2012	Jefferson County <i>Port Townsend and Jefferson County Leader</i> Wednesday, Feb. 29, 2012 Wednesday, Mar. 7, 2012 Wednesday, Mar. 14, 2012
Grays Harbor County <i>The Daily World</i> Tuesday, Feb. 28, 2012 Thursday, Mar. 1, 2012 Friday, Mar. 2, 2012 Thursday, Mar. 8, 2012 Wednesday, Mar. 14, 2012 Thursday, Mar. 15, 2012 Friday, Mar. 16, 2012	Statewide, OR <i>The Oregonian</i> Monday, Feb. 27, 2012 Tuesday, Feb. 28, 2012 Wednesday, Feb. 29, 2012 Monday, Mar. 12, 2012 Sunday, Mar. 18, 2012 Monday, Mar. 19, 2012 Tuesday, Mar. 20, 2012	Tillamook, OR <i>Tillamook Headlight-Herald</i> Wednesday, Feb. 29, 2012 Wednesday, Mar. 7, 2012 Wednesday, Mar. 14, 2012

Newport, OR
Newport News-Times
 Wednesday, Feb. 29, 2012
 Friday, Mar. 2, 2012
 Wednesday, Mar. 7, 2012
 Friday, Mar. 9, 2012
 Wednesday, Mar. 14, 2012
 Friday, Mar. 16, 2012

Eureka, CA
Eureka Times-Standard
 Tuesday, Feb. 28, 2012
 Wednesday, Feb. 29, 2012
 Thursday, Mar. 1, 2012
 Wednesday, Mar. 14, 2012
 Tuesday, Mar. 20, 2012
 Wednesday, Mar. 21, 2012
 Thursday, Mar. 22, 2012

Fort Bragg, CA
Fort Bragg Advocate-News
 Thursday, Mar. 1, 2012
 Thursday, Mar. 8, 2012
 Thursday, Mar. 15, 2012
 Thursday, Mar. 22, 2012

Juneau, AK
The Juneau Empire
 Monday, Feb. 27, 2012
 Tuesday, Feb. 28, 2012
 Wednesday, Feb. 29, 2012
 Tuesday, Mar. 20, 2012
 Sunday, Mar. 25, 2012
 Monday, Mar. 26, 2012
 Tuesday, Mar. 27, 2012

Ketchikan, AK
Ketchikan Daily News
 Monday, Feb. 27, 2012
 Tuesday, Feb. 28, 2012
 Wednesday, Feb. 29, 2012
 Tuesday, Mar. 20, 2012
 Saturday, Mar. 24, 2012
 Monday, Mar. 26, 2012
 Tuesday, Mar. 27, 2012

I.2.3 SCOPING MEETINGS

Nine scoping meetings were held in March 2012 (March 13, 14, 15, 16, 19, 20, 22, 23, and 27) in the cities of Oak Harbor, WA; Quilcene, WA; Silverdale, WA; Aberdeen, WA; Tillamook, OR; Newport, OR; Eureka, CA; Fort Bragg, CA; and Ketchikan, AK, respectively. At each scoping meeting, staffers at the welcome station greeted guests and encouraged them to sign in to be added to the project mailing list to receive future notifications. In total, 238 people signed in at the welcome table. The meetings were held in an open house format, presenting informational posters and written information, with Navy staff and project experts available to answer participants' questions. Additionally, a digital voice recorder was available to record participants' oral comments. The interaction during the information sessions was productive and helpful to the Navy.

What is a scoping meeting?

The scoping period determines the extent of the EIS in terms of significant issues. Scoping meetings allow the face-to-face exchange of information and ideas to ensure relevant topics are identified and properly studied and that the Draft EIS is thorough and balanced.

I.2.4 PUBLIC SCOPING COMMENTS

Scoping participants submitted comments in five ways:

- Oral statements at the public meetings (as recorded by the digital voice recorder)
- Written comments at the public meetings
- Written letters (received any time during the public comment period)
- Electronic mail (received any time during the public comment period)
- Comments submitted directly on the project website (received any time during the public comment period)

In total, the Navy received comments from 316 individuals and groups. Because many of the comments addressed more than one issue, 1,054 total comments resulted. Table I.2-1 provides a breakdown of areas of concern based on comments received during scoping. The summary following Table I.2-1 provides an overview of comments and is organized by area of concern.

Table I.2-1: Public Scoping Comment Summary

Area of Concern	Count	Percent of Total
Marine Mammals	225	21.3%
Sound in the Water/Sonar	173	16.4%
Underwater Explosions	71	6.7%
Mitigation	59	5.6%
Study Area/Size	57	5.4%
Fish	56	5.3%
Marine Habitats	45	4.3%
National Environmental Policy Act Process/Public Participation	42	4.0%
Navy Activities/Proposed Action	38	3.6%
Sea Turtles	35	3.3%
Birds	30	2.8%
Water Quality	29	2.8%
Socioeconomics/Commercial and Recreational Fishing	29	2.8%
Cumulative Impacts	25	2.4%
Public Health and Safety	24	2.3%
Other	23	2.2%
Research	20	1.9%
Air Quality	18	1.7%
Marine Debris	15	1.4%
Terrestrial Resources	15	1.4%
Noise	11	1.0%
Cultural Resources/American Indian Concerns	9	0.9%
Access	5	0.5%
TOTAL	1,054	100.0%

I.2.4.1 Marine Mammals

A significant number of participants requested the Navy train and test in areas devoid of marine life. Comments expressed a general concern about the Navy's training and testing activities, which include sonar and explosives, and how these activities can harm or kill marine mammals. Many comments requested the need for improved and more effective marine mammal protection measures, particularly since many whale species are declining. Other comments addressed the migration routes of marine mammals and the need for Navy to avoid these to ensure the success of marine species. Comments requested the Navy address hot spots and other methods to actively protect marine mammals.

I.2.4.2 Sound in the Water/Sonar

Comments in this category expressed concern about the use of sonar in biologically diverse areas of the Pacific Northwest, questioned the need for sonar, and requested the Navy stop using sonar in its training and testing activities. Comments questioned the proposed increased use of sonar in Puget Sound and Dabob Bay. Many comments questioned the current research available on the effects of sonar on marine species, and stated that lack of information should force sonar activities to a halt until better research is conducted. Many comments felt current models are inadequate and misrepresent expected take levels. Comments also questioned marine species hearing thresholds of underwater sound at various ranges and cited specific examples where sonar has harmed marine life.

I.2.4.3 Underwater Explosions

Many comments referenced the negative impacts underwater explosives have on marine life. Comments also expressed concerns for public safety. Comments addressed toxic and radioactive materials leached from munitions, bombs and other explosives, and the water contamination that is a result of underwater explosions. Comments referenced L-112 (an individual killer whale), and other marine mammal deaths, and the belief that Navy explosives were the cause. Many comments requested the Navy cease using explosives in such a biologically diverse area.

I.2.4.4 Mitigation

A significant number of participants expressed concerns about current mitigation measures and the inadequate reliance on lookouts to spot marine species. Comments stated that current passive sonar technology should be improved and more sophisticated technology should be designed to more effectively identify and track marine species. Comments stated that the Navy should focus on avoidance of hot spots and migration routes, and even create greater buffer zones away from the coastline. Mitigation measures for aircraft flight paths to minimize routes over residential areas were also suggested. Many comments expressed the need for the Navy to coordinate with other federal, state, and local agencies to develop more effective mitigation measures.

I.2.4.5 Study Area/Size

Most comments regarding the Study Area addressed the need for training and testing in the Pacific Northwest, expressed concern for the lack of designations on the Study Area Map, such as Marine Protected Areas, and questioned the legitimacy of having such a large Study Area. Many comments expressed concern about "the expansion" of training ranges in the Pacific Northwest or requested the Navy train and test farther away from the coastline to create a larger buffer zone for coastal species. Many comments requested the Navy train and test outside the Pacific Northwest in areas with less species diversity. Other comments expressed concern that Puget Sound and the Olympic Coast National Marine Sanctuary are part of the Study Area.

I.2.4.6 Fish

There were several comments about how training and testing activities would impact the albacore, groundfish, salmon, shellfish, and halibut fisheries and subsequent effects on prey. Comments questioned the effects underwater sound from sonar, pile driving, and explosives have on fish and the research that has been put in place to make these determinations. Many comments addressed the need to train elsewhere to reduce harm on fish species that are needed for tourism, recreational, and commercial purposes.

I.2.4.7 Marine Habitats

Comments in this category expressed concern about the impacts Navy training and testing may have on the many marine habitats in the Pacific Northwest that are home to a diversity of species. Comments addressed the need for alternatives and mitigation to focus on habitat management. Protection of breeding habitats was a common theme. Comments specifically addressed the importance of Puget Sound as a feeding ground for many marine species.

I.2.4.8 National Environmental Policy Act Process/Public Participation

A significant number of participants requested a comment period extension, as suggested by the Natural Resources Defense Council, due to perceived poor scoping meeting attendance. Other comments expressed concern with the meeting format, the information provided, and Navy representation by contractors. Some comments, however, expressed appreciation for the information provided and for the subject matter experts present at the open house information sessions. Some comments felt the timing for public meetings was inappropriate because of the lack of information on the cause of death for L-112. Some comments inquired about the cost of meetings, missing documentation on the project website, the website commenting tool, and the locations for the future public hearings.

I.2.4.9 Navy Activities/Proposed Action

Many participants in the comment process wanted detailed documentation of, and reasons for, the types (including types of vessels and aircraft), frequencies and locations of Navy activities conducted in the Pacific Northwest. Many comments expressed opposition to the U.S. military or did not support an increase in Navy training and testing activities. Comments expressed concern about Navy activities that use sonar and explosives, and questioned the need for such activities since there is no imminent threat. Comments also requested the Navy develop new alternatives that have minimal environmental impact. Participants also requested alterations to flight paths and notifications of flight activity.

I.2.4.10 Sea Turtles

There were several comments regarding the impacts sonar and explosives would have on sea turtles and sea turtle habitat. Comments addressed direct impacts that could result when sea turtles are exposed to sound over a certain decibel. Other comments questioned the impacts on sea turtles during training and testing with unmanned systems. Comments generally requested the Navy train and test in areas devoid of marine life, especially outside of the Olympic Coast National Marine Sanctuary.

I.2.4.11 Birds

Natural resource issues mentioned were the impacts training and testing, including the use of sonar, explosives and pile driving, have on birds, particularly threatened and endangered diving bird species, such as the marbled murrelet and short-tailed albatross. Comments in this category specifically addressed the alarming decrease in shorebird and seabird populations in Washington State and

requested recent studies from outside the Navy on these reduced bird populations. Comments also questioned methods of observation and avoidance measures in place. Other comments addressed how toxic materials can impact bird species, stated a lack of attention is given to birds since marine mammals are the more popular species, and requested the Navy be sensitive to the habits and migratory patterns of the birds around Whidbey Island.

I.2.4.12 Water Quality

Concerns in this area were about identifying water bodies likely to be impacted by the project, the nature of the potential impacts and the specific discharges and pollutants likely to impact those waters. Additional comments discussed past exemptions the Navy received allowing excessive pollution of waterways. Water contamination was a prominent topic throughout all comments in this category.

I.2.4.13 Socioeconomics/Commercial and Recreational Fishing

Comments in this category stated how recreational access is vital to the economic base of the Pacific Northwest coastal communities. Several comments questioned the impacts on the tuna, halibut, salmon and shellfish fisheries and groundfish habitat, and requested review of Navy activities for compatibility with commercial and recreational fishery seasons. One recommendation was for the Navy to include notification of exercises on the NOAA weather forecast so that the small boat tuna fleet could have increased awareness. Other comments questioned how Navy activities would impact tourism, which some considered driven by whale watchers, and whether or not fisherman would be reimbursed for economic losses as a result of reduced catches.

I.2.4.14 Cumulative Impacts

Comments on cumulative impacts requested the Navy consider all ocean impacts, such as waste from the tsunami in Japan, oil spills, garbage and discarded fishing nets, when assessing Navy activities. Comments directed the Navy to meaningfully evaluate cumulative impacts on marine species (both in and outside the project area) from underwater noise, sonar and other stressors, including climate change and ocean acidification. Other comments requested the Navy analyze the cumulative impacts from combined and individual Canadian and Navy sonar usage.

I.2.4.15 Public Health and Safety

Comments pertaining to public health and safety requested the Navy engage in direct dialogue with the trawling community and co-develop a mutually acceptable warning system that will alert trawlers when submarines are operating in the same area. Other comments specifically addressed the impacts aircraft flight paths have on residents by disrupting sleep patterns. Additional comments expressed concern about toxic chemicals used in Navy range complexes, including the impact these toxic chemicals have on air and water that residents are exposed to, and the safety risks imposed on residents with the use of drones, weapons, aircraft, sonar, and ships near the Pacific Northwest coastline. Comments requested the Navy clean up hazardous spills and ordnance on all Navy ranges and provide details on the proper disposal of all toxic wastes, hazardous materials, and other waste.

I.2.4.16 Other

This category of comments addressed issues or concerns that were beyond the scope of the NWTT EIS/OEIS. Comments addressed the use of white phosphorus and depleted uranium, inquired about domestic disaster training and coordinating with the Canadian Navy, requested the use of local products to reduce the Navy's environmental footprint, suggested that the actual decision-makers interact with the public, or expressed support for national security.

I.2.4.17 Research

Comments in this category requested the Navy spend more money on researching the physical and behavioral effects sonar and pile driving have on marine mammals. Other comments addressed the need to invest money in technology that better identifies the presence of sea life, and questioned if existing technology has been adequately tested, such as unmanned vehicles, and the true effects these technologies have on sensitive areas. Comments requested the Navy also research and address barosinusitis in whales and dolphins, to better understand species migration patterns, which may lead to altering training routes to reduce impacts, and to continue researching the cause of the recent whale casualty (L-112) in the area.

I.2.4.18 Air Quality

Concerns in this area were the impacts activities would have on air quality, and ultimately, climate change. Comments expressed concerns with the Navy receiving exemptions, which leads to more air pollution, and the Navy's use of aerosols and other toxic airborne chemicals.

I.2.4.19 Marine Debris

Several comments discussed the impacts marine debris, not just from Navy activities, have on the marine environment. Debris references were regarding tsunami debris, oil spills, fishing nets, garbage and remnants from explosive materials. Comments also focused on the cleanup of any hazardous materials and spills.

I.2.4.20 Terrestrial Resources

Comments in this category expressed general concerns about how training and testing activities may affect the natural, terrestrial environment and the species that make the land their habitat, especially migratory birds and other wildlife. Comments mentioned that terrestrial species are a part of the biological balance in the Northwest area.

I.2.4.21 Noise

Several comments about aircraft noise from landings, takeoffs, and flight routes were received. The comments requested adjustments to flight operations to minimize noise and proposed a public website that would inform community members of flight schedules and other Navy activities that may increase noise levels. Other comments expressed concern with evening aircraft activities, and how other noise-intensive activities, such as pile driving and explosions, impact marine species in the Study Area.

I.2.4.22 Cultural Resources/American Indian Concerns

Comments in this category requested information on the tribal consultation and coordination process and referenced the need for thorough and comprehensive cultural surveys of potentially affected areas. Additional comments expressed concern with military training and testing occurring on tribal lands and the impacts on tribal resources.

I.2.4.23 Access

Concerns in this area are in regard to year-round access to recreational areas and increased access restrictions on Dabob Bay.

I.3 DRAFT ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

The NWTT Draft EIS/OEIS was released to the public on 24 January 2014 with the issuance of the Notice of Availability and a Notice of Public Meetings in the *Federal Register* (79 Federal Register [FR] 4158, also in Appendix B – Federal Register Notices).

I.3.1 DISTRIBUTION OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

The Draft EIS/OEIS was made available for viewing or download from the project website at www.NWTTAIS.com. Letters providing notification of the availability of the Draft EIS/OEIS on the website were mailed to 668 federal and local elected officials, government agencies, community and business groups, and tribal staff. CD-ROM versions of the Draft EIS/OEIS were sent to federal and state government agencies, tribes, and individuals who requested a copy. In addition, hard copy versions were sent to information repositories (typically libraries) and some members of the public that specifically requested a hard copy version of the document.

The complete list of information repositories, tribes, agencies, and individuals that received copies of the EIS/OEIS (hardcopy, CD-ROM, or both) follows in Table I.3-1.

Table I.3-1: List of NWTT Draft EIS/OEIS Recipients

Information Repositories	
<u>Washington</u>	<u>Oregon</u>
Everett Main Library	Astoria Public Library
Gig Harbor Library	Driftwood Public Library (Lincoln City)
Jefferson County Library - Port Hadlock	Newport Public Library
Kitsap Regional Library – Poulsbo	Tillamook Main Library
Kitsap Regional Library - Sylvan Way (Bremerton)	Guin Library, Hatfield Marine Science Center
Oak Harbor Public Library	
Port Angeles Main Library	
Port Townsend Public Library	<u>California</u>
Timberland Regional Library - Aberdeen	Fort Bragg Branch Library
Timberland Regional Library – Hoquiam	Humboldt County Public Library, Arcata Branch
	Humboldt County Public Library, Eureka
	Redwood Coast Senior Center
<u>Alaska (2)</u>	
Juneau Public Library, Downtown Branch	
Ketchikan Public Library	
Tribes	
<u>Washington</u>	<u>Oregon</u>
Confederated Tribes and Bands of the Yakama Nation	Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians
Confederated Tribes of the Chehalis Reservation	
Cowlitz Indian Tribe	Confederated Tribes of Grand Ronde Community of Oregon
Hoh Indian Tribe	
Jamestown S'Klallam Tribe	Confederated Tribes of Siletz Indians of Oregon

Table I.3-1: List of NWTT Draft EIS/OEIS Recipients (continued)

Tribes (continued)	
<u>Washington</u>	<u>Oregon</u>
Lower Elwha Klallam Tribe	Confederated Tribes of the Warm Springs Reservation of Oregon
Lummi Tribe of the Lummi Reservation	Coquille Indian Tribe
Makah Indian Tribe of the Makah Reservation	Cow Creek Band of Umpqua Tribe of Indians
Muckleshoot Indian Tribe of the Muckleshoot Reservation	Klamath Tribes
Nisqually Indian Tribe of the Nisqually Reservation	
Nooksack Indian Tribe of Washington	<u>California</u>
Port Gamble S'Klallam Tribe	Big Lagoon Rancheria, California
Puyallup Tribe of the Puyallup Reservation	Cahto Tribe of the Laytonville Rancheria
Quileute Tribe of the Quileute Reservation	Cher-Ae Heights Indian Community of the Trinidad Rancheria, California
Quinault Indian Nation	Coyote Valley Band of Pomo Indians of California
Samish Indian Nation	Elk Valley Rancheria, California
Sauk-Suiattle Indian Tribe	
Shoalwater Bay Tribe of the Shoalwater Bay Reservation	Hoop Valley Tribe, California
Skokomish Indian Tribe	Hopland Band of Pomo Indians, California
Squaxin Island Tribe of the Squaxin Island Reservation	Karuk Tribe
Stillaguamish Tribe of Indians of Washington	Pinoleville Pomo Nation, California
Suquamish Indian Tribe of the Port Madison Reservation	
Swinomish Indians of the Swinomish Reservation of Washington	Potter Valley Tribe, California
Tulalip Tribes of Washington	Redwood Valley or Little River Band of Pomo Indians of the Redwood Valley Rancheria, California
Upper Skagit Indian Tribe	Resighini Rancheria, California
	Robinson Rancheria Band of Pomo Indians, California
<u>Alaska</u>	Round Valley Indian Tribes, Round Valley Reservation, California
Central Council of the Tlingit and Haida Indian Tribes of Ketchikan Indian Corporation	Scotts Valley Band of Pomo Indians of California
Metlakatla Indian Community, Annette Island Reserve	Sherwood Valley Rancheria of Pomo Indians of California
Organized Village of Saxman	Smith River Rancheria, California
	Wiyot Tribe, California
	Yurok Tribe of the Yurok Reservation, California
Agencies	
	<u>Federal</u>
Battelle Pacific Northwest National Laboratory	NOAA National Marine Fisheries Service Northwest Region
Bureau of Indian Affairs Northwest Regional Office	
Bureau of Land Management Coos Bay District Office	NOAA OLE (Office of Law Enforcement)
Bureau of Land Management Oregon/Washington State Office	Olympic Coast National Marine Sanctuary Advisory Council
Bureau of Land Management Spokane District Office	Olympic Coast National Marine Sanctuary
Bureau of Ocean Energy Management	Pacific Fishery Management Council
Bureau of Ocean Energy Management Pacific OCS Region	U.S. Army Corps of Engineers
	U.S. Army National Guard Boardman Oregon

Table I.3-1: List of NWTT Draft EIS/OEIS Recipients (continued)

Agencies (continued)	
	<u>Federal</u>
Bureau of Safety and Environmental Enforcement Pacific OCS Region	U.S. Coast Guard 13th District U.S. Coast Guard District 17
Bureau of Safety and Environmental Enforcement Office of Regulation	U.S. Coast Guard Office of Operating and Environmental Standards (CG-3PSO)
Federal Aviation Administration	U.S. Department of Commerce
Federal Aviation Administration Western Pacific Region Marine Mammal Commission	U.S. Department of the Interior Office of Environmental Policy and Compliance
National Marine Fisheries Service Arcata Field Office	U.S. Environmental Protection Agency Region X
National Marine Fisheries Service Office of Protected Resources ESA Division	U.S. Environmental Protection Agency Region X Environmental Review & Sediment Management Unit
National Marine Fisheries Service Office of Protected Resources Northwest Region	U.S. Environmental Protection Agency NEPA Compliance Division
National Marine Fisheries Service Eureka Field Office	U.S. Fish and Wildlife Service Arcata Office
National Marine Fisheries Service Oregon Office	U.S. Fish and Wildlife Service Pacific Region U.S. Fish and Wildlife Service Region 7
National Marine Fisheries Service Southwest Oregon Habitat Branch	U.S. Fish and Wildlife Service Western Washington Office
National Marine Fisheries Service Oregon Coast/Lower Columbia Habitat Branch	U.S. Fish and Wildlife Service Washington Maritime Wildlife Refuge Complex
National Marine Fisheries Service Ukiah Field Office	U.S. Geological Survey Alaska Science Center
National Marine Protected Areas Center	U.S. Geological Survey Northwest Area Office
National Park Service Olympic National Park	U.S. Geological Survey Southwest Area Office
NOAA Fisheries - National Marine Fisheries Service	U.S. Geological Survey Western Fisheries Research Center
NOAA Fisheries Northwest Regional Office	
NOAA Fisheries Northwest Fisheries Science Center	USDA Forest Service Pacific Northwest Region
NOAA Fisheries Washington Habitat Branch	
<u>Washington State and Local</u>	<u>California State and Local</u>
Coastal Advisory Body on Ocean Policy	California Coastal Commission
Puget Sound Partnership	California Department of Fish and Game
Washington State Department of Agriculture Policy and Communications	California Environmental Protection Agency
Washington State Department of Archaeology & Historic Preservation	California Resources Agency
Washington State Department of Ecology	Department of Toxic Substances Control
Washington State Department of Ecology Southwest Regional Office	
Washington State Department of Fish and Wildlife Region 6	<u>Oregon State and Local</u>
Washington State Department of Natural Resources	Oregon Department of Forestry
Washington State Fish and Wildlife Commission	Oregon Department of Parks and Recreation
Washington State Parks and Recreation Commission	Oregon Department of Land Conservation and Development
City of Oak Harbor Planning Department	Oregon Department of Fish and Wildlife
City of Ocean Shores	Oregon Department of State Lands
	Oregon Military Department

Table I.3-1: List of NWTT Draft EIS/OEIS Recipients (continued)

Agencies (continued)	
<u>Washington State and Local (continued)</u>	<u>Oregon State and Local (continued)</u>
Friday Harbor Airport	Oregon State Department of Environmental Quality Oregon State DEQ Water Quality Oregon Water Resources Department Pacific States Marine Fisheries Commission
<u>Alaska State and Local</u>	
Alaska Department of Commerce Community and Economic Development	Alaska Department of Natural Resources Office of History and Archaeology
Alaska Department of Environmental Conservation	Alaska Department of Transportation & Public Facilities
Alaska Department of Fish & Game Commercial Fisheries Division	Alaska Department of Transportation & Public Facilities Statewide Aviation
Alaska Department of Fish and Game	Alaska Marine Highway
Alaska Department of Fish and Game Division of Wildlife Conservation	Department of Commerce Community & Economic Development Division of Community and Regional Affairs
Alaska Department of Fish and Game Habitat	Department of Environmental Conservation Division of Air Quality
Alaska Department of Fish and Game Sport Fish Division	Department of Environmental Conservation Division of Administrative Services
Alaska Department of Fish and Game Subsistence	Department of Environmental Conservation Division of Environmental Health
Alaska Department of Fish and Game Wildlife Conservation Division	Department of Environmental Conservation Division of Spill Prevention and Response
Alaska Department of Military & Veterans Affairs	Department of Environmental Conservation Division of Water
Alaska Department of Natural Resources	Department of Natural Resources Division of Mining Land and Water
Alaska Department of Natural Resources Public Information Center	Department of Natural Resources Division of Geological & Geophysical Surveys
Alaska Department of Natural Resources Division of Forestry	Department of Natural Resources Division of Oil and Gas
Alaska Department of Natural Resources Division of Mining Land and Water	Department of Transportation & Public Facilities Division of Ports and Harbors
Alaska Department of Natural Resources Division of Parks and Outdoor Recreation	
<u>Canada</u>	
Fisheries and Oceans Canada Pacific Region	
Individuals	
Sue Boecker	
Charlotte Mills	
Rosalind Peterson	
Carol Van Strum	
Daniel Rockey	

I.3.2 PUBLIC COMMENT PERIOD FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in Appendix B – Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements.

The Notice of Public Meetings included a project description and dates and locations of the eight public meetings. The public comment period allowed a variety of opportunities for the public to comment on the Draft EIS/OEIS. Copies of the Draft EIS/OEIS were provided to libraries in Washington, Oregon, California, and Alaska, and the document was available on the project website for review. Navy representatives were available during the open house public meetings to provide information and answer questions one-on-one. Comment sheets were made available to attendees.

I.4 PUBLIC COMMENTS AND NAVY RESPONSES

Comments on the Draft EIS/OEIS were received via mail, at the public meetings either in writing or orally, and via the project website. The Navy also received approximately 9,700 form letters from one non-governmental organization and a petition from another non-governmental organization with approximately 6,000 signatures (see Sections I.4.1 and I.4.2, respectively).

Comments covered a wide spectrum of thoughts, opinions, ideas, and concerns. The most commonly addressed themes included marine mammal impacts, the level and locations of proposed training and testing, use of sonar and underwater explosives, mitigation measures, expended materials, public meeting locations, and cumulative impacts.

Each row in the following tables presents the identification of the commenter, the comment, and the Navy's response to the comment. Because many commenters touched on more than one topic, in some cases the commenter's topics were separated into individual comments, assigned a number, and responded to separately. The commenter's name or organization may be abbreviated when the comment is broken into more than one topic. The comment numbering system also captures whether the comment was received electronically (via NWTTEIS.com), in written form (by mail or during a public meeting), or orally (either in private dictation or during public testimony at a public meeting). For example, the comment by the Marine Mammal Commission cover several topics, so these are separated into subsequent comments named MMC-02, MMC-03, etc.

Table I.4-1 contains comments from federal agencies and elected officials received during the public comment period and the Navy's response to those comments.

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials

Commenter	Comment	Navy Response
<p>Huffman, DeFazio, Thompson-01 (Representing California's 2nd District, Oregon's 4th District, and California's 5th District in the U.S. House of Representatives)</p>	<p>We submit this letter to comment on the U.S. Navy's Northwest Training and Testing (NWTT) draft environmental impact statement (EIS). We appreciate the critical role the Navy plays in advancing our national security, and recognize the need to balance these priorities with our obligation to manage marine resources. However, we also believe that to fulfill the Navy's obligations under the National Environmental Policy Act (NEPA) and to follow NEPA's instruction to fully engage the public and other stakeholders in environmental analysis and the weighing of alternatives, the draft EIS should be revised and reissued for further public review and comment.</p> <p>NEPA requires the Navy to conduct a thorough environmental review of any major action "significantly affecting the quality of the human environment." The review is essential to enabling the public and decision makers to develop informed opinions about the value of proposed activities given potential environmental impacts and tradeoffs associated with available courses of action. The NWTT draft EIS, by contrast, presents a rigid plan, downplays potential harms, and offers neither the public nor decision makers with viable alternatives to minimize harm.</p>	<p>The Navy complies with all applicable environmental laws, including NEPA. As such, the Navy has developed this EIS/OEIS to meet the requirements of these laws. Please see Chapter 2 (Description of Proposed Action and Alternatives), which includes selection criteria and alternatives considered but eliminated (Section 2.5.1, Alternatives Eliminated from Further Consideration). Please see Chapter 3 (Affected Environment and Environmental Consequences) for the description of the affected environment and environmental consequences of the Navy's Proposed Action.</p> <p>In consultation with resource agencies and using the best available science, the Navy found that most of the stressors associated with Navy activity in any alternative have little or no impact on the environment, and that most impacts from Navy activity are short term and temporary and do not affect the overall quality or quantity of the resource. Where greater impacts were identified, the Navy has proposed practical mitigation.</p>
<p>Huffman, DeFazio, Thompson-02</p>	<p>The NWTT draft EIS fails to properly address the issue of noise pollution or offer genuine mitigation alternatives. Noise pollution can have a devastating impact on marine resources, and the scientific consensus is clear: mitigating harm requires geographical or seasonal restrictions on the use of powerful underwater sound sources. The National Oceanic and Atmospheric Administration (NOAA), which reviewed the Navy's sonar mitigation in 2010-the same mitigation proposed here-stated that more needed to be done to address uncertainties and protect marine life.</p>	<p>The Navy made a distinction between sound and noise (please see the Glossary), and in consultation with resource agencies and using the best available science, addressed the impacts of sound in the water, as well as noise in the water and in the air.</p>
<p>Huffman, DeFazio, Thompson-03</p>	<p>The Navy itself has adopted more protective measures in other training circumstances such as those utilized by the Atlantic Fleet, which has, among other things, sited exercises beyond the continental shelf and Gulf Stream and moved activities out of important habitat to avoid marine life. Despite these precedents, the NWTT draft EIS fails to even analyze whether training or testing could be limited to, or excluded from, any portions of the study area.</p>	<p>Both the Draft and Final EIS/OEIS fully explain why certain mitigation measures have been considered but eliminated (please see Section 5.3.4, Mitigation Measures Considered but Eliminated, and especially Section 5.3.4.1.11, Avoiding Marine Species Habitats).</p> <p>The Navy's overall approach to assessing potential mitigation measures was based on two principles: (1) mitigations are reasonably effective at reducing potential impacts on the resource; and (2) from an operational perspective, the mitigations must be practicable and executable while not compromising safety and readiness. Through extensive discussion, and based on the best available science and monitoring training and testing over the course of 9 years, NMFS and Navy have identified mitigation measures that are practicable and reasonably effective.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
<p>Huffman, DeFazio, Thompson-04</p>	<p>The draft EIS also fails to utilize the full set of resources NOAA has developed to help agencies evaluate and mitigate the impacts of anthropogenic noise. One such resource is the Cetacean Density and Distribution Mapping Working Group's (CetMap) density and distribution maps for marine mammal populations in the Pacific Northwest. For example, the NWTT draft EIS does not directly consider CetMap's mapping of specific and limited areas of high density populations of Cuvier's beaked whales (offshore waters of Oregon and Northern California) and harbor porpoises (inshore waters of Washington and Oregon)-two species known to be highly sensitive to sonar and other high-intensity sounds. These maps have significant overlap with the study area and should have been consulted as a potential basis for alternatives development or mitigation strategies.</p>	<p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
		<p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. No biologically important areas for beaked whales or harbor porpoises were identified in the NWTT Study area in the final 2015 CETMAP produced product. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Huffman, DeFazio, Thompson-05</p>	<p>We are also concerned that the NWTT draft EIS downplays potential impacts to fisheries. The Pacific Northwest is a highly productive region for fish and invertebrate populations, including federally designated essential fish habitats in the NWTT study area. The proposed training and testing activities in the NWTT complex could place commercially important fisheries at risk. The draft EIS' s findings that such activities will cause limited harm are contradicted by the scientific literature which suggests that anthropogenic noise can interfere with a variety of fish behaviors including communication, recognition and reproduction. Fishermen have also reported decreased catch rates in the vicinity of underwater noise. The final EIS should include a careful analysis of the potential for behavioral, auditory, and physiological impacts on fish.</p>	<p>While the EIS/OEIS concludes there may be impacts from the Proposed Action to fish, those impacts do not translate into impacts to socioeconomic resources. Impacts analyzed in the EIS/OEIS consider the individual and the population. Impacts to single individuals do not translate to impacts on the entire population or the resource as a whole. The conclusions presented in the EIS/OEIS are fully supported in the analysis. Additionally, an Essential Fish Habitat (EFH) Assessment was prepared to specifically examine potential impacts to essential fish habitats in the Study Area. This assessment, which can be found on the NWTTEIS.com website, concluded that the potential impacts from the Proposed Action may adversely affect EFH; however, these effects would not exceed a determination of more than minimal.</p> <p>Concerns of commercial fisherman were addressed in the EIS/OEIS (see Section 3.12.3, Environmental Consequences). Favored fishing areas change over time with fluctuations in fish populations and communities, preferred target species, or fishing modes and styles. Declines in fishing rates can be attributed to several factors both natural and anthropogenic. Section 3.9 (Fish) concluded no long-term impacts to fish populations are anticipated; therefore, Section 3.12 (Socioeconomic Resources) correctly concluded there would be no indirect impacts to commercial and recreational fishing.</p>
<p>Huffman, DeFazio, Thompson-06</p>	<p>Finally, we are concerned that the Navy has not seriously reviewed the cumulative incremental impact of its activities. The Pacific Northwest is home to some of the busiest ports in the United States. Ongoing public and private activities in the region generate</p>	<p>As stated in Section 4.4.1 (Resource Areas Dismissed from Cumulative Impacts Analysis) of the Draft EIS/OEIS, in accordance with Council on Environmental Quality guidance (Considering</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>significant marine noise. In the draft EIS, the Navy lists out a number of these activities, but fails to utilize best available science to assess the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future significant actions.” The Navy’s conclusion that its activities do not represent an additive harm fails to properly consider the implications of its own impact assessments, as well as leading scientific literature on marine mammal behavior, noise sensitivity, and migratory patterns.</p> <p>Thank you for your consideration of our comments on this important matter. It is clear that the Navy’s NWTT EIS is deficient in a number of key areas and should be revised and reissued for further public review prior to finalization. We look forward to your response and working with you to ensure a proper balance between national security and marine resource management.</p>	<p>Cumulative Effects under the National Environmental Policy Act, Council on Environmental Quality, January 1997), the cumulative impacts analysis focused on impacts that are “truly meaningful.” This was accomplished by reviewing the direct and indirect impacts that have the potential to occur on each resource under each of the alternatives. Key factors considered were the current status and sensitivity of the resource and the intensity, duration, and spatial extent of the impacts of each potential stressor. In general, long-term rather than short-term impacts and widespread rather than localized impacts were considered more likely to contribute to cumulative impacts. Those impacts to a resource that were considered to be negligible were not considered further in the analysis. The level of analysis for each resource was commensurate with the intensity of the impacts identified in Chapter 3 (Affected Environment and Environmental Consequences).</p>
<p>U.S. Environmental Protection Agency – Region 10 (Written)</p>	<p>We have reviewed the Navy’s Northwest Training and Testing Draft Environmental Impact Statement/Overseas Environmental Impact Statement. Our review was conducted in accordance with the EPA’s responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act. Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Our review of the Draft EIS/OEIS prepared for the proposed action considers expected environmental impacts and the adequacy of the EIS in meeting procedural and public disclosure requirements of the NEPA.</p> <p>Project Summary</p> <p>The Draft EIS/OEIS analyzes the potential environmental impacts that could result from current, emerging, and future training and testing activities in the Northwest Training and Testing Study Area. The Study Area is made up of air and sea space in the eastern north Pacific Ocean region, located adjacent to the Northwest coast of the United States, to include the Strait of Juan de Fuca, Puget Sound, and Western Behm Canal in southeastern Alaska.</p> <p>Three alternatives are analyzed. The No Action Alternative represents baseline training and testing activities as defined by existing Navy environmental planning documents, including the Northwest Training Range Complex EIS/OEIS, the Naval Undersea Warfare Center Keyport Range Complex Extension EIS/OEIS, and the Southeast Alaska Acoustic Measurement Facility EIS. Alternative 1 includes the training and testing activities addressed in the No Action Alternative, plus adjustments to types and levels of activities from the baseline. Alternative 2 includes all elements of Alternative 1 plus adjustments to the tempo of activities. Training would remain the same as Alternative 1, testing would increase, on average, about 12 percent over those in Alternative 1.</p>	<p>Thank you for your review of the Draft EIS/OEIS. The Navy will continue to pursue the development of a well-designed mitigation and monitoring program in coordination with the National Marine Fisheries Service (please see Section 5.5.1.1 of the EIS/OEIS, Integrated Comprehensive Monitoring Plan Top-Level Goals). Final marine mammal consultation results for ESA and MMPA will be included in the ROD.</p> <p>Proposed mitigations were made available through the NMFS rule making process in the Proposed Rule.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>Potential acoustic effects of proposed activities on marine mammals and sea turtles are a primary concern.</p> <p>Responsiveness to the EPA Scoping Comments</p> <p>In our April 27, 2012 scoping comments we recognized the Navy's need to conduct realistic testing and training. We also noted our appreciation for the Navy's substantial efforts to understand, minimize and eliminate the effects of naval operations on the environment. We provided several recommendations for information that the Draft EIS/OEIS should consider in order to adequately set forth the environmental impacts of the alternatives. Below, we describe the Draft EIS/OEIS's responsiveness to our scoping comments.</p> <p>Maximizing Environmental Benefits</p> <p>To help ensure that the Draft EIS/OEIS - like past comprehensive environmental planning for training/testing ranges and operating areas - results in continued progress on understanding, minimizing and eliminating environmental impacts of military readiness activities, we recommended that the Draft EIS/OEIS include an alternative designed to maximize environmental benefits. We suggested decreasing the tempo of training and testing activities, adjusting the types of training and testing activities, or maximizing the use of environmentally protective elements from the Navy's 15 EISs for major at-sea ranges and operating areas.¹ Information in the Draft EIS/OEIS describing the Navy's requirements for adequately preparing naval forces is responsive to our suggestion that the Navy consider adjusting the tempo and types of training and testing activities.</p> <p>With regard to maximizing the use of environmentally protective elements from existing environmental planning documents, we believe the Navy's effort to improve upon past processes - as described in Draft EIS/OEIS section 5.2.2.1 "Lessons Learned from Previous Environmental Impact Statements/Overseas Environmental Impact Statements" - is responsive to our scoping comment. We strongly support your effort to consider all mitigations previously implemented and adapt the mitigation assessment approach based on lesson learned from previous EISs, ESA biological opinions, Marine Mammal Protection Act Letters of Authorization, and other formal or informal consultations with regulatory agencies. As a result of your effort, we believe new environmental benefits will be achieved by your planned efforts such as the requirement for additional Navy personnel and civilian equivalents to complete environmental training modules; updated Marine Species Awareness Training to improve the effectiveness of visual observations for marine resources; and the addition of lookouts for several training and testing activities for which there is currently no lookout required. We encourage your continued efforts to improve upon existing mitigation, including through studying the effectiveness of lookouts in detecting marine mammals and other sensitive resources.</p> <p>Water Quality</p>	

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>The Draft EIS/OEIS's Sediments and Water Quality chapter is responsive to our scoping comments because information on the following topics is included: water bodies likely to be impacted, the nature of potential impacts, and specific discharges and pollutants likely to cause impacts. While chemical, physical, or biological changes in sediment or water quality may be expected to meet applicable standards and guidelines, we encourage the Navy's continued efforts to protect sediments and water quality. Just as the Navy has replaced lead with tungsten in some munitions because of environmental concerns, we recommend your continued efforts to understand and act on evolving information about the behavior of the various complexes that tungsten forms. Similarly, we appreciate the Draft EIS/OEIS's section on Climate Change and Sediments. We encourage your continued consideration of evolving information on the tendency of metals to dissociate from particles to which they are bound in sediments under more acidic conditions. As the oceans' acidity changes, negative impacts from the Navy's expended metals may become more widespread, and present a greater concern.</p> <p>Environmental Justice</p> <p>The Draft EIS/OEIS's information on the potential for impacts from physical disturbances to the public or reductions in accessibility is responsive to our environmental justice recommendations. Your conclusion that "there are no disproportionately high impacts or adverse effect on any low-income or minority populations." is responsive to our recommendation to include an environmental justice determination.²</p> <p>Climate Change</p> <p>The Draft EIS/OEIS's information on the Navy's energy, environmental, and climate change initiatives - including the Navy Climate Change Roadmap - is responsive to our recommendation that the Draft EIS/OEIS describe whether and how climate change considerations have influenced decisions. We broadly appreciate the Navy's commitment to mitigating the harmful effects of climate change and specifically recognize, for example, that one benefit of local training is reducing the greenhouse gas emissions associated with transportation to training and testing sites.</p> <p>Environmental Concerns and Rating</p> <p>While the Draft EIS/OEIS is responsive to our scoping comments, we remain concerned about adverse effects to marine mammals - including Endangered Species Act listed marine mammals. To address concerns about effects to marine mammals, we recommend the Navy continue to pursue the development of a well-designed mitigation and monitoring program in coordination with the National Marine Fisheries Service. To the extent possible, please include in the Final EIS/OEIS updated results of the Navy's effectiveness assessment for lookouts and mitigation and monitoring details from MMPA and ESA consultation with NMFS.</p> <p>We are rating the Draft EIS/OEIS Environmental Concerns - Adequate, "EC-1 ". A copy of our rating system is enclosed.</p>	

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>Thank you for this opportunity to comment and if you have any questions please contact me at (206) 553- 1601 or by electronic mail at reichgott.christine@epa.gov, or you may contact Erik Peterson of my staff at (206) 553-6382 or by electronic mail at peterson.erik@epa.gov.</p> <p>¹ http://greenfleet.dodlive.mil/environment/marine-mammals-ocean-resources/environmental-planning-at-sea/navy-at-seaenvironmental-impact-statements/</p> <p>² Draft EIS/OEIS, p. 3.12-1</p>	
<p>U.S. Department of the Interior, Office of Energy Policy and Compliance</p>	<p>The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS/OEIS) prepared by the Department of the Navy for the Northwest Training and Testing Study Area that encompasses coastal and marine areas along the Pacific Coast of the United States. The proposed training and testing activities will occur within the Northwest Training Range Complex or the Southeast Alaska Acoustic Measurement Facility. Several units of the National Park System, including Olympic National Park, Ebey's Landing National Historic Reserve, San Juan Island National Historic Park, Lewis and Clark National Historical Park, Redwood National and State Parks, and Glacier Bay National Park and Preserve are within these areas of potential effect. Consequently, the National Park Service (NPS) is interested in the potential of the proposed actions to adversely affect marine resources and soundscapes at these NPS units. Training exercises involving marine vessels and aircraft, and use of explosives, electromagnetic devices, or sonar technology, have the potential to impact national park resources or diminish visitor enjoyment of these parks.</p> <p>NPS evaluates external federal actions which may impact the human and natural environment within our Parks with respect to mandates of our 1916 Organic Act, including " ... to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations." This includes the natural soundscape and marine resources. Moreover, visitors to the potentially affected parks come with expectations of seeing, hearing, and experiencing phenomena associated with a specific natural or cultural environment, yet in many cases these environments are being increasingly impacted by artificial sounds associated with watercraft, explosives, and aircraft overflights.</p> <p>The Executive Summary includes several references to environmental and jurisdictional considerations addressed in the Draft EIS; however, the document does address the NPS, its specific federal management requirements, and the resources protected in the affected parks. The Department requests that any further analysis and/or any subsequent permitting resulting from this study process that could impact national park resources be coordinated with NPS marine biologists, acoustic biologists, and acoustic specialists.</p>	<p>The National Parks System is addressed in Sections 3.2 (Air Quality), 3.12 (Socioeconomic Resources), and 6.1.2 (Marine Protected Areas) of the EIS/OEIS. Only one National Park lies within the Study Area, and that park, Olympic National Park, is assessed for impacts on p. 6-17 of the Draft EIS/OEIS. It is important to note that flights in the Olympic Military Operations Area (MOA) over the Olympic National Park are proposed to increase by as much as 10 percent annually. The approximate 10 percent increase in flights equates to about one additional flight per day. These flights have been occurring for decades, and as described in Section 3.12.3.3.2.1 (Training), attendance within the National Park has been steadily increasing since 2010, concurrent with these activities. The Navy has included a discussion of potential wilderness impacts, conducted an analysis of the World Heritage Site (Appendix K), and completed a noise analysis of activities in the Olympic MOAs (Appendix J).</p> <p>The Navy consulted with the U.S. Fish and Wildlife Service regarding the Navy's Proposed Action and potential impacts to endangered species.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>In addition, the Department also requests that the U.S. Fish and Wildlife Service be consulted when conducting any further analysis and/or any subsequent permitting resulting from this study.</p>	
<p>U.S. Department of the Interior, Bureau of Ocean Energy Management</p>	<p>Please find below the Bureau of Ocean Energy Management Pacific OCS Region's comments regarding the Navy's Draft EIS: Notice of Availability of the Northwest Training and Testing (NWTT) Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS).</p> <p>1. It is recommended that the Navy consider the marine renewable energy resource potential in the training areas discussed in the Draft EIS, in particular the areas on the outer continental shelf from Washington State to Northern California. The attached maps for wind energy potential (Figure 1) and for wave energy potential (Figure 2) show the wind and wave resource potential offshore the Pacific Coast of the United States. Generally, the wind and wave resource potential in the training area included in the Draft EIS is some of the best in the country. Both of these renewable energy resources could be utilized in the future and BOEM suggests the Navy consider the potential for renewable energy development in the training area so every effort can be made to ensure renewable energy development is compatible with the Navy's training operations and national security.</p> <p>2. Similarly, the Navy should take into consideration the Pacific Outer Continental Shelf off shore oil and gas resources potentially within the proposed Navy Northwest Training and Testing area. Oil and gas resources in the proposed training and testing area are detailed on the attached map (Figures 3 and 4). BOEM estimates that the proposed Northwest Training and Testing area include 84% of the Pacific Northwest Province (an area defined by BOEM for planning purposes on the Outer Continental Shelf, comprising the Washington-Oregon Area and Eel River Basin, respectively) and 17% of the Point Arena Basin which is one of seven geologic basins that constitute the Central California Province (also defined by BOEM for planning purposes on the Outer Continental Shelf).</p> <ul style="list-style-type: none"> - The Washington-Oregon Area (WOA) is estimated to contain approximately 0.4 billion barrels of oil and 2.23 trillion cubic feet of natural gas. Our estimate is that about 0.34 billion barrels of oil and 1.87 trillion cubic feet of natural gas is contained within the proposed Northwest Training and Testing area. - The Eel River Basin (EEB) is estimated to contain approximately 0.07 billion barrels of oil and 1.52 trillion cubic feet of natural gas. Our estimate is that about 39.2 million barrels of oil and 0.85 trillion cubic feet of natural gas is contained within the proposed Northwest Training and Testing area - The Central California Province (CCP) is estimated to contain a total of about 5.23 billion barrels of oil and 5.21 trillion cubic feet of natural gas. Of this total resource within the CCP, the Point Arena Basin is estimated to contain about 2.0 billion barrels of oil and 2.1 trillion cubic feet of natural gas. We estimate that 0.344 billion barrels of oil and 0.41 	<p>Since the Proposed Action does not involve constructing new infrastructure or creating additional restrictions to shared uses of the Study Area, further assessment of impacts to specific energy development potential was not needed.</p> <p>In order to improve energy security, increase energy independence, and help lead the nation towards a clean energy economy, the Department of the Navy has established energy goals that will move the Navy and Marine Corps away from a reliance on petroleum and will dramatically increase use of alternative energy. This includes cooperatively working with the BOEM to identify areas suitable for renewable/alternative energy development and which will not negatively affect Navy training readiness and testing activities</p> <p>The current process is for BOEM to provide the Office of the Secretary of Defense (OSD) with specific information where development will be considered and ask for an assessment of impacts. The Navy is not in the position to make any determination about future offshore energy development until such time as BOEM makes its intention for development known.</p> <p>Regarding EO 13211, a Statement of Energy Effects is required for "significant energy actions," which is defined as those actions "likely to have a significant adverse effect on the supply, distribution, or use of energy" or "is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action." Neither of those apply to the Navy's Proposed Action in this EIS/OEIS, so a Statement of Energy Effects is not required.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>trillion cubic feet of natural gas of the Point Arena Basin resource are within the proposed Northwest Training and Testing Area.</p> <p>- In total, the amount of oil and gas resources within the proposed Northwest Training and Testing Area that may be impacted from potential future development would be approximately 3.10 billion barrels of oil and 753 billion cubic feet of natural gas.</p> <p>3. The Office of Management and Budget (OMB) guidance states that a regulatory action that “creates a serious inconsistency or otherwise interferes with an action taken or planned by another agency regarding energy” could have significant adverse effects. The EIS should include an analysis as required by Executive Order 13211, which requires that a Statement of Energy Effects (Executive Order 13211 OMB Guidance Memoranda 1-27.pdf) be prepared.</p>	
<p>U.S. Department of the Interior, Fish and Wildlife Service (FWS)-01</p>	<p>Thank you for the opportunity to review the Department of Navy's (Navy) Northwest Training and Testing Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). The U.S. Fish and Wildlife Service's (Service) Washington Fish and Wildlife Office is providing the enclosed comments.</p> <p>The EIS/OEIS addresses the Navy's need to support and conduct current, emerging, and future training and testing activities in the Northwest Training and Testing Study Area. The EIS/OEIS provided an analysis with effects determinations to species listed under the Endangered Species Act. While the Service provided comments regarding the Navy's analysis on listed species and designated critical habitat, we did not comment on the effects determinations. In most cases, there was not enough information provided regarding the dates and timing of the Navy activities to determine the exposure and risk of the activities on listed species.</p> <p>The Service issued a Biological Opinion on the U.S. Pacific Fleet Northwest Training Range Complex in the Northern Pacific Coastal Waters off the States of Washington, Oregon and California and activities in Puget Sound and airspace over the State of Washington on August 12, 2010. Since the Service issued the Biological Opinion, additional species have been listed, are proposed for listing, and critical habitat has been designated that may be impacted by the proposed Navy's testing and training activities.</p> <p>The Service understands that the Navy will be conducting a Section 7 consultation on the project. The Service would like to meet with the Navy, prior to submittal of a Biological Assessment, to address the potential project impact to listed species and designated critical habitat to address measures to avoid, minimize, and reduce potential adverse effects. Meeting prior to the submittal of the Biological Assessment will also streamline the consultation process.</p> <p>The USFWS did not provide comments on the effects determinations provided in the DEIS for ESA listed species. Additional information, such as dates and timing of activities, is necessary to determine potential risk and exposure of the alternatives to</p>	<p>The Navy appreciates the specific comments provided and addresses those individually in the comment responses following this comment.</p> <p>Following this letter from the U.S. Fish and Wildlife Service, the Navy provided the Service a Biological Assessment and initiated Section 7 consultation for species listed under the Endangered Species Act. All new species and designated critical habitat were included in the Biological Assessment.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	listed species. The USFWS will conduct a thorough review and analysis on the proposed alternative during the ESA section 7 consultation.	
FWS-02	The analysis of the alternatives on listed species appears to address impacts from a single event and does not consider the alternatives over the long-term. The DEIS states in Section 4.2.3 (Page 4-2) that the general types of activities addressed by the DEIS are expected to continue indefinitely. Therefore, the analysis needs to consider potential impacts of the activities on fish and wildlife over the long-term and not just one specific event. The more often an event occurs, the greater potential for impacts to fish and wildlife.	The language in Chapter 4 (Cumulative Impacts) has been changed to clarify that the Navy's activities "are expected to continue into the reasonably foreseeable future." The Navy considered the short-term, long-term, direct, and indirect impacts of the Proposed Action on each resource. In some cases impacts were quantifiable for individual or average events, and those estimates were scaled up for the entire Proposed Action. The conclusions throughout the analysis in Chapter 3 reflect this approach.
FWS-03	Page 1-3. Section 1.2, Phase II of the planning program. This paragraph states that the Navy will not reanalyze the portions of the NWTRC EIS/OEIS that addressed land activities because those activities will not increase, nor will their associated impacts change, and the biological opinions prepared by the USFWS will not be altered by the Proposed Action for this EIS/OEIS. Since the issuance of the USFWS's concurrence on terrestrial species, additional species and critical habitat have been listed or are proposed to be listed. The Navy should analyze the potential impacts of the proposed alternatives on newly listed species and critical habitat as well as proposed species and critical habitat. The Navy should also review any potential increase in activities that will occur from Alternatives 1 and 2 and their effects to listed terrestrial species.	The NWTT analysis considers those species whose occurrence overlaps with the proposed activities, which does not include the overland elements of the Northwest Training Range Complex (NWTRC) EIS/OEIS. Recently listed species and critical habitat are being considered separately by the Navy as they are outside the scope of the NWTT EIS/OEIS.
FWS-04	Page 2-8, Figure 2.1-3 Indian Island is not identified on this figure. Alternatives 1 and 2 both include precision anchoring activities, but the area is not identified on the map.	A new figure has been added with the description of Precision Anchoring in Appendix A of the Final EIS/OEIS.
FWS-05	Page 2-12 Section 2.2.1. The second paragraph states that impacts from anti-air warfare activities conducted over land were analyzed in previous documents and remain valid. Similar to the previous comment on Page 1-3, additional species have been listed or are proposed for listing. Under the EIS, Alternatives 1 and 2 will result in increased levels of certain activities. The EIS does not state how the increased actions will result in increased aircraft or other activities around Navy bases and the potential effects to listed or proposed terrestrial species and critical habitat. Page 2-46, Section 2.7, paragraph 1, discusses the relocation of aircraft and personnel. Can these relocations result in increased impacts to terrestrial species that were not analyzed in the EIS?	The NWTT analysis considers those species whose occurrence overlaps with the proposed activities. Recently listed species and critical habitat on lands previously included in prior NWTRC will be considered separately under ESA as those anti-air warfare activities conducted in Eastern Washington are not part of the Proposed Action. Further evaluation during this process determined that those activities are independent of activities occurring offshore and in airspace over Western Washington. Each NEPA document addresses a specific proposed action, separated from other actions by its purpose and need, independent utility, timing, and geographic location. However, every environmental document considers the cumulative impacts to the environment from other relevant past, present, and reasonably foreseeable future actions (federal, state, local and private) in addition

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
		<p>to the proposed action.</p> <p>Analysis of airfield activities and relocation of aircraft and personnel is addressed in other environmental planning documents, such as the <i>Final Supplemental Environmental Impact Statement for the Introduction of the P-8A Multi-Mission Maritime Aircraft into the U.S. Navy Fleet</i> (U.S. Department of the Navy, 2014), and the <i>Draft Environmental Assessment for the Transition of Expeditionary EA-6B Prowler Squadrons to EA-18G Growler at Naval Air Station Whidbey Island, Oak Harbor, Washington</i> (U.S. Department of the Navy, 2012).</p>
FWS-06	<p>Page 2-45 Section 2.5.2, No Action Alternative.</p> <p>The DEIS states that the baseline testing activities also includes other testing events that historically occurred in the Study Area land have been subject to previous analysis pursuant to NEPA and EO 12114. The USFWS does not consider historical activities as part of the No Action Alternative. The No Action Alternative is based on continuing ongoing activities and not historic activities. The USFWS may not have considered historical events during previous section 7 consultations. Please define what activities are considered historic events and what time period is being referred to as "historic."</p>	<p>These "historical" activities are in fact current ongoing activities that have also occurred in the past.</p>
FWS-07	<p>Page 2-46 Section 2.6.</p> <p>The first paragraph states "The second interpretation, which applies to this DEIS/OEIS, allows the No Action Alternative to be thought of in terms of continuing with the present course of actions until that action is changed." This sentence is not consistent with the description of the No Action Alternative on Page 2-45 (see previous comment regarding Page 2-45, Section 2.5 .2) regarding including historical events in the analysis.</p>	<p>The Navy's historical (and current ongoing) activities are part of the "present course of actions" that the Navy would continue under the NAA.</p>
FWS-08	<p>Page 3.0-8 Section 3.0.2.1.</p> <p>The first paragraph after the bullets is specific to marine mammal populations. Research and monitoring has occurred for listed fish and wildlife species, specifically for the Explosive Ordnance Demolition activities in Puget Sound. Does the Navy expect no long-term consequences to salmonid or murrelet populations as a result of the proposed continuation of training and testing within the Pacific Ocean and Puget Sound?</p>	<p>That is correct. The Navy expects no long-term consequences to salmonid or murrelet populations as a result of the proposed continuation of training and testing within the Pacific Ocean and Puget Sound.</p>
FWS-09	<p>Page 3.6-2 Section 3.6.1.2.</p> <p>This section states that birds carried forward are based, in part, on previous ESA Section 7 consultations with the USFWS. Additional species have been listed or proposed for listing since the last consultation. These species, several of which are terrestrial, should be included in the analysis.</p>	<p>The NWTT analysis considers those species whose occurrence overlaps with the proposed activities, which does not include the overland elements of the NWTRC EIS/OEIS. Recently listed species and critical habitat are being considered separately by the Navy as they are outside the scope of the NWTT EIS/OEIS.</p>
FWS-10	<p>Page 3.6-5 Section 3.6.1.2.5.</p> <p>This section further clarifies why terrestrial species, both birds and invertebrates, should</p>	<p>The NWTT analysis considers those species whose occurrence overlaps with the proposed activities. Recently listed species and</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>be analyzed. This section states that aircraft activities in the Olympic MOAs would increase under the Proposed Action.</p> <p>However, these new activities would consist of high-altitude flights. As stated in the comment on Page 2-12, could these increased flights result in increased impacts to terrestrial species near Navy bases?</p>	<p>critical habitat not in the NWTT Study Area would be considered separately. It is important to note that the approximate 10 percent increase in flights in the Olympic MOAs equates to about one additional flight per day.</p> <p>The NWTT EIS/OEIS does not include airfield activities under the Proposed Action. Those activities, which are covered under separate analysis, are included in the NWTT Cumulative Impacts chapter.</p>
FWS-11	<p>Page 3.6-58 Section 3.6.3.2.1.</p> <p>This section states that the Navy is required to report all bird strikes when damage to aircraft or injuries result. The second paragraph discusses the potential bird strikes within the project area. If the Navy is required to report bird strikes, specific information on the number and species of birds that are struck during Navy testing and training exercises is available. This Information should be provided here.</p>	<p>Any bird strikes that may have occurred during training and testing are included in the totals mentioned in Section 3.6.3.2.1. However, bird strike data are not broken out by strikes that occur during proposed training and testing, which are part of the NWTT Proposed Action, and those that occur during activities that are not part of NWTT, such as transit or maintenance check flights.</p>
FWS-12	<p>Page 3.7-1 Section 3.7.1.</p> <p>This section states that pier-side maintenance and testing would not create stressors affecting marine vegetation and therefore, these activities are not addressed in this section. What about potential shading effects from the vessels docked or moored at the piers? With increased activities proposed under Alternatives 1 and 2, does this result in vessels being docked longer, which may result in increased shading impacts to marine vegetation and potential impacts to aquatic invertebrates and fish that use that vegetation?</p>	<p>The potential impacts discussed in the comment are analyzed when ship homeporting analysis is conducted. This EIS/OEIS does not propose any new ship homeporting, so those stressors are not analyzed here. The training and testing activities proposed in the NWTT EIS/OEIS are not expected to impact analysis of mooring times.</p>
FWS-13	<p>Page 3.9-13 Section 3.9.2.3.1.</p> <p>This section needs to include PCEs for bull trout. The PCEs listed in this section only address species under the jurisdiction of the National Marine Fisheries Service, such as Chinook and chum salmon.</p>	<p>The Final EIS/OEIS has been revised to include PCE information for bull trout.</p>
FWS-14	<p>Page 3.9-30 Section 3.9.2.3.1.6, Population and Abundance.</p> <p>Please provide information on both bull trout and Dolly Varden (<i>Salvelinus malma</i>). Dolly Varden are a species similar in appearance to bull trout, but are usually found in the upper watershed above fish barriers. Bull trout within Puget Sound are a migratory species and can be found with Dolly Varden in marine waters.</p>	<p>A new section has been added for Dolly Varden, including the information provided in the comment, as well as explanation of why this species is listed as threatened. Please see Section 3.9.2.3.1.7 (Dolly Varden [<i>Salvelinus malma</i>]) in the Final EIS/OEIS.</p>
FWS-15	<p>Page 3.9-30 Section 3.9.2.3.1.6, Habitat and Geographic Range.</p> <p>Bull trout along the Washington Coast will be found within the Offshore Areas of the Study Area, not just within the Inland Waters of Puget Sound.</p>	<p>The Final EIS/OEIS has been revised in two locations to clarify that the bull trout can occur in both the Offshore Area and the Inland Waters of the Study Area.</p>
FWS-16	<p>Page 3.9-32 Section 3.9.2.3.1.6, Migration.</p> <p>The first sentence states that the Washington Coastal-Puget Sound population of bull</p>	<p>The Final EIS/OEIS has been revised as recommended by the comment.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>trout spawn in rivers and streams, but rear their young in the ocean. Bull trout rearing occurs largely in freshwater river systems. Some sub-adult bull trout migrate to the ocean (Washington Coast bull trout) or Puget Sound (Puget Sound bull trout) to rear for part of the year.</p>	
<p>FWS-17</p>	<p>Page 3.9-91 Section 3.9.3.2.1.2, Training Activities, Inland Waters.</p> <p>Wording in the last paragraph of this section and repeated throughout other sections on the discussion of impacts to listed species and designated critical habitat, states that the majority of PCEs required by the salmonid species and Pacific eulachon are applicable to fresh water and estuaries (i.e., spawning sites, rearing sites, and migration corridors) and are outside the Study Area. Bull trout PCEs were not mentioned or described in the DEIS. Critical habitat is designated along the Washington Coast and throughout Puget Sound, which are within the Project Area. An analysis on impacts of the project on the PCEs for bull trout designated critical habitat is needed for both the offshore area and Puget Sound.</p>	<p>Bull trout PCEs have been added to the Final EIS/OEIS. Of nine identified bull trout PCEs, five are present in the NWTT Study Area and are described in Section 3.9.2.3.1.6 (Bull Trout [<i>Salvelinus confluentus</i>]). The impact analysis in the Final EIS/OEIS considers these PCEs.</p>
<p>Marine Mammal Commission-01 (Written)</p>	<p>The Marine Mammal Commission recommends that, prior to issuing the final environmental impact statement/overseas impact statement, the Navy—</p> <ul style="list-style-type: none"> • revise its DEIS by expanding the range of alternatives under consideration to include at least one with lesser levels of training and testing activities; <p>No Action Alternative</p> <p>The Navy has chosen to use a continuation of current activities as the No Action Alternative. The Commission understands that choice and considers it reasonable as long as the environmental impacts of all major current activities have been assessed appropriately. However, the Commission has serious concerns regarding the selection of the other alternatives because, as a set, they do not satisfy the requirement under the Council on Environmental Quality (CEQ) guidance that the DEIS consider management of both greater and lesser intensity.</p> <p>The Navy suggested in its DEIS that it need not consider any alternative under which training and testing activities would be reduced. Specifically, the Navy stated that such an alternative cannot be considered because it would not allow the Navy to meet its mandates under 10 U.S.C. § 5062. However, the guidance provided by CEQ on No Action Alternatives explains that—</p> <p>the regulations require the analysis of the no action alternative even if the agency is under a court order or legislative command to act. This analysis provides a benchmark, enabling decisionmakers to compare the magnitude of environmental effects of the action alternatives. It is also an example of a reasonable alternative outside the jurisdiction of the agency which must be analyzed.</p> <p>Thus, even though the Navy may prefer a different alternative that enables it to meet fully its obligations under Title 10, such alternatives must be analyzed in the DEIS.</p>	<p>The Purpose of the Proposed Action is to ensure the Navy accomplishes its statutorily required mission to maintain, train, and equip combat-ready military forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. Please see Section 2.5 (Alternatives Development) and specifically Section 2.5.1.2 (Reduced Training and Testing), which clearly states that “Reduction or cessation of training and testing would prevent the Navy from meeting its Title 10 requirements and adequately preparing naval forces for operations at sea ranging from disaster relief to armed conflict.” The Navy explored a variety of alternatives and concluded that the three alternatives presented in the EIS/OEIS were the only reasonable alternatives that met training and testing requirements.</p> <p>Regarding the No Action Alternative, the Navy follows CEQ guidance quoted in the comment that requires the analysis of a No Action Alternative. In compliance with NEPA, the Navy analyzed a full range of reasonable alternatives, which were rigorously and objectively explored. The current No Action Alternative provides the benchmark requested in the comment. Also, several activities are reduced in the action alternatives.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>Therefore, the Commission recommends that the Navy revise its DEIS by expanding the range of alternatives under consideration to include at least one with lesser levels of training and testing activities.</p>	
<p>MMC-02</p>	<p>• (1) account for uncertainty in extrapolated density estimates for all species by using the upper limit of the 95% confidence interval or the arithmetic mean plus two standard deviations and (2) then re-estimate the numbers of takes accordingly; Uncertainty in density estimates Uncertainty in general—The Navy estimated marine mammal densities in NWTT based on (1) models that use direct survey sighting data and distance sampling theory, (2) models that use known or inferred habitat associations to predict densities (e.g., relative environmental suitability (RES) models), typically in areas where survey data are limited or non-existent, or (3) extrapolation from neighboring regional density estimates or population/stock assessments based on expert opinion (Department of the Navy 2014b). The Navy noted that estimates from both RES models and extrapolated densities include a high degree of uncertainty (Department of the Navy 2014b), but it does not appear that the Navy included measures of uncertainty (i.e., standard deviation, coefficient of variation, etc.) in those estimates. For NWTT, the Navy indicated that extrapolated density estimates from the Southwest Fisheries Science Center (SWFSC) data were considered more representative of expected densities than those generated from RES models¹. The Navy stated that, in the absence of any other density data for various species that occur in the U.S. Northwest Offshore or the Canada Offshore stratum², density data from the SWFSC's Oregon/Washington stratum were used (Department of the Navy 2014b). Those data originated from areas south of the two offshore strata. For other species, such as Dall's porpoise, data from the SWFSC's Northern California stratum were applied to the Oregon/Washington and the U.S. Offshore strata. SWFSC's data also were collected in summer and fall but were used to estimate winter and spring densities for species expected to occur in winter and/or spring. In addition, some density estimates were based on (1) a single sighting, for which the Navy noted the confidence in the value was low and/or (2) f(0) and g(0) values derived from other surveys in the North Pacific³ (Department of the Navy 2009). Further, for Dall's porpoise and minke whale densities for the inland waters of Washington, the Navy used density data from harbor porpoise surveys that then were prorated (i.e., scaled) based on harbor porpoise sightings (ManTech-SRS Technologies 2007). Man-Tech SRS Technologies (2007) emphasized that those estimates were subject to high levels of uncertainty and variability since the prorating method required several assumptions that could not be evaluated fully. The Commission understands that density data are not available for all areas where or times when activities may occur and that when such data are available the densities could be underestimated. However, the Commission continues to believe that action</p>	<p>The Navy coordinated with scientists at the Southwest Fisheries Science Center (SWFSC) and the National Marine Mammal Laboratory (NMML) to help identify the best available density estimates for marine mammals occurring in the Study Area. Regarding the use of extrapolated density estimates from the SWFSC rather than using estimates from RES models, in the Pacific Ocean the distribution patterns predicted by the RES model do not correspond well to known species distribution patterns (Ferguson, M. C., Barlow, J., Brownell, R. & Pitman, R. 2011. <i>Identifying areas of biological importance to cetaceans in data-poor regions</i>. White paper summarizing results from panel of "subject matter experts" to help identify marine mammal offshore biologically important areas relevant to the U.S. Navy's use of Surveillance Towed Array Sensor Systems Low-Frequency Active Sonar). Further, RES density estimates for some of the other Navy Study Areas (e.g., HSTT) were found to be orders of magnitude different from density estimates derived from multiple years of systematic line-transect survey data (Department of the Navy 2014 – Navy Marine Species Density Database Technical Report). Therefore, in the absence of density data, extrapolation of density estimates from well-studied regions to lesser-known regions was deemed more appropriate than using RES data, which have shown to be inconsistent with what is known to be true. The use of a mean density estimate is consistent with the approach taken by NMFS to estimate and report the populations of marine mammals in their Stock Assessment Reports, and the estimated mean is thus considered the "best available data." Adjusting the mean estimates as suggested would result in unreasonable measures, particularly given the very high coefficients of variation (CVs) associated with most marine mammal density estimates. Further, the Navy's acoustic model includes conservative estimates of all parameters (e.g., assumes that the animals do not move horizontally, assumes they are always head-on to the sound source so that they receive the maximum amount of energy, etc.), which results in a more conservative (i.e., greater) assessment of potential impacts.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>proponents, including the Navy, should use the best available density estimate plus some measure of uncertainty (e.g., mean plus two standard deviations, mean plus the coefficient of variation, the upper confidence interval) in those instances. If one uses a “best” density estimate, there is approximately a 50 percent chance that the actual density is either greater or less than that estimate. The Navy did indicate that uncertainty characterized in the original density data references was catalogued and retained for potential later use. Thus, those values should be readily available for analysis. Therefore, the Commission recommends that the Navy (1) account for uncertainty in extrapolated density estimates for all species by using the upper limit of the 95% confidence interval or the arithmetic mean plus two standard deviations and (2) then re-estimate the numbers of takes accordingly.</p> <p>¹ The Commission is unsure how the Navy could determine that the extrapolated densities better represent the expected densities than densities from RES models in the absence of density data in those areas.</p> <p>² For NWTT, the Navy delineated three different density areas (i.e., offshore, inland waters, and Western Behm Canal in Alaska), which were differentiated further into various strata within those areas.</p> <p>³ For example, Waite (2003) did not provide survey-specific f(0) and g(0) values; therefore, those values originated from other surveys that occurred in the North Pacific.</p>	
<p>MMC-03</p>	<p>• (1) incorporate data from Raum-Suryan et al. (2005) and Call et al. (2007) and consult with scientists at the National Marine Mammal Laboratory (NMML) regarding unpublished data to revise the areas used in estimating Steller sea lion densities in the offshore and Western Behm Canal areas, (2) incorporate data from Robinson et al. (2012) into the areas used in estimating northern elephant seal densities in the offshore and Western Behm Canal areas, (3) incorporate data from Weise et al. (2006) and consult with scientists at NMML regarding unpublished data to revise the areas used in estimating California sea lion densities in the offshore area, and (4) incorporate data from Ream et al. (2005), Lea et al. (2009), and Melin et al. (2012) and consult with scientists at NMML regarding unpublished data to revise the areas used in estimating northern fur seal densities in the offshore and Western Behm Canal areas—further, movement and dispersion data specific to the NWTT areas from tagged pinnipeds could be scaled to the population for a better estimate of density, if those data are available from NMML;</p> <p>Pinniped densities—To estimate pinniped densities, the Navy primarily used sightings or abundance data divided by an area. In the offshore area, the Navy used the following areas for each species:</p> <ul style="list-style-type: none"> • for harbor seals that area was based on Calambokidis et al. (2004) reporting that seals occur within 40 km of the coastline; • for Steller sea lions that area was based on the entire geographic range of the eastern stock; • for elephant seals that area was based on the female foraging range (based on a 	<p>1. Areas for estimating SSL density, NWTT Offshore and SEAFAC. NMSDD TR used the eastern stock of SSL (highest stock estimate was used), multiplied by 0.25 (Bonnell and Bowlby 1992) to get at sea #s. Then this was divided by the area of the eastern stock of SSL (1,244,000 km²) to get a uniform distribution density estimate. Raum-Suryan et al. (2005) and Call et al. (2007) present the movement, dispersal and haulout use of juvenile (Call et al.) and juvenile and pups (Raum-Suryan et al.). Both papers confirm those species are present in the offshore and Western Behm Canal portions of the NWTT; however these papers present information on haul out use, round trip duration, and distance of a subset of the available population, which may be useful for small estimates of area use. This information is limited to juveniles and pups, and does not represent the range of area that is potentially covered by all SSLs in the eastern stock of SSLs. Therefore, as most literature indicates a wide variety of dispersal and movement among age classes and sex, the uniform distribution was used. In short, this information does not change the analysis presented in the EIS/OEIS.</p> <p>2. With regards to the northern elephant seals calculation of area, the area used for calculation was based on all animals in the LeBouef et al. (2000) paper and was mistakenly reported in the TR as only females. The Robinson et al. (2012) study presents reinforcing data on the presence of northern elephant seals in both the NWTT offshore</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>figure in LeBoeuf et al. (2000)); and</p> <ul style="list-style-type: none"> • for California sea lions and northern fur seals those areas were based on “geographic area of occurrence.” <p>The Commission is unsure if the latter area is represented by the total area of the NWTT offshore area, the actual area in which the animals occur or forage off the Pacific Northwest coast, or the entire range of the stock. To estimate the densities in Western Behm Canal for Steller sea lions, northern elephant seals, and northern fur seals, the Navy used the area of the Gulf of Alaska Large Marine Ecosystem⁴ (Department of the Navy 2009⁵). For harbor seals in Western Behm Canal, the Navy used the area associated with haul-out sites within 35 km of the Navy’s study area. Except for harbor seals, for which the Commission believes that the areas used to estimate densities in both the offshore and Western Behm Canal areas are appropriate, more representative data exist regarding areas of use for each of the other species.</p> <p>For Steller sea lions, Department of the Navy (2009) cited satellite telemetry data for dispersion and haul-out behavior of pups and dependent juveniles with females in Southeast Alaska from Raum-Suryan et al. (2004) and Call et al. (2007). However, it does not appear that the Navy used those data to define the area in which Steller sea lions occur. In addition, NMML has unpublished satellite telemetry data⁶ that could be used to determine the areas of Steller sea lion occurrence for both the offshore and Western Behm canal areas. For elephant seals, Robinson et al. (2012) provided satellite telemetry data on dispersion and movements of female northern elephant seals similar to that of LeBoeuf et al. (2000). From a total of 297 deployments, the researchers collected data on 209 elephant seal tracks of which 195 originated from Año Nuevo Island (see Figure 6 in Robinson et al. (2012)). Those newer elephant seal data should be combined with the LeBoeuf et al. (2000) data to revise the Navy’s area approximation for offshore densities. For California sea lions, Weise et al. (2006) determined that adult male California sea lions remained fairly close to shore but do venture farther out to sea when anomalous oceanic conditions occur, such as were observed in 2005. Although California sea lions were tracked only to southern Oregon by Weise et al. (2006), the Commission believes that unpublished data likely exist from sea lions tagged at San Miguel by NMML. Those unpublished data may better inform the range of California sea lions within the offshore area. Lastly, movements of northern fur seals have been investigated using satellite telemetry from adult females in the non-breeding season (Ream et al. 2005, Melin et al. 2012) and from pups (Lea et al. 2009). Those data, in addition to unpublished data from NMML, could be used to better define the areas in which fur seals occur in both the offshore and Western Behm Canal areas. Specifically, data regarding movements and dispersion of tagged fur seals in the two areas could be scaled to the population and be used for a better approximation of density in those areas. Accordingly, the Commission recommends that the Navy (1) incorporate data from Raum-Suryan et al. (2005) and Call et al. (2007) and consult with scientists at</p>	<p>and Western Behm Canal portions of the NWTT study area and the incorporation of the Robinson study would not change the analysis of impacts on the stock.</p> <p>3. The Weise et al. (2006) paper adds to the information regarding movements of a subset of animals under “anomalous” conditions and for the majority of the Pacific coast of North America, which is outside the NWTT Study Area. Given these factors, it was not included in the definition of area. However, the findings are not inconsistent with the current analysis; California sea lions are assumed to be present in the Study Area. The Navy has also taken into account monitoring data on California sea lions in the Study Area, as presented in Section 3.4.2.29 (California Sea Lion [<i>Zalophus californianus</i>]), including that from local researchers in the Pacific Northwest. Use of data that at present is both unpublished and unknown would be integrated into the Navy’s analysis once that data has been made available and becomes part of the record constituting the best available science.</p> <p>4. Ream et al. (2005), Melin et al. (2012) and Lea et al. (2009) all indicate that there is some use of the nearshore areas of the NWTT off Washington and Oregon by pups and females, and those findings are not inconsistent with the current analysis. The Marine Mammal Commission’s suggested novel method of determining a density of pinnipeds based on the presence of tagged animals and then “scaled to the population” may be investigated in the future as the science and methodology matures in the evolution of the best available science. The Navy, along with NMFS, will continue to work with researchers and scientists at NMML in the development of future at-sea analyses.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>NMML⁷ regarding unpublished data to revise the areas used in estimating Steller sea lion densities in the offshore and Western Behm Canal areas, (2) incorporate data from Robinson et al. (2012) into the areas used in estimating northern elephant seal densities in the offshore and Western Behm Canal areas, (3) incorporate data from Weise et al. (2006) and consult with scientists at NMML regarding unpublished data to revise the areas used in estimating California sea lion densities in the offshore area, and (4) incorporate data from Ream et al. (2005), Lea et al. (2009), and Melin et al. (2012) and consult with scientists at NMML regarding unpublished data to revise the areas used in estimating northern fur seal densities in the offshore and Western Behm Canal areas—further, movement and dispersion data specific to the study areas from tagged pinnipeds could be scaled to the population for a better estimate of density, if those data are available from NMML.</p> <p>⁴ www.lme.noaa.gov</p> <p>⁵ The Department of the Navy (2009) density estimation methods were referenced by Department of the Navy (2010).</p> <p>⁶ The Commission understands it is difficult to determine densities when the best available data are not published. Accordingly, the Commission plans to recommend in its upcoming letter regarding the 2013 stock assessment reports that NMFS’s Science Centers, including NMML, publish their data.</p> <p>⁷ The Commission can provide contact information for the appropriate scientists at NMML.</p>	
<p>MMC-04</p>	<ul style="list-style-type: none"> • revise its abundance estimates to include (1) data from Allen and Angliss (2013) and Carretta et al. (2013) to determine Steller and northern fur seal densities in both the offshore and Western Behm Canal areas and (2) updated data for harbor seals in the Western Behm Canal area, if available; <p>In general, the Navy used abundance estimates from stock assessment reports to estimate pinniped densities. Some of those estimates may be outdated or not considered best available science. The abundance estimates that the Navy used in both the offshore and Western Behm Canal areas have increased for Steller sea lions and decreased for northern fur seals (see Allen and Angliss (2013) and Carretta et al. (2013)) since reported in Department of the Navy (2009, 2014b). The Navy did indicate that updated abundance estimates for harbor seals would be available in 2010 or 2011 (Department of the Navy 2010b), but it is unclear if the Navy tried to obtain those data and they are still unavailable or if the Navy has not updated the harbor seal density data since the Department of the Navy (2010) document. In either case, more current data likely are available for harbor seals since nearly four years have passed. Therefore, the Commission recommends that the Navy revise its abundance estimates to include (1) data from Allen and Angliss (2013) and Carretta et al. (2013) to determine Steller and northern fur seal densities in both the offshore and Western Behm Canal areas and (2) updated data for harbor seals in the Western Behm Canal area, if available.</p>	<p>The information listed in the Technical Report for the Western Behm Canal was based on earlier data. However, an evaluation of the 2012 SAR for the Gulf of Alaska indicated that the increase in Steller sea lion counts between the two data sets would only increase the Western Behm Canal density estimate by 0.001 animals per square kilometer, which was not updated in the Technical Report at the time.</p>
<p>MMC-05</p>	<ul style="list-style-type: none"> • (1) use harbor seal haul-out correction factors of 1.50 and 1.57 for the offshore and inland water areas, respectively, rather than a pooled correction factor of 1.53 and (2) 	<p>While Huber et al. did report a regional correction factor for each survey site, ANOVA results in the same paper concluded there was no</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>use a haul-out correction factor of 1.47 to determine the overall abundance of harbor seals for the Western Behm Canal area and apply a correction of 0.32 to determine the proportion of the overall abundance at sea rather than applying a single correction factor of 0.198;</p> <p>To better estimate the densities of harbor seals in NWTT, the Navy applied correction factors to the abundance estimates in all three areas. A single “regional combined” haul-out correction factor of 1.53 from Huber et al. (2001) was applied to the abundance estimate for both offshore and inland Washington areas. However, Huber et al. (2001) also determined separate haul-out correction factors for the offshore and inland waters (i.e., 1.50 and 1.57, respectively). Those separate correction factors should have been used for the two areas. In addition, the Navy used a correction factor of 0.198 (Allen and Angliss 2010⁸) for the harbor seal abundance estimate in Western Behm Canal. The Commission believes the Navy misinterpreted that information. Simpkins et al. (2003) determined a haul-out correction factor of 1.198, which would account for seals at sea and not counted during a survey⁹. The proportion of seals hauled out would be 0.835 with 0.165 at sea (Simpkins et al. 2003). The abundance estimate, which was based on hauled out seals, should have been multiplied by the haul-out correction factor to determine the overall abundance. Then the overall abundance should have been reduced by the proportion at sea, which is the same method as the Navy used for its offshore density estimate.</p> <p>Further, Withrow and Loughlin (1995) determined a haul-out correction factor of 1.74 for the same general area and at the same time of year as Simpkins et al. (2003). It is unclear why the correction factors differ so much, but the Commission believes that the Navy should use the mean of the two haul-out correction factors (1.47) to determine the overall abundance estimate for Western Behm Canal. The Navy then should reduce that overall abundance estimate by 0.32 (0.68 would be the proportion of seals hauled out¹⁰) to determine the number of animals at sea. Accordingly, the Commission recommends that the Navy (1) use harbor seal haul-out correction factors of 1.50 and 1.57 for the offshore and inland water areas, respectively, rather than a pooled correction factor of 1.53 and (2) use a haul-out correction factor of 1.47 to determine the overall abundance of harbor seals for the Western Behm Canal area and apply a correction of 0.32 to determine the proportion of the overall abundance at sea rather than applying a single correction factor of 0.198.</p> <p>⁸ However, the haul-out correction factor originated in Simpkins et al. (2003).</p> <p>⁹ The correction factor to adjust an abundance estimate to account for seals in the water is the reciprocal of the proportion of tagged animals hauled out. That correction factor is not the same as the proportion of seals in the water.</p> <p>¹⁰ The reciprocal of the mean haul-out correction factor of 1.47 is 0.68, which is the proportion of seals hauled out. Therefore, 0.32 would be the proportion of seals in the water.</p>	<p>significant difference between any of the locations and proportion ashore. Therefore, the regional correction was not used, and the regional combined haulout factor can be viewed as a conservative approach.</p> <p>With regards to Western Behm Canal, the description of the correction factor, as reported in the SEAFAC Density report, is confusingly written as 0.198. The text was written as “Total seals were calculated as the 1,094 seals hauled out in the area (Withrow et al. 1999) plus an at sea correction factor of 0.198 of the haul-out count (Allen and Angliss 2010).” The “plus” in this language was meant to indicate that the Simpkins 1.198 factor was used to achieve a total population of 1,310. The at-sea proportion based on the Simpkins value (which Allen and Angliss used) would be approximately 216 animals, this value is reported in the technical report. While the confusing language was carried into the technical report, the methodology is the same as presented in your comment and the density reported would not change. This grammatical edit will be forwarded to the density team.</p> <p>Using a mean haulout correction factor of 1.47 would revise the density estimate from 0.29 seals per km² to 0.56 seals per km². This information will be forwarded to the Density Team for evaluation. However, given that Southeast Alaska (Clarence Strait) stock of harbor seals would not be exposed to sound that would exceed the current impact thresholds (as listed in Section 3.4 [Marine Mammals] of the EIS/OEIS), it is unlikely that any revisions to density values will result in a change in modeled effects.</p>
MMC-06	<ul style="list-style-type: none"> include in either its DEIS or supporting documents (Department of the Navy 2014b) the 	Department of the Navy 2014 (Navy Marine Species Density Database)

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>method(s) by which species-specific densities were calculated for each area and each season and cite the primary literature from which the data originated;</p> <p>Lack of transparency in density estimations—The Commission had a difficult time determining how some of the densities were calculated given the need to review multiple sources of information. For example, the Navy indicated in its density database technical report (Department of the Navy 2014b) that the densities of Cuvier’s and Baird’s beaked whales for Western Behm Canal were taken from Department of the Navy (2010). But Department of the Navy (2010) indicated that the densities were calculated in Department of the Navy (2009) and were based on Waite (2003). In Department of the Navy (2009), the Navy stated that data from vessel surveys conducted by Waite (2003) yielded the stated densities. Further, various documents (e.g., Department of the Navy 2009, 2010, 2014b) use different delineations for seasons—some use the conventional four seasons, while others use warm and cold seasons. The Navy should have explained the method by which the densities were calculated for each area (for NWTT that would include each of the three density areas) and each season in Department of the Navy (2014b), as the current process is not transparent. Therefore, the Commission recommends that the Navy include in either its DEIS or supporting documents (Department of the Navy 2014b) the method(s) by which species-specific densities were calculated for each area and each season and cite the primary literature from which the data originated.</p>	<p>Technical Report) includes individual species-specific descriptions of the density estimates used for each area and each season. The seasonal delineation used by the Navy is specifically described in this report (Section 3.2). Due to the many different sources of data used, all sections incorporate by reference the literature from which the estimates were taken. In addition, Chapter 3.3 of the Technical Report, “Information on Density Data Sources Considered and Included,” provides additional details on the main data sources used (and for many of the systematic surveys maps are included to show the extent of the study area or transects surveyed). For those cases where density estimates were taken directly from an existing report (e.g., U.S. Department of the Navy 2010, Marine Mammal Occurrence/ Density Report prepared in support of Navy activities at the Southeast Alaska Acoustic Measurement Facility), a general description is provided but it is beyond the scope of this document to summarize all the information contained in each of the reports that are incorporated by reference.</p> <p>The technical report is available on the NWTT website at: http://nwtteis.com/DocumentsandReferences/NWTTDocuments/SupportingTechnicalDocuments.aspx. The Navy continues to use the best available science, and this information will be considered in future projects.</p>
<p>MMC-07</p>	<ul style="list-style-type: none"> • (1) use 157 rather than 152 dB re 1 $\mu\text{Pa}^2\text{-sec}$ as the temporary threshold shift (TTS) threshold for high-frequency cetaceans exposed to acoustic sources, (2) use 169 rather than 172 dB re 1 $\mu\text{Pa}^2\text{-sec}$ as the TTS thresholds for mid- and low-frequency cetaceans exposed to explosive sources, (3) use 145 rather than 146 dB re 1 $\mu\text{Pa}^2\text{-sec}$ as the TTS threshold for high-frequency cetaceans for explosive sources, and (4)(a) based on those decreases in the TTS thresholds, adjust the permanent threshold shift (PTS) thresholds for high-frequency cetaceans exposed to acoustic sources by increasing the amended TTS threshold by 20 dB and for low-, mid-, and high-frequency cetaceans exposed to explosive sources by increasing the amended TTS thresholds by 15 dB and (b) adjust the behavioral thresholds for low-, mid-, and high-frequency cetaceans exposed to explosive sources by decreasing the amended TTS thresholds by 5 dB; <p>Criteria and thresholds</p> <p>The Navy proposed to estimate the numbers of takes resulting from its activities by adjusting received sound levels at different frequencies based on the hearing sensitivity of various groups of marine mammals at those frequencies. The adjustments were based on “weighting” functions derived by Southall et al. (2007) and Finneran and</p>	<p>As detailed in Finneran and Jenkins (2012), the thresholds presented incorporate new findings since the publication of Southall et al. (2007) and the evolution of scientific understanding since that time. Please note that Dr. Finneran was one of the authors for Southall et al. (2007) and so is completely familiar with the older conclusions present in the 2007 publication; therefore, Dr. Finneran was able to integrate that knowledge into the development of the refined approach that was presented in Finneran and Jenkins (2012), based on evolving science since 2007. The Navy is confident that the thresholds and criteria used in the NWTT analysis have already incorporated the correct balance of conservative assumptions that tend towards overestimation in the face of uncertainty. Details regarding the process are provided in Section 3.4.3.1.14 (Quantitative Analysis). In addition, the summary of the thresholds used in the analysis are presented in Section 3.4.3.1.10 (Thresholds and Criteria for Predicting Acoustic and Explosive Impacts on Marine Mammals). As noted in Section 1.7 of the NWTT EIS/OEIS, the National Marine Fisheries Service is a cooperating agency in the</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>Jenkins (2012; Type I and Type II weighting functions, respectively). Type I weighting functions (see Figure 1 in Southall et al. 2007) are flat over a wide range of frequencies and then decline at the extremes of the animal's hearing range. Type II weighting functions (Finneran and Jenkins 2012) are used only for cetaceans and combine the precautionary Type I curves developed by Southall et al. (2007) with equal loudness weighting functions derived from empirical studies of bottlenose dolphins (Finneran and Schlundt 2011).</p> <p>The Commission considers the theory behind those weighting functions to be reasonable. However, the amplitudes of the final Type II weighting functions were adjusted by lowering the sound exposure levels (SELs) at all frequencies by roughly 16–20 dB (compare Figures 2 and 6 of Finneran and Jenkins (2012)). For sonar-related activities, Finneran and Jenkins (2012) reduced the TTS thresholds for acoustic sources for low- and mid-frequency cetaceans (see Table 2 in Southall et al. 2007 for information on functional hearing groups) by 17 dB, assuming they rounded up from 16.5 dB. However, they only reduced the TTS threshold for high-frequency cetaceans by 18.3 rather than 19.4 dB (Table 4 in Finneran and Jenkins (2012)). Because data are lacking for TTS thresholds for high-frequency cetaceans exposed to acoustic (i.e., tonal) sources, Finneran and Jenkins (2012) indicated that a 6-dB correction factor then was added to the TTS threshold (because it was derived from exposure to non-explosive impulsive sources (i.e., from airguns) rather than acoustic sources) based on the method outlined in Southall et al. (2007). However, the Commission's understanding is that Southall et al. (2007) did not use a 6-dB correction factor to extrapolate between impulsive and acoustic thresholds, but rather to estimate PTS thresholds from TTS thresholds based on peak pressure levels. Southall et al. (2007) did indicate that the TTS threshold for acoustic (nonpulse) sources was 12 dB greater than for explosive sources (pulses) based on SELs (195 vs 183 dB re 1 $\mu\text{Pa}^2\text{-sec}^{11}$, respectively). If the explosive threshold of 164.3 dB re 1 $\mu\text{Pa}^2\text{-sec}$ (based on Lucke et al. (2009) and used in Finneran and Jenkins (2012)) is increased by 12 dB, the resulting unadjusted TTS threshold would be 176.3 dB re 1 $\mu\text{Pa}^2\text{-sec}$ for acoustic sources. That threshold then should have been adjusted by 19.4 dB to yield a TTS threshold of 157 dB re 1 $\mu\text{Pa}^2\text{-sec}$.</p> <p>Further, it is unclear how the explosive thresholds (i.e., for underwater detonations) were adjusted downward to account for the amplitude decrease in the Type II weighting functions. For example, Finneran and Jenkins (2012) indicated that they used Finneran et al. (2002) TTS data of 186 dB re 1 $\mu\text{Pa}^2\text{-sec}$ to determine the TTS threshold for explosives for mid-frequency cetaceans, which also was supported by Southall et al. (2007). But if one uses the purported method of subtracting 16.5 dB from that threshold, the resulting Type II weighted SEL would be 169.5 (it appears it should be rounded down to 169 based on the Finneran and Jenkins (2012) document) rather than 172 dB re 1 $\mu\text{Pa}^2\text{-sec}$. Finneran and Jenkins (2012) proposed to use 172 dB re 1 $\mu\text{Pa}^2\text{-sec}$ for low-frequency cetaceans as well. Lastly, they appear to use a correction factor of 18 rather</p>	<p>development of the EIS/OEIS because of its expertise and regulatory authority over marine resources. Additionally, the NWTT EIS/OEIS will serve as the NMFS's NEPA documentation for the rule-making process under the MMPA. Given this, NMFS was included in the development of the current thresholds. Furthermore, the thresholds and criteria used in the NWTT EIS/OEIS have been paralleled by the TTS and PTS thresholds NMFS recently proposed in its "Draft Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammals." For these reasons the thresholds used in the current analysis remain the best available science, although the Navy will continue to revise those thresholds based on emergent research and in cooperation with NMFS as the federal regulator through future MMPA permitting processes.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>than 19.4 to adjust the Type II weighted SEL for high-frequency cetaceans. The Commission is concerned that the TTS thresholds for explosive sources that the Navy used not only are greater than they should be based on the methods described but also are used as the basis for the PTS and behavioral thresholds. Thus, if those thresholds were not adjusted by the appropriate amplitude factor, the Navy may have estimated the numbers of takes of marine mammals incorrectly. To address these concerns, the Commission recommends that the Navy (1) use 157 rather than 152 dB re 1 $\mu\text{Pa}^2\text{-sec}$ as the TTS threshold for high-frequency cetaceans exposed to acoustic sources, (2) use 169 rather than 172 dB re 1 $\mu\text{Pa}^2\text{-sec}$ as the TTS thresholds for mid- and low-frequency cetaceans exposed to explosive sources, (3) use 145 rather than 146 dB re 1 $\mu\text{Pa}^2\text{-sec}$ as the TTS threshold for high-frequency cetaceans for explosive sources, and (4)(a) based on those decreases in the TTS thresholds, adjust the PTS thresholds for high-frequency cetaceans exposed to acoustic sources by increasing the amended TTS threshold by 20 dB and for low-, mid-, and high-frequency cetaceans exposed to explosive sources by increasing the amended TTS thresholds by 15 dB and (b) adjust the behavioral thresholds for low-, mid-, and high-frequency cetaceans exposed to explosive sources by decreasing the amended TTS thresholds by 5 dB.</p> <p>¹¹ Those TTS thresholds were based on Schlundt et al. (2000) and Finneran et al. (2002).</p>	
<p>MMC-08</p>	<ul style="list-style-type: none"> • (1) use 171 dB re 1 $\mu\text{Pa}^2\text{-sec}$ as the TTS threshold for phocids exposed to explosive sources and (2) based on that decrease in the TTS threshold for phocids, adjust the PTS and behavioral thresholds by increasing the TTS threshold by 15 and decreasing the TTS threshold by 5 dB, respectively; <p>For determining TTS thresholds for pinnipeds for underwater detonations, the Navy used data from Kastak et al. (2005) and extrapolation factors from Southall et al. (2007). Kastak et al. (2005) estimated the average SEL for onset-TTS for pinnipeds exposed to octave-band underwater sound centered at 2.5 kHz (i.e., mid-frequency sound). However, underwater detonations produce broadband sound in the low-frequency range. The Commission recognizes that the data provided by Kastak et al. (2005) may be the only data available, but it is unclear if those data provide an appropriate basis for estimating the relevant thresholds. More importantly, the extrapolation factors from Southall et al. (2007) were not stated specifically in the Navy’s analysis for underwater detonations, but it appears that the Navy used 6 dB. As noted in the previous paragraph, Southall et al. (2007) seem to have used 6 dB as the extrapolation factor for determining PTS thresholds from TTS thresholds based on peak sound pressure levels, not for extrapolating from acoustic to explosive thresholds. Further, Southall et al. (2007) determined the TTS threshold for harbor seals exposed to pulsed sound (explosive sources) by using a correction factor of 12 dB to reduce the Type I threshold of 183 dB re 1 $\mu\text{Pa}^2\text{-sec}$ for mid-frequency cetaceans, which equates to 171 dB re 1 $\mu\text{Pa}^2\text{-sec}$. The Commission believes that threshold of 171 dB re 1 $\mu\text{Pa}^2\text{-sec}$ should have been used by the Navy rather than the 177 dB re 1 $\mu\text{Pa}^2\text{-sec}$. Further, as stated previously, the TTS</p>	<p>Please refer to the discussion of the thresholds used in the analysis as presented in Section 3.4.3.1.10 (Thresholds and Criteria for Predicting Acoustic and Explosive Impacts on Marine Mammals). As detailed in Finneran and Jenkins (2012) the thresholds presented incorporate new findings since the publication of Southall et al (2007) and the evolution of scientific understanding since that time. Regarding concerns expressed with regard to the use of data from Southall et al (2007), please note that Dr. Finneran was one of the authors for Southall et al. (2007) and so is completely familiar with the older conclusions present in the 2007 publication. As a result, Finneran and Jenkins (2012) are clearly qualified to integrate Southall et al. (2007) into the development of the refined approach that was presented in Finneran and Jenkins (2012) based on evolving science since 2007.</p> <p>Regarding the concern that impacts could have been underestimated, please see Section 3.4.3.1.14 (Quantitative Analysis). The Navy is confident that the thresholds and criteria used in the NWTT analysis incorporated the correct balance of conservative assumptions tending towards overestimating in the face of uncertainty in developing the most accurate assessment of impacts possible given the current state of the science. National Marine Fisheries Service is a cooperating agency in the development of the EIS/OEIS and was included in the development of the current thresholds. Furthermore,</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>thresholds serve as the basis for the PTS and behavioral thresholds and could have been underestimated. Therefore, the Commission recommends that the Navy (1) use 171 dB re 1 $\mu\text{Pa}^2\text{-sec}$ as the TTS threshold for phocids exposed to explosive sources and (2) based on that decrease in the TTS threshold for phocids, adjust the PTS and behavioral thresholds by increasing the TTS threshold by 15 and decreasing the TTS threshold by 5 dB, respectively.</p>	<p>the thresholds and criteria used in the NWTT EIS/OEIS have been paralleled by the TTS and PTS thresholds NMFS recently proposed in their “Draft Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammals.” For these reasons the thresholds used in the current analysis remain the best available science, although the Navy will continue to revise those thresholds based on emergent research and in cooperation with NMFS as the federal regulator through future MMPA permitting processes.</p>
<p>MMC-09</p>	<p>• use its spatially and temporally dynamic simulation models rather than simple probability calculations to estimate strike probabilities for specific activities (i.e., movements of vessels, torpedoes, unmanned underwater vehicles and expended munitions, ordnance, and other devices);</p> <p>Probability of strike</p> <p>The Navy used a qualitative assessment to determine the number of whales that could be struck by a vessel based on historical data. The Navy also estimated the probabilities of expended munitions and non-explosive materials (e.g., sonobouys) striking a marine mammal based on simple probability calculations (Appendix I of its DEIS). In doing so, the Navy compared the aggregated footprint of some specific marine mammal species with the footprint of all objects that might strike them. Both of those were based only on densities of marine mammals in the action area and expected amount of materials to be expended within a year in those areas. By combining marine mammal densities and those activities over space and time into a single calculation, the Navy provided only a crude estimate of strike probabilities for the average condition, which may have been underestimated based on the shortcomings of the density data (as previously discussed). Neither marine mammals nor Navy activities are distributed homogeneously in space or time. To provide a more reliable estimate of possible takes from munitions and materials, the Navy should incorporate spatial and temporal considerations in its calculations to estimate takes. For example, the Navy’s model for determining takes of marine mammals from sound-producing activities can account for the movement of sound sources and marine mammals. Using that model to estimate the probability of strike, the Navy could change the data collected by the animat dosimeters from a received sound level to a close approach distance, which would result in more realistic strike probabilities.</p> <p>For the HSTT Final Environmental Impact Statement/Overseas Environmental Impact Statement (FEIS), the Navy indicated that it considered using a dynamic simulation model to estimate strike probabilities but determined that use of historical data was more appropriate for the analysis. The Navy believed that those data account for real-world variables over many years, and any model would be expected to be less accurate than the use of actual data. The Commission disagrees with that conclusion. First of all, the</p>	<p>MMC disagreement over the use of a qualitative assessment to determine the number of whales that could be struck by Navy vessels, torpedoes, unmanned underwater vehicles, expended munitions, ordnance, and other devices has been noted. The suggestion to use the Navy Acoustic Effects Model to determine the probability of a strike would not provide a more reliable estimate of strike probability given there are so many unknown but critical values which would be necessary as required inputs.</p> <p>As noted, there are changes between the No Action Alternative and Alternatives 1 and 2 in the number of activities analyzed that involve vessel movement. It is, however, not the case that an increase in the activities analyzed means there will be an equivalent increase in steaming hours or the number of vessels at sea. As provided in Section 2.5.2 (Alternatives Carried Forward), the No Action Alternative included training and testing activities as defined by existing Navy environmental planning documents. Under Alternatives 1 and 2, the analysis included current Navy training and testing requirements not yet analyzed under existing environmental planning documents as well as new future requirements. Therefore, most of the increase from the No Action Alternative in the number of activities involving vessel movement simply reflect an increase in the activities analyzed, not an increase in activities conducted. For example and as shown on Tables 2.8-1 and 2.8-2 for Alternative 1, Precision Anchoring (10 Events); Sonar Maintenance (35 events); and System, Subsystem and Component Testing (156 events) all involve vessel movement, all have historically occurred, but none were included in any previously existing Navy environmental planning documents and so were not part of the No Action Alternative analyzed in the NWTT EIS/OEIS (0 events under the NAA vs. 201 under Alt 1). It is also important to note that an increase in events including vessel movement does not equate to an increase in actual vessel movement. The reality of Navy budgets would not allow for a significant increase in vessel movements.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>activities under the Preferred Alternative would increase over baseline (i.e., the No Action Alternative). As an example, the number of testing activities involving vessel movement in the offshore area would increase by nearly 400 percent over the No Action Alternative (37 vs. 138 activities) and using the historical rate of ship strikes based on lesser numbers of vessels would underestimate the possibility of ship strikes under the Preferred Alternative. Further, the Commission supports the use of actual data relevant to the activities proposed under the alternatives. However, those data should be used to seed the dynamic simulation models rather than in the qualitative assessment of vessel strike or current crude calculations of strike probabilities for expended munitions and materials. For these reasons, the Navy should provide a more accurate assessment based on the best available information for marine mammals and the locations and scheduled times of its activities. Therefore, the Commission again recommends that the Navy use its spatially and temporally dynamic simulation models rather than simple probability calculations to estimate strike probabilities for specific activities (i.e., movements of vessels, torpedoes, unmanned underwater vehicles and expended munitions, ordnance, and other devices).</p>	<p>Instead, more events are being conducted during the same number or even decreasing number of vessel movements. As discussed in Section 3.4.3.4.1 (Impacts from Vessel Strikes), vessel movements under the three alternatives would not appreciably change in location or frequency, and the manner in which the Navy has trained would remain consistent with the range of variability observed over the last decade.</p> <p>The recommendation of the Marine Mammal Commission to use a dynamic simulation model to estimate strike probability was considered, but the Navy found that use of historical data was more appropriate for the analysis. The strike probability analysis completed in this EIS/OEIS is based upon actual data collected from historical use of vessels, in-water devices, and military expended materials, and the likelihood that these items may even have the potential to strike an animal. These data account for real world variables over the course of many years, and any model would be expected to be less accurate than the use of actual data. There is no available science regarding the necessary functional parameters for a complex dynamic whale strike simulation model; there are large unknowns regarding the data that would be necessary such as the density, age classes, and behavior of large whales in the NWTT Study Area; and there is no means to validate the output of a model given there is no empirical data (no strikes to whales during the proposed training and testing) to “seed the dynamic simulation.” Therefore, use of historical data from identical activities elsewhere and additional use of a probability analysis remain a more reasonable analytical approach.</p>
<p>MMC-10</p>	<ul style="list-style-type: none"> provide the predicted average and maximum ranges for all impact criteria (i.e., behavioral response, TTS, PTS, onset slight lung injury, onset slight gastrointestinal injury, and onset mortality), for all activities (i.e., based on the activity category and representative source bins and including ranges for more than 1 ping), and for all functional hearing groups of marine mammals within the three NWTT areas (i.e., offshore, inland waters, and Western Behm Canal); <p>Mitigation and monitoring measures</p> <p>Many of the proposed activities involve mitigation measures that currently are being implemented in accordance with previous environmental planning documents, regulations, or consultations. Most of the current mitigation zones for activities involving acoustic (e.g., mid- and high-frequency active sonar) or explosive sources (e.g., underwater detonations, explosive sonobuoys, surface detonations) were designed originally to reduce the potential for onset of TTS. For the DEIS, the Navy revised its</p>	<p>Ranges to effects for all criteria and functional hearing groups are provided for representative active sonars (Section 3.4.3.2.1.1, Range to Effects) and explosives (Section 3.4.3.2.2.1, Range to Effects). The representative sources include the most powerful active sonar source and the charge with the largest net explosive weight analyzed. Average ranges to effect are provided in the EIS/OEIS to show the reader typical zones of impact around representative sources and are sufficient to understand the remainder of the EIS/OEIS as it applies to the range to effects represented by the representative ranges provided.</p> <p>As presented in Chapter 5, Table 5.4-1 the Navy has developed recommended mitigation measures and mitigation zones that can be implemented uniformly across the Navy rather than having differing mitigation measures specific to a range complex or otherwise based</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>acoustic propagation models by updating hearing criteria and thresholds and marine mammal density and depth data. Based on the updated information, the models now predict that for certain activities the ranges to onset of TTS are much larger than those estimated previously. Due to the ineffectiveness and unacceptable operational impacts associated with mitigating those large areas, the Navy is unable to mitigate for onset of TTS for every activity. For that reason, it proposes to base its mitigation zones for each activity on avoiding or reducing PTS.</p> <p>Table 5.3-2 in the DEIS lists the Navy’s predicted distances or ranges over which PTS and TTS might occur and the recommended mitigation zones. Rather than include all sources, the table categorizes sound sources by a representative source type within a source bin (e.g., Bin MF1: SQS-53 antisubmarine warfare hull-mounted sonar) and provides average and maximum distances from the sound source at which PTS could be expected to occur and the average range at which TTS could be expected to occur. Chapter 3 of the DEIS also includes tables listing various ranges. However, the tables in Chapter 3 include (1) only a subset of the proposed activities, some of which are not relevant to NWTT, (2) the average rather than maximum ranges, and (3) nominal values for deep water offshore areas, not specific to NWTT (see Table 3.4-20). The Commission is unsure why the Navy would include a table that was not relevant or applicable to NWTT. In addition, the DEIS does not provide the ranges to PTS for acoustic sources for more than 1 ping (Table 3.4-10), as it does for TTS (i.e., 1, 5, and 10 pings; Table 3.4-11). Instead, the Navy assumed that marine mammals could not maintain a speed of 10 knots parallel the ship and receive adequate energy over successive pings to result in PTS. Further, the Navy indicated in Table 3.4-10 that the ranges to PTS for acoustic sources were “within representative ocean acoustic environments” and in Table 3.4-11 that the ranges to TTS for acoustic sources were “over a representative range of ocean environments”, which the Commission assumes as not necessarily within NWTT (similar to Table 3.4-20).</p> <p>The Navy stated that modeling for inland waters provides an overestimate of the range to effects because it cannot adequately account for the complex interactions of the sound energy into very shallow water and associated shorelines, the loss into dampening structures (i.e., such as adjacent pilings, jetties, or seawalls), or occasions when a ship or submarine is moored bow-in so that the sound is transmitted toward the nearby shoreline. Therefore, the Navy noted that the ranges in Table 5.2-3 would be even more protective for activities in the inland waters. The Commission agrees that in many cases the Navy’s range estimates are more protective in inland waters, but that is not true in all cases. Situations occur in which sound can propagate greater distances in shallower water. Data specific to NWTT are essential, especially for inland waters¹² and Western Behm Canal where waters are shallower and bottom characteristics would be important for determining sound propagation. Further, the Navy did not propose to power down when pinnipeds were within various radii of the acoustic source. Rather, the Navy</p>	<p>upon varying ranges to effects. In Section 3.4, Table 3.4-20 referenced in the comment is therefore relevant for the entire Navy.</p> <p>Average ranges to effect are provided in the EIS/OEIS to show the reader typical zones of impact around representative sources and are sufficient to understand the remainder of the EIS/OEIS as it applies to the range to effects represented by the representative ranges provided.</p> <p>As explained in the EIS/OEIS in Section 3.4.3.2.1.1 (Range to Effects), there is no reason to show a PTS range for more than one ping because of the short distances involved, even in the case of the most powerful hull mounted source; The ship moves beyond the PTS zone for each successive ping, and there is no difference in successive pings. Given all the science detailed in the EIS/OEIS (see for example Section 3.4.3.2.1.2, Avoidance Behavior and Mitigation Measures as Applied to Sonar and Other Active Acoustic Sources) indicating that marine mammals will behaviorally avoid high levels of sound, the assumption that a marine mammal would not remain alongside a pinging vessel is a simple but reasonable assumption. As presented in the EIS/OEIS, while 10 knots was the speed used in modeling the ship’s speed of advance, a ship engaged in anti-submarine warfare training or testing would be moving at between 10 and 15 knots. For the majority of marine mammals, the distance to a PTS exposure is within 10 meters of the sonar dome, and that distance is not influenced significantly by differing ocean environments given that the calculated range to a PTS is almost entirely a function involving the physics of spreading loss. The comment’s assumption that the distances provided in Tables 3.4-10 and 3.4-11 do not apply to NWTT is incorrect.</p> <p>Although the Navy made statements recognizing the complexity of acoustic modeling in inland waters, it would be incorrect to assume that modeling therefore lacked precision. The Navy acoustic modeling makes use of the most accurate information and environmental data available, including the inland waters where these activities would take place. Details of this model’s processes and the description and derivation of the inputs are presented in the Navy’s Determination of Acoustic Effects Technical Report (Marine Species Modeling Team 2013). As presented in Section 3.4.3.1.14.3 (Navy Acoustic Effects Model), the model incorporates actual site-specific bathymetric relief, sound speed profiles, wind speed, and bottom properties into the propagation analysis.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>proposed to shut down when pinnipeds were at 90 m or less. The Commission believes that shutting down for pinnipeds likely would occur most often in either inland waters or in Western Behm Canal, which may not have been included in Tables 3.4-10, 11, and 20. Absent NWTT-specific information, the DEIS process is not fully transparent and the Commission and public cannot comment on the appropriateness of the proposed mitigation zones. To address those shortcomings, the Commission recommends that the Navy provide the predicted average and maximum ranges for all impact criteria (i.e., behavioral response, TTS, PTS, onset slight lung injury, onset slight gastrointestinal injury, and onset mortality), for all activities (i.e., based on the activity category and representative source bins and including ranges for more than 1 ping), and for all functional hearing groups of marine mammals within the three NWTT areas (i.e., offshore, inland waters, and Western Behm Canal).</p> <p>¹² Empirical sound propagation measurements have been obtained by Washington Department of Transportation and the Navy at Naval Base Kitsap, which could inform modeling of inland waters.</p>	
<p>MMC-11</p>	<ul style="list-style-type: none"> • use passive and active acoustics, whenever practicable, to supplement visual monitoring during the implementation of its mitigation measures for all activities that could cause PTS, injury, or mortality beyond those explosive activities for which passive acoustics already was proposed; <p>The Navy indicated in its DEIS that the use of lookouts (i.e., observers) would increase the likelihood of detecting marine mammals at the surface, but it also noted that it is unlikely that using lookouts will be able to help avoid impacts on all species entirely due to the inherent limitations of visually detecting marine mammals. The Commission agrees and has made numerous recommendations to the Navy in previous letters to characterize the effectiveness of visual observation. For a number of years, the Navy has been working with collaborators at the University of St. Andrews to study observer effectiveness. The Navy has noted in the DEIS that while data were collected as part of a proof-of-concept phase, those data are not fairly comparable as protocols were being changed and assessed, nor are those data statistically significant. The Commission agrees that the data are preliminary and may not be statistically significant but the basic information they provide is useful. In one instance, the marine mammal observers (MMOs) had sighted at least three marine mammals at distances less than 914 m (i.e., within the mitigation zone for mid-frequency active sonar for cetaceans), which were not sighted by Navy lookouts (Department of the Navy 2012). Further, MMOs have reported marine mammal sightings not observed by Navy lookouts to the Officer of the Deck, presumably to implement mitigation measures—however details regarding those reports or raw sightings data were not provided to confirm (Department of the Navy 2010a). The Commission believes that these studies will be very informative once completed but that a precautionary approach should be taken in the interim.</p> <p>Therefore, the Commission believes that the Navy should supplement its visual monitoring efforts with other measures rather than simply reducing the size of the zones</p>	<p>As discussed in various locations in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring; for an example see specifically Section 5.3.2.1.2.1) of the EIS/OEIS, the Navy already makes use of passive acoustic detection when available and appropriate. Passive acoustic monitoring would be conducted with Navy assets, such as passive ship sonar systems or sonobuoys, already participating in the activity. As the comment notes, the Navy is in the process of assessing Lookout effectiveness at detecting marine mammals during Navy exercises. Until the results of the Navy’s Lookout effectiveness study are available, the Navy must rely on the best available science to determine detection probabilities of marine mammals by Navy Lookouts, which is represented in the Navy’s acoustic effects model and post-modeling analysis. Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities. Results from the Lookout effectiveness study will be reviewed and any recommendations for improving Lookout effectiveness will be considered at that time.</p> <p>In the interim, please note that the Navy’s visual mitigation has been</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>it plans to monitor. The Navy did propose to supplement visual monitoring using passive acoustics during activities that generate impulsive sounds (i.e., primarily explosives) but not during the use of low-, mid-, and high-frequency active sonar. The Navy uses visual, passive acoustic, and active acoustic monitoring during Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar activities to augment its mitigation efforts over large areas. Therefore, it is not clear why the Navy did not propose to use those same monitoring methods as part of its mitigation measures for the other activities described in its DEIS. To ensure effective mitigation and monitoring, the Commission recommends that the Navy use passive and active acoustics, whenever practicable, to supplement visual monitoring during the implementation of its mitigation measures for all activities that could cause PTS, injury, or mortality beyond those explosive activities for which passive acoustics already was proposed.</p>	<p>demonstrated to be effective over the 8 years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website. Regarding the comment that the Navy should supplement its visual monitoring efforts with other measures, please see the discussion in Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations). Regarding mitigation measures for SURTASS LFA, the active sonar system used by SURTASS LFA is built into the system's vertical array and can only be employed in this fashion from a slow-moving platform. It is not possible to employ this system on the types of platforms analyzed in the NWTT EIS/OEIS because it cannot be installed on other ship classes.</p>
<p>MMC-12</p>	<ul style="list-style-type: none"> • use a second clearance time category of 60 minutes for deep-diving species (i.e., beaked whales and sperm whales) if the animal has not been observed exiting the mitigation zone; <p>The Navy has proposed to cease acoustic activities (i.e., active sonar transmissions, Bin MF1) when a marine mammal is detected within the mitigation zone. This raises the issue of when those activities should resume. According to the DEIS, those acoustic activities would resume when (1) the animal has been observed exiting the mitigation zone, (2) the animal has been thought to have exited the mitigation zone based on its course and speed, (3) the mitigation zone has been clear from any additional sightings for a period of 30 minutes, (4) the ship has transited more than 1.8 km beyond the location of the last sighting, or (5) the ship concludes that dolphins are deliberately closing in on the ship to ride the ship's bow wave (and there are no other marine mammal sightings within the mitigation zone). The Commission questions some of those requirements when the position of the marine mammal is unknown. The key consideration is the position of the marine mammal relative to the sound source, which is best estimated as a function of the marine mammal's position when first sighted and the speed and heading of both the vessel and the marine mammal. If the vessel and marine mammal are not moving in the same direction, then the marine mammal may leave the mitigation zone relatively quickly. However, if they are moving in the same direction, then the marine mammal may remain within the mitigation zone for a prolonged period. Unless the marine mammal is resighted leaving or already outside the mitigation zone, the Navy should not resume its activity until it has had a reasonable chance of verifying that it can do so without further impacting the marine mammal. The delay should take into account that (1) a marine mammal may remain underwater where it is not visible, (2) it may change its heading and speed in response to a vessel or sound source, and (3) visual observation alone may not be sufficient to determine a marine mammal's position relative to a vessel or sound source after the initial sighting, unless the marine mammal surfaces again and is observed.</p>	<p>As described in the Final EIS/OEIS in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), a 30 min. wait period more than covers the average dive times of most marine mammal species but may not be sufficient for some deep-diving marine mammal species. Note also that the analysis in Section 3.4.3.2.1 (Predicted Impacts from Sonar and Other Active Acoustic Sources) and in Section 3.4.3.2.2 (Impacts from Explosives) shows that injury to deep-diving marine mammals (e.g., sperm whales and beaked whales) are not expected to occur. Furthermore, as detailed in Section 5.3.2.1.1.1 (Low-Frequency and Hull-Mounted Mid-Frequency Active Sonar) any wait period greater than 30 min. would result in an unacceptable operational impact on readiness.</p> <p>The Navy agrees that implementation of the mitigation begins with detection of a marine mammal. The Navy, in consultation with NMFS, developed a set of conditions for recommencing an activity as detailed in the EIS/OEIS Section 5.3.2.1.1.1 (Low-Frequency and Hull Mounted Mid-Frequency Active Sonar) that are essentially as provided in the comment. In developing these conditions, the Navy was fully aware that unless the marine mammal is detected again, there are a number of possible ways it could remain in the vicinity of an activity. The Navy took into account the possibility that a marine mammal could possibly remain underwater where it is not visible or that it could change its direction of travel or could possibly change its speed. The Navy therefore determined the mitigation measures presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) based upon on two principles: (1) mitigations are reasonably effective at reducing potential impacts on the resource; and (2) from an operational perspective, the mitigations must be practicable and</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>The dive time of a sighted marine mammal is a central consideration whenever mitigation measures depend on visual observation. For some medium-sized and large cetaceans, the proposed 30-minute pause may be inadequate, sometimes markedly so. Beaked and sperm whales, in particular, can remain submerged for periods far exceeding 30 minutes. Blainville’s and Cuvier’s beaked whales dive to considerable depths (> 1,400 m) and can remain submerged for more than 80 minutes (Baird et al. 2008). The grand mean dive duration for those species of beaked whales during foraging dives is approximately 60 minutes (51.3 and 64.5 minutes for Blainville’s and Cuvier’s beaked whales, respectively; Baird pers. comm.). Sperm whales also dive to great depths and can remain submerged for up to 55 minutes (Drouot et al. 2004), with a grand mean dive time of approximately 45 minutes (Watwood et al. 2006). If they continue foraging in the same area as a stationary source and that source is turned on after only 30 minutes, then beaked whales and sperm whales could be exposed to sound levels sufficient to cause Level A harassment.</p> <p>In addition, lookouts may not detect marine mammals each time they return to the surface, especially cryptic species such as beaked whales, which are difficult to detect even under ideal conditions. Barlow (1999) found that “[a]ccounting for both submerged animals and animals that are otherwise missed by the observers in excellent survey conditions, only 23 percent of Cuvier’s beaked whales and 45 percent of Mesoplodon beaked whales are estimated to be seen on ship surveys if they are located directly on the survey trackline.” Therefore, after a shutdown, the Commission recommends that the Navy use a second clearance time category of 60 minutes for deep-diving species (i.e., beaked whales and sperm whales) if the animal has not been observed exiting the mitigation zone.</p>	<p>executable while not compromising safety and readiness. Through extensive discussion, and based on the best available science and monitoring training and testing over the course of 9 years, NMFS and Navy have identified mitigation measures that are practicable and reasonably effective.</p> <p>The Navy was aware of the diving behaviors of marine mammals and integrated the data in Watwood and Buonantony (2012) into the modeling and the development of mitigation measures. This issue was also discussed in the EIS/OEIS in Section 5.3.1.2.5.1 (Detection Probabilities of Marine Mammals in the Study Area) and in Section 5.3.2.1.1.1 (Low-Frequency and Hull-Mounted Mid-Frequency Active Sonar). As described in the EIS/OEIS in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), a 30-minute wait period more than covers the average dive times of most marine mammal species but may not be sufficient for some deep-diving marine mammals. The intention of the mitigation is to reduce the potential for injury to marine mammals. As presented in Section 3.4.3.2.1.1 (Range to Effects), for mid-frequency cetaceans such as deep diving sperm whales and beaked whales, the PTS (injury; Level A harassment) range from even the SQS-53C sonar is only approximately 10 meters, and therefore all stationary sources, which are all much less powerful, would require a sperm whale or beaked whale to be much closer to the source. As described in Section 3.4.3.1.15 (Marine Mammal Avoidance of Sound Exposures) there are many activities for which it is unlikely a marine mammal will remain close enough to those activities for a Level A exposure to occur. The Navy does not expect that mitigation will eliminate all potential effects, but has proposed measures that are effective, practical, and safe to implement, and that do not impact the readiness objective underlying the purpose for the activity in the first place.</p> <p>The Navy is aware that Lookouts may not see a marine mammal each time it surfaces. However, note that as presented in Section 3.4.3.1.16 (Implementing Mitigation to Reduce Sound Exposures), line transect marine mammal survey protocols and the detection opportunities possible for Navy Lookouts on ships and other platforms involved in a training scenario are not directly comparable. Additionally, a mitigation based on identification of “deep-diving species” would be impracticable in any case given that species identification is difficult even for experts. For these reasons, Navy will continue to use the mitigation measures developed in coordination with NMFS, and will be based upon on two</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
		<p>principles as described above and in Section 5.2.2 (Overview of Mitigation Approach). Any wait period greater than 30 minutes would result in an unacceptable operational impact on readiness.</p>
<p>MMC-13</p>	<p>• (1) provide the range to effects for all impact criteria (i.e., behavioral response, TTS, PTS, onset slight lung injury, onset slight gastrointestinal injury, and onset mortality) for underwater detonations that involve time-delay firing devices based on sound propagation in the shallow water nearshore environment for the relevant marine mammal functional hearing groups (i.e., mid- and high-frequency cetaceans and pinnipeds) and (2) use those data coupled with the maximum charge weight and average swim speed of the fastest group of marine mammals as the basis for the mitigation zone for underwater detonations that involve time-delay firing devices—if the Navy chooses not to adjust its mitigation zones, then it should estimate the numbers of takes for Level A harassment and mortality based on the possibility that marine mammals could be present in the mitigation zone when the explosives detonate and on updated, more realistic swim speeds, which should be incorporated into its LOA application;</p> <p>For underwater detonations that involve time-delay firing devices, the Navy proposed to use a 640-m mitigation zone. The Navy’s mitigation measures for underwater detonations involving time-delay firing devices at other ranges or study areas have been based on the explosive weight of the charge, a time delay to detonation of 10 minutes, an average swim speed for dolphins of 3 knots, and an added buffer to account for marine mammals that may be transiting at speeds faster than the average. The Navy mentioned none of those factors in the DEIS. Rather, the Navy stated that only mid-frequency cetaceans and sea turtles are expected to occur in the area where the activity would occur (i.e., primarily close to shore and in shallow water) and the size of the zone was based on larger range to effect for sea turtles (page 5-36 in the DEIS). As previously noted, the Navy did not provide the ranges to the various thresholds for activities that occur in the inland waters in the current DEIS, limiting the Commission’s and public’s ability to evaluate the proposed 640-m mitigation zone. Further, it does not appear that the Navy included pinnipeds or high-frequency cetaceans when assessing the effectiveness of the mitigation zone. The Commission is unsure why pinnipeds and high-frequency cetaceans would not occur close to shore or in shallow water, especially in inland waters.</p> <p>The Navy should have determined the mitigation zone for underwater detonations that involve time-delay firing devices based on sound propagation in the shallow-water nearshore environment for the relevant marine mammal functional hearing groups, the maximum charge weight, maximum time delay that would be used (e.g., 10 minutes), and the average swim speed of the fastest group of marine mammals expected to occur in the area (e.g., mid-frequency¹³ and high-frequency cetaceans and pinnipeds). Until such time that those data and analyses are available, the Commission and the public cannot comment on the appropriateness or effectiveness of the mitigation measure.</p>	<p>Thank you for the comment regarding the apparent absence of high-frequency cetaceans and pinnipeds in the discussion with regard to Section 5.3.2.1.2.3 (Mine Countermeasure and Neutralization Activities Using Positive Control Firing Devices). The text has been revised for the Final EIS/OEIS to provide more clarity in this regard. The Navy considered all marine mammals and applicable environmental conditions in the analysis and the development of mitigation. As shown on Table 2.8-1 and described in Section 5.3.1.2.2.4 (Mine Neutralization Activities Using Diver-Placed Time-Delay Firing Devices Training), the largest charge weight (NEW) proposed for use in the NWTT Study Area during MIW training is a 2.5 lb. charge. As shown in Table 3.4-20, the average approximate farthest range to injury (PTS) for the most sensitive marine mammal species is only 140 m (153 yd.) for a 2.6 lb. charge. As shown in Table 5.3-2 for “Mine Countermeasure and Neutralization Activities (Time-delay and positive control),” those ranges reflect the average and maximum possible ranges to effects for the most sensitive marine species (sea turtles) based on the inland shallow water location in NWTT where the activity would occur. Please note for all marine mammal functional hearing groups, underwater detonations that involve time-delay firing devices would have shorter ranges than those shown in Table 3.4-20 and Table 5.3-2. In shallow water with loss of energy into the air and into the bottom and using a 2.5 lb. charge, the ranges would be even shorter than those shown on Table 3.4-20 for a 2.6 lb. charge in deep water offshore areas. Also note that as presented on page 3.4-191 of the EIS/OEIS, the range to effects presented in Table 3.4-20 and Table 5.3-2 conservatively assume an explosive impulse 1 second in duration when in fact, most impulses are much less than 1 second and therefore contain less energy than what is being used to produce the estimated ranges shown. Given the material presented in the EIS/OEIS, the discussion of the conservative assumptions (a 1-second duration pulse, a zone extending far beyond the injury zone of any species, and the difference between the average 140 m PTS zone and the 640 m mitigation zone), it is clear why it was not necessary to provide an additional table of ranges to effect for marine mammals in inland waters. As stated in page 5-35 of the EIS/OEIS, all other hearing groups had shorter ranges to onset of injury, so the largest mitigation zone will provide an even greater</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>Therefore, the Commission recommends that the Navy (1) provide the range to effects for all impact criteria (i.e., behavioral response, TTS, PTS, onset slight lung injury, onset slight gastrointestinal injury, and onset mortality) for underwater detonations that involve time-delay firing devices based on sound propagation in the shallow water nearshore environment for the relevant marine mammal functional hearing groups (i.e., mid- and high-frequency cetaceans and pinnipeds) and (2) use those data coupled with the maximum charge weight and average swim speed of the fastest group of marine mammals as the basis for the mitigation zone for underwater detonations that involve time-delay firing devices—if the Navy chooses not to adjust its mitigation zones, then it should estimate the numbers of takes for Level A harassment and mortality based on the possibility that marine mammals could be present in the mitigation zone when the explosives detonate and on updated, more realistic swim speeds, which should be incorporated into its LOA application.</p> <p>¹³ The Commission continues to believe that the use of 3 knots as an average swim speed is inaccurate and inadequate for mid-frequency cetaceans (see Au and Perryman 1982, Lockyer and Morris 1987, Mate et al. 1995, Ridoux et al. 1997, Rohr et al. 1998, Rohr and Fish 2004).</p>	<p>protection for all other species and hearing groups which have a shorter range to effect. As noted by the Navy in previous responses, the mitigation zone takes into account a portion of the distance that a marine mammal could potentially travel during the time delay based on a reasonable assumption of marine mammal swim speed. A swim speed of 3 knots (101 yd./min.) is a reasonable bounding for consideration of a nominal average swim speed for a marine mammal and was determined in consultation with NMFS scientists. Given it is contrary to the overall effort to provide the most realistic estimate of impacts possible, the Navy disagrees with the suggestion by MMC to eliminate the step in the analysis that reduced raw number counts from the preliminary modeling by accounting for likely animal behavior and the reductions possible by the implementation of mitigation.</p>
<p>MMC-14</p>	<ul style="list-style-type: none"> • (1) use the total numbers of model-estimated Level A harassment and mortality takes rather than reducing the estimated numbers of Level A harassment and mortality takes based on the Navy’s proposed post-model analysis and (2) incorporate those take estimates into its LOA application; <p>Request for Level A harassment and mortality takes</p> <p>The Navy proposed an additional post-model analysis of acoustic and explosive effects to include (1) animal avoidance of repeated sound exposures, (2) sensitive species avoidance of areas of activity before a sound source or explosive is used, and (3) effective implementation of mitigation measures. That analysis effectively reduced the model-estimated numbers of Level A harassment (i.e., PTS and injury) and mortality takes.</p> <p>The Navy assumed that marine mammals likely would avoid repeated high level exposures to a sound source that could result in injuries (i.e., PTS). It therefore adjusted its estimated numbers of takes to account for marine mammals swimming away from a sonar or other active source and away from multiple explosions to avoid repeated high-level sound exposures. The Navy also assumed that harbor porpoises and beaked whales would avoid certain training and testing activity areas because of high levels of vessel or aircraft traffic before those activities. For those types of activities, the Navy appears to have reduced the model-estimated takes from Level A harassment (i.e., PTS) to Level B harassment (i.e., TTS) during use of sonar and other active acoustic sources and from mortality to Level A harassment (i.e., injury) during use of explosive sources. The Commission recognizes that, depending on conditions, marine mammals may avoid areas of excessive sound or activity. Indeed, one of the concerns regarding sound-related disturbance is that it causes marine mammals to abandon important habitat on a</p>	<p>The Navy believes that the post-modeling analysis is an effective method for quantifying the implementation of mitigation measures to reduce impacts on marine mammals, and that the resulting exposure estimates are, nevertheless, a conservative estimate of impacts on marine mammals from the Navy’s proposed activities.</p> <p>See Section 3.4.3.1.15 (Marine Mammal Avoidance of Sound Exposures) as presented in the EIS/OEIS for the discussion of the science regarding the avoidance of sound sources by marine mammals. In addition, the technical report, Post-Model Quantitative Analysis of Animal Avoidance Behavior and Mitigation Effectiveness for Northwest Training and Testing, goes into detail on how the avoidance and mitigation factors were used and provides scientific support from peer-reviewed research. This technical report is available on the NWTT website at: http://nwtteis.com/DocumentsandReferences/NWTTDocuments/SupportingTechnicalDocuments.aspx The Navy analysis does not indicate nor is it expected that marine mammals would abandon important habitat on a long-term or even permanent basis. As presented in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), the information gathered to date includes research, and monitoring before, during, and after Navy-wide training and testing events since 2006. This information strongly indicates that it is unlikely there will be impacts to populations of marine mammals (such as whales, dolphins, and porpoise) having any long-term consequences</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>long-term or even permanent basis. That being said, the Commission knows of no scientifically established basis for predicting the extent to which marine mammals will abandon their habitat based on the presence of vessels or aircraft. That would be essential information for adjusting the estimated numbers of takes.</p> <p>As an example, the Navy indicated that beaked whales that were model-estimated to be within range of the mortality threshold were assumed to avoid the activity for missile exercises (air-to-surface; see Table 3.4-21). But in Chapter 5 of the DEIS, the Navy indicated that missile exercises involve the aircraft firing munitions at a target location typically up to 27 km away (and infrequently at ranges up to 138 km away). When an aircraft is conducting the exercise, it can travel close to the intended impact area so that it can be visually observed. However, the Navy indicated that there is a chance that animals could enter the impact area after the visual observations have been completed and the activity has commenced. The Commission understands that to mean the aircraft clears the zone around the target and then travels to its firing location to commence the activity. Therefore, the Commission is unsure why the Navy would reduce any mortality or Level A harassment take estimates based on mitigation measures that are followed by a time lag before the activities actually commence, which could allow for the animals to re-enter the mitigation zone around the target.</p> <p>The Navy also indicated that its post-model analysis considered the potential for highly effective mitigation to prevent Level A harassment from exposure to sonar and other active acoustic sources and Level A harassment and mortality from exposure to explosive sources. Clearly, the purpose of mitigation measures is to reduce the number and severity of takes. However, the effectiveness of the Navy's mitigation measures has not been demonstrated and remains uncertain. This is an issue that the Commission has raised many times in the past, and the Navy has recognized the need to assess the effectiveness of its mitigation measures in its Integrated Comprehensive Monitoring Program and in the current DEIS, which states that although the use of lookouts is expected to increase the likelihood that marine species would be detected at the water's surface, it is unlikely that using those lookouts would help avoid impacts to all species because of the inherent limitations of visual monitoring.</p> <p>According to data in the monitoring reports mentioned previously (Department of the Navy 2010a, 2012), the effectiveness of the lookouts has yet to be determined. However, the Navy proposed to adjust its take estimates based on both mitigation effectiveness scores and $g(0)$—the probability that an animal on a vessel's or aircraft's track line will be detected. According to its proposed approach, for each species the Navy would multiply a mitigation effectiveness score and a $g(0)$ to estimate the percentage of the subject species that would be observed by lookouts and for which mitigation would be implemented, thus reducing the estimated numbers of marine mammal takes for Level A harassment and mortality (explosive sources only). The Navy would reduce the estimated numbers of Level A harassment (i.e., PTS) and mortality</p>	<p>as a result of the proposed continuation of training and testing in the ocean areas historically used by the Navy, including the NWTT Study Area.</p> <p>With regard to and using the example missile exercise in the comment, note that the adjustments to the raw modeling predictions reduces some (not all) predicted mortality and PTS exposures based on the potential for marine mammals to be detected and for mitigation to be implemented. Not taking into account some possible reduction in mortality and Level A exposures would provide a less realistic, overestimation of possible exposures, as if there were no mitigation measures implemented. The period of time between clearing the impact area of any non-participants or marine mammals and weapons release is on the order of minutes, making it highly unlikely that a marine mammal would enter the mitigation zone. It is usually the case that there are other observers when an event such as a missile exercise takes place, to assess the accuracy of the weapon. Although additional observers present during Navy training and testing activities can and have detected marine mammals resulting in the implementation of mitigation, the presence of these additional participants was not factored into the mitigation adjustments. This is similar to the comment's example regarding a torpedo (explosive) test. Please see Appendix A for a revised description of this event regarding the manner with which this test is conducted. These additional details should provide the information necessary to understand the sequence of the events leading up to the test.</p> <p>The assignment of mitigation effectiveness scores and the appropriateness of consideration of sightability using detection probability, $g(0)$, when assessing the mitigation in the quantitative analysis of acoustic impacts is discussed in the NWTT EIS/OEIS Section 3.4.3.1.16 (Implementing Mitigation to Reduce Sound Exposures). Additionally, the activity category, mitigation zone size, and number of Lookouts are provided in the NWTT EIS/OEIS in Section 5 in Tables 5.3-2 and 5.4-1. With regard to the actual effectiveness of the mitigation, Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) summarizes information on visual detection leading to the implementation of mitigation in the annual exercise reports provided to NMFS and briefed annually to NMFS and the Marine Mammal Commission. These annual exercise reports have been made available and can be found at http://www.navymarinespeciesmonitoring.us/ in addition to the</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>takes for that species to Level B (i.e., TTS) or Level A harassment (i.e., injury) takes, respectively.</p> <p>To implement that approach, the Navy assigned mitigation effectiveness scores of—</p> <p>1 if the entire mitigation zone can be observed visually on a continuous basis based on the surveillance platform(s), number of lookouts, and size of the range to effects zone;</p> <p>0.5 if (1) over half of the mitigation zone can be observed visually on a continuous basis, (2) there is one or more of the scenarios within the activity for which the mitigation zone cannot be observed visually on a continuous basis (but the range to effects zone can be observed visually for the majority of the scenarios), or (3) the mitigation zone can be continuously observed, but the activity may occur at night; or</p> <p>N/A if (1) less than half of the mitigation zone can be observed visually on a continuous basis or (2) the mitigation zone cannot be observed visually on a continuous basis during most of the scenarios within the activity due to the type of surveillance platform(s), number of lookouts, and size of the mitigation zone.</p> <p>The difficulty with this approach is in determining the appropriate adjustment factors. Again, the information needed to judge effectiveness has not been made available. In addition, the Navy has not provided the criteria (i.e., the numbers and types of surveillance platforms, numbers of lookouts, and sizes of the respective zones) needed to elicit the three mitigation effectiveness scores. Moreover, the coverage afforded by the mitigation measures is not adequate to ensure that those measures will be effective. That is, measures of effort (i.e., numbers and types of surveillance platforms, numbers of lookouts, and sizes of mitigation zones) are not necessarily measures of, or even linked to, effectiveness. The Navy has not yet demonstrated that such measures of effort are synonymous with effectiveness nor has it demonstrated the effectiveness of the visual monitoring measures, as discussed previously. The Navy further reinforced that fact in its DEIS when stating the Navy believes that it is improper to use the proof-of-concept data to draw any conclusions on the effectiveness of Navy lookouts. Therefore, it is unclear what basis the Navy would have to assign the mitigation effectiveness scores, as the use of those scores to reduce the numbers of takes is unsubstantiated.</p> <p>The information that the Navy provided in Chapter 5 of the DEIS regarding the effectiveness of various mitigation measures does not necessarily comport with its determination of mitigation effectiveness scores. For example, the Navy indicated that the mitigation zone for torpedo testing exercises is 1.9 km. However, the Navy stated it is highly unlikely that anything but a whale blow or large pod of dolphins will be seen at distances closer to 1.9 km near the perimeter of the mitigation zone. The Commission is unclear how the Navy would implement a shut down or delay for odontocetes that are not in a large group or for pinnipeds. Nevertheless, the Navy concluded that the measure is likely effective at reducing the risk of injury to marine mammals that may be observed from the smaller distances within the mitigation zone and assigned the highest</p>	<p>NMFS Office of Protected Resources website. There have been in excess of 80 reports submitted to NMFS in this regard.</p> <p>With regard to the comment on the terms “range to effects zone” and “mitigation zone,” these terms are used appropriately in the discussion of mitigation in the Navy’s Request for Letter of Authorizations under the MMPA submitted to NMFS (see for example 77 FR 60679) and in the EIS/OEIS Section 5.3.2 (Mitigation Zone Procedural Measures). In summary, the range to effects zone is the distance over which the specific effects would be expected, and the mitigation zone is the distance that the Lookout will be implementing mitigation within and is developed based on the range to effects distance for injury (i.e., PTS).</p> <p>As explained in the EIS/OEIS in Section 3.4.3.2.1.1 (Range to Effects), there is no reason to show a PTS range for more than 1 ping because of the short distances involved, even in the case of the most powerful hull mounted source; the ship moves beyond the PTS zone for each successive ping and there is no difference in successive pings. Given all the science detailed in the EIS/OEIS (see for example Section 3.4.3.2.1.2, Avoidance Behavior and Mitigation Measures as Applied to Sonar and Other Active Acoustic Sources) indicating that marine mammals will behaviorally avoid high levels of sound, the assumption that a marine mammal would not remain alongside a pinging vessel is a simple but reasonable assumption. As presented in the EIS/OEIS, while 10 knots was the speed used in modeling the ship’s speed of advance, a ship engaged in anti-submarine warfare training or testing would be moving at between 10 and 15 knots. For the majority of marine mammals, the distance to a PTS exposure is within 10 m of the sonar dome and that distance is not influenced significantly by differing ocean environments (i.e., no difference between Behm Canal and the open ocean) given that the calculated range to a PTS is almost entirely a function involving the physics of spreading loss at those short distances.</p> <p>The comment’s assumption that the distances provided in Tables 3.4-10 and 3.4-11 do not apply to NWTT is incorrect. With regard to the dipping sonar example, because a helicopter must hover over a location and lower the sonar into the water to the appropriate depth before pinging, it is very unlikely a marine mammal would remain in the immediate area of the source (see Table 3.4-10; <2 meters for most marine mammals and within 20 m for all others) required for a PTS to occur.</p> <p>Regarding the use of g(0) as an approximation for the detectability of</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>effectiveness score of 1 for the mortality zone and 0.5 for the injury zone (Table 3.4-22). Those effectiveness scores again seem to be measures of effort rather than of true effectiveness.</p> <p>In addition, the Navy appears to be inconsistent in its use of the terms “range to effects zone” and “mitigation zone,” which are not the same (see Table 5.3-2 of the DEIS). More importantly, some of the mitigation zones may be smaller than the estimated range to effects zones. For example, the Navy proposed a mitigation zone of 183 m after a 10 dB reduction in power for its most powerful active acoustic sources (e.g., Bin MF1) and assumed that marine mammals would leave the area near the sound source after the first 3–4 pings. However, the Navy did not present data on the range to onset PTS for more than 1 ping and only provided data for “representative ocean acoustic environments”, which may or may not be representative of inland waters and Western Behm Canal. It also is unclear how the Navy evaluated sources that have a typical duty cycle of several pings per minute (i.e., dipping sonar), as the range to onset PTS for those sources appear to be based on 1 ping as well (Table 5.3-2). Without the relevant information, mitigation based on those zones cannot be evaluated fully or deemed effective and assigning mitigation effectiveness scores is inappropriate.</p> <p>The Navy used numerous references to estimate species-specific g(0)s (Table 5.3-1). Those sources were based on both vessel- and aircraft-based scientific surveys of marine mammals. It also indicated that various factors are involved in estimating g(0), including sightability and detectability of the animal (e.g., species-specific behavior and appearance, school size, blow characteristics, dive characteristics, and dive interval), viewing conditions (e.g., sea state, wind speed, wind direction, sea swell, and glare), the observer’s ability to detect animals (e.g., experience, fatigue, and concentration), and platform characteristics (e.g., pitch, roll, yaw, speed, and height above water). In the DEIS, the Navy noted that due to the various detection probabilities, levels of experience, and dependence on sighting conditions, lookouts would not always be effective at avoiding impacts on all species. Yet it based its g(0) estimates on data from seasoned researchers conducting scientific surveys, not on data from Navy lookouts whose effectiveness as observers has yet to be determined. The Commission recommended earlier in this letter that the Navy supplement its mitigation and monitoring measures because the observer effectiveness study has yet to be completed or reviewed. It therefore would be inappropriate for the Navy to reduce the numbers of takes based on the proposed post-analysis approach because, as the Navy has described its approach, it does not address the issue of observer effectiveness in developing mitigation effectiveness scores or g(0) values. Further, the Navy believes that it also would be improper to use the proof-of-concept data to draw any conclusions on the effectiveness of Navy lookouts. Accordingly, applicable data simply do not exist at the current time to fulfill the Navy’s post-analysis objective. Based on these concerns, the Commission recommends that the Navy (1) use the total numbers of model-</p>	<p>marine mammals, in the EIS/OEIS Section 3.4.3.1.16 (Implementing Mitigation to Reduce Sound Exposures), the Navy goes into great detail pointing out the difference between line transect surveys (“the seasoned researchers” referenced in the comment) and Navy lookouts; specifically see page 3.4-122 through 3.4-125. Results from the Lookout effectiveness study will be reviewed and any recommendations for improving Lookout effectiveness will be considered at that time.</p> <p>In the interim, please note that the Navy’s visual mitigation has been demonstrated to be effective over the 8 years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website. The Navy disagrees with the suggestion by MMC to eliminate the step in the analysis that reduces raw number counts from the preliminary modeling by accounting for likely animal behavior and the reductions possible by the implementation of mitigation since it is contrary to the overall effort to provide the most realistic estimate of impacts possible.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>estimated Level A harassment and mortality takes rather than reducing the estimated numbers of Level A harassment and mortality takes based on the Navy’s proposed post-model analysis and (2) incorporate those take estimates into its LOA application.</p>	
<p>MMC-15</p>	<p>• revise its DEIS to (1) include in its cumulative impacts analysis all potential risk factors, including those that are deemed individually minor but could be significant when considered collectively and (2) provide sufficient details to allow the reader to evaluate the utility of the Navy’s conceptual framework for its cumulative impacts analysis;</p> <p>Cumulative impacts</p> <p>The Navy’s analysis of cumulative impacts on marine mammals extends the evaluations of individual and multiple sound-producing activities under the various alternatives provided in Chapter 3. The Navy’s analytical framework is commendable, but its description and use of the framework in the DEIS fall short in several important respects.</p> <p>First, the DEIS did not include the detailed information needed to assess the reliability of the framework. Without that information, the framework is a conceptual model only and the reader does not have sufficient information to judge its practical utility and, therefore, the soundness of the Navy’s decision-making based on that model.</p> <p>Second, the DEIS indicated that the Navy omitted from its overall cumulative impact analysis stressors or activities found to have a negligible impact on an individual species. Doing so runs counter to the idea behind a cumulative impact assessment. CEQ’s regulations for implementing the National Environmental Policy Act point out that “[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR 1508.7). In essence, the approach used in the DEIS does not support a cumulative impacts analysis.</p> <p>To address these fundamental concerns, the Commission recommends that the Navy revise its DEIS to (1) include in its cumulative impacts analysis all potential risk factors, including those that are deemed individually minor but could be significant when considered collectively and (2) provide sufficient details to allow the reader to evaluate the utility of the Navy’s conceptual framework for its cumulative impacts analysis.</p>	<p>Please refer to Appendix G (Biological Resource Methods) for detailed information regarding the conceptual framework. At present there is insufficient science to assess the reliability of the conceptual framework and, additionally, the Navy’s decision-making process does not rely on an output of this conceptual framework. For marine mammals in particular, see Section 3.4.3.1.2 (Analysis Background and Framework), Section 3.4.3.1.9 (Long-Term Consequences to the Individual and the Population), and Section 3.4.4 (Summary of Impacts [Combined Impacts of all Stressors] on Marine Mammals) which provide the basis for Navy’s decision making in regard to these resources. Of most importance in this regard is the Section 3.4.4.1 (Summary of Observations During Navy Activities), which summarizes the empirical data gathered intensively since 2006 indicating there is no direct evidence that routine Navy training and testing spanning decades has negatively impacted marine mammal populations at any Navy Range Complex.</p> <p>Regarding the second issue raised by the comment, as stated in Section 4.2.2 (Identify Appropriate Level of Analysis for Each Resource), in accordance with Council on Environmental Quality guidance (Considering Cumulative Effects under the National Environmental Policy Act, Council on Environmental Quality, January 1997), the cumulative impacts analysis focused on impacts that are “truly meaningful.” This was accomplished by reviewing the direct and indirect impacts that could occur on each resource under each alternative. Key factors considered were the current status and sensitivity of the resource and the intensity, duration, and spatial extent of the impacts of each potential stressor. In general, long-term rather than short-term impacts and widespread rather than localized impacts were considered more likely to contribute to cumulative impacts. Those impacts to a resource that were considered to be negligible were not considered further in the analysis. The level of analysis for each resource was commensurate with the intensity of the impacts identified. For example, stressors that were shown to have no impact on an individual level, such as sound sources above the hearing of any marine mammal, can have no impact at a cumulative level. For those stressors that may have an impact and collectively have a cumulative impact, detailed discussions were presented in</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
		<p>Section 4.4.6 (Marine Mammals). Again, however, Section 3.4.4.1 (Summary of Observations During Navy Activities) that summarizes the empirical data gathered over 8 years where the Navy has been intensively training and testing indicates there has been no identifiable cumulative impact on marine mammals as a result of ongoing routine Navy training and testing.</p>
<p>MMC-16</p>	<p>• (1) describe what it used as the upper limit of behavioral response function1 (BRF1) for low-frequency cetaceans and the upper limits of BRF2 for both mid- and high-frequency cetaceans, including if it assumed a 1-sec ping for all sources and (2) if the upper limits of the BRFs were based on weighted thresholds, use the unweighted or M-weighted thresholds of 195 dB re 1 $\mu\text{Pa}^2\text{-sec}$ for low- and mid-frequency cetaceans and 176 dB re 1 $\mu\text{Pa}^2\text{-sec}$ for high-frequency cetaceans to revise its behavior take estimates for all marine mammals exposed to acoustic sources;</p> <p>Possible errors in the take tables</p> <p>The Commission observed some possible errors in the take tables provided in the Navy's DEIS, LOA application, and NWTT technical report that includes the raw modeled data (NWTT-TR; Department of the Navy 2014a). For example, in the NWTT-TR, the model-estimated takes for TTS exceed those for behavior for both Kogia spp. (52.67 and 13.83, respectively) and Dall's porpoises (2429.77 and 758.91, respectively) exposed to non-impulsive sources (acoustic sources) during training events under Alternative 1¹⁴ (Table 14 in Department of the Navy 2014a), but not for harbor porpoises (768.59 and 5920.38, respectively). The Commission is unsure how the takes would be so much greater for the TTS threshold when it is higher than the behavior threshold.</p> <p>One possible explanation is that the Navy used the weighted threshold of 152 dB re 1 $\mu\text{Pa}^2\text{-sec}$ rather than the unweighted threshold of 176 dB re 1 $\mu\text{Pa}^2\text{-sec}$¹⁵ as the upper limit of BRF2¹⁶ (Finneran and Jenkins 2012) for high-frequency cetaceans other than harbor porpoises. If that is the case, then the estimated numbers of takes for behavior would have been underestimated. It would not be appropriate for the Navy to use a weighted threshold based on a Type II weighting function when the Navy indicated that it applied the Type I weighting functions (as normally are used in concert with either unweighted or M-weighted thresholds) to the estimated exposures—this logic would apply to mid- and low-frequency cetaceans as well. The Navy did not specify what it used as the upper limit of the BRF2, but in previous environmental compliance documents for its Tactical Training Theater Assessment and Planning Program (TAP)¹⁷, the Commission believes that the Navy assumed the pings emitted from the sound sources were 1 sec in length, thus the sound pressure level and sound exposure level were equivalent. That meant that the upper limit of BRF2 as used in previous TAP documents was 195 dB re 1 μPa, which equated to 195 dB re 1 $\mu\text{Pa}^2\text{-sec}$ and the delineation of behavior and TTS takes occurred at 195. The assumption of a 1-sec ping</p>	<p>Please see the EIS/OEIS Section 3.4.3.1.10 (Thresholds and Criteria for Predicting Acoustic and Explosive Impacts on Marine Mammals) and the referenced Finneran and Jenkins (2012) for details describing how the explanation of the criteria and thresholds used in the analysis were derived. Hearing impairment such as TTS is based on an SEL threshold and behavior is based on the sound pressure level of the highest ping received. The predicted higher order effect from the acoustic effects model is the potential effect that is reported. Please note that the Navy considers both a predicted TTS and predicted significant behavioral response as Level B for military readiness activities under MMPA.</p> <p>Regarding the raw number exposures presented in the modeling technical report (Navy Marine Species Modeling Team 2013) and difference between the Non-TTS exposures for harbor porpoise when compared to Dall's porpoise and Kogia spp, note that, as presented in Section 3.4.3.1.12.1 (Sonar and Other Active Acoustic Sources), a sound pressure level of 120 dB re 1 μPa is used in this analysis as a threshold for predicting behavioral responses in harbor porpoises whereas for the high-frequency cetaceans like Dall's porpoise and Kogia spp. (see Table 3.4-6), the behavioral response threshold is the received level SPL: BRF2 using Type 1 weighting. Additionally, these species have unique density distributions and dive profiles which can result in very different modeling results.</p> <p>Regarding the confusion about TTS and behavioral takes. Over time, for some events, such as slow moving or stationary sources and stationary animals, PTS and TTS takes increase with multiple pings and increased energy. However, multiple pings would not cause the outer range of the behavioral takes to increase. Therefore, the fixed pool of animals that are taken (PTS + TTS + behavioral) doesn't change but, over time, some TTS become PTS, and some behavioral become TTS. The result of this is that, ultimately, the behavioral takes are reduced and become smaller and smaller, eventually fewer than the number of TTS.</p>

Table I.4-1: Responses to Comments from Federal Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>may be appropriate for some sound sources but likely is not appropriate for all. Therefore, the Commission recommends that the Navy (1) describe what it used as the upper limit of BRF1 for low-frequency cetaceans and the upper limits of BRF2 for both mid- and high-frequency cetaceans, including if it assumed a 1-sec ping for all sources and (2) if the upper limits of the BRFs were based on weighted thresholds, use the unweighted or M-weighted thresholds of 195 dB re 1 $\mu\text{Pa}^2\text{-sec}$ for low- and mid-frequency cetaceans and 176 dB re 1 $\mu\text{Pa}^2\text{-sec}$ for high-frequency cetaceans to revise its behavior take estimates for all marine mammals exposed to acoustic sources.</p> <p>¹⁴ Alternative 1 in the DEIS and NWTT-TR is the Preferred Alternative, as discussed in the LOA application.</p> <p>¹⁵ Based on the Commission's rationale in the criteria and thresholds section of this letter.</p> <p>¹⁶ BRF2 is used for all mid- and high-frequency cetaceans but beaked whales and harbor porpoises; while BRF1 is used for low-frequency cetaceans.</p> <p>¹⁷ The environmental compliance documents under TAP are currently in place, including the final rules and associated letters of authorization under the MMPA that expire in 2015.</p>	
<p>MMC-17</p>	<p>• round its takes, based on those takes in the NWTT technical report tables, to the nearest whole number or zero in all of its take tables in the DEIS and LOA application.</p> <p>The Navy also appears to be rounding all take numbers from the NWTT-TR down in its DEIS and LOA application rather than rounding to the nearest whole number, which the Commission believes was the Navy's policy for species listed under the Marine Mammal Protection Act (MMPA) in its environmental compliance documents for its TAP Program. When determining the population within a modeling area in its NWTT-TR, the Navy indicated the total true population is (1) rounded to 1 if the total true population is equal to or greater than 0.05 but less than 1.0 and (2) rounded to the nearest whole number if the total true population is equal to or greater than 1.0. For example, the model-estimated non-TTS (behavioral) takes for Steller sea lions exposed to non-impulsive sources during training events under Alternative 1 in the NWTT-TR was 398.98 (Table 14 in Department of the Navy 2014a), but was rounded down to 398 in the DEIS (Table 3.4-17) and LOA application (Table 5.2¹⁸). It is unclear why the Navy wouldn't be rounding to the nearest whole number in its DEIS and LOA application. Accordingly, the Commission recommends that the Navy round its takes, based on those takes in the NWTT-TR tables, to the nearest whole number or zero in all of its take tables in the DEIS and LOA application.</p> <p>The Commission appreciates the opportunity to provide comments on the Navy's DEIS. Please contact me if you have questions concerning the Commission's recommendations or rationale.</p> <p>¹⁸ The Commission understands that Table 5-2 includes takes for exposure to both non-impulsive and impulsive sources, but the model-estimated takes for non-TTS (behavior) and TTS were 0 and 0.05 which would equal 0.</p>	<p>The final modeling numbers presented in the EIS/OEIS have been rounded down at the sub-total stage so that final totals presented will sum correctly. This is especially an issue with modeling results for species having multiple stocks as presented in Section 3.4.1.14.1 (Marine Species Density Data) that must have the predicted exposures for a given area and species (such as harbor porpoise offshore) where the Navy prorated the total modeled exposures in order to estimate acoustic exposures to the various stocks. So that the numbers would sum consistently, the standard rounding convention could not be used; the numbers will differ between the total and different levels of subtotal. The options were therefore to always round up or to always round down. As detailed in Section 3.4.3.1.14.4 (Model Assumptions and Limitations), given the consistent use of factors erring on the side of being mathematically conservative and overestimating given various uncertainties, it was considered prudent to round down subtotals at the final stage of presentation.</p>

Table I.4-2 contains comments on the NWTT Draft EIS/OEIS from American Indian Tribes, nations, and tribal organizations.

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations

Commenter	Comment	Navy Response
FEDERALLY RECOGNIZED AMERICAN INDIAN TRIBES/NATIONS		
Elk Valley Rancheria	<p>Thank you for your letter dated January 14, 2014 regarding the above-referenced matter. The Elk Valley Rancheria, California, a federally recognized Indian tribe (the "Tribe"), does not have any comments regarding the Northwest Training and Test DEIS at this time.</p> <p>Please feel free to include the Tribe on a list of interested parties for future notices.</p>	<p>The Commanding Officer of Naval Air Station Whidbey Island invited the Elk Valley Rancheria Tribe to consider initiation of government-to-government consultation in January 2014. The Navy appreciates the response from the Elk Valley Rancheria Tribe and the time taken to review the NWTT Draft EIS/OEIS. The Navy will continue to provide future notices to the Elk Valley Rancheria Tribe regarding this project.</p>
Port Gamble S'Klallam Tribe (PGST) -01	<p>I. The Tribe is Concerned that Increased naval Training and Testing Exercises in Puget Sound Will Infringe on the Exercise of Treaty Fishing Rights.</p> <p>The Tribe is concerned that the Navy's proposed increase in the level of training and testing exercises to be conducted in Puget Sound and other areas will have detrimental impacts on the exercise of treaty fishing rights that are not disclosed in the Draft Environmental Impact Statement (DEIS), and requests government-to-government consultation to resolve these substantive concerns. The Tribe is also troubled by the Navy's continued failure to understand and fairly assess the effects of its activities on Tribes and their treaty-protected right to fish in its NEPA documents. Consequently, the Tribe asks the Navy to revisit its analysis on the effects of its training and testing exercises in the Northwest on "Native American and Alaska Native Traditional Resources" and cultural resources¹ in the DEIS, and properly disclose the individual and cumulative effects of naval activity in Puget Sound on the Tribe.</p> <p><small>1 PGST comments regarding cultural resources to be submitted separately by the Tribe's anthropologist, Josh Wisniewski, PhD.</small></p>	<p>Thank you for the comment letter. The Commanding Officer of Naval Base Kitsap invited both the Jamestown S'Klallam Tribe and the Port Gamble S'Klallam Tribe to consider initiation of government-to-government consultation in letters dated January 17, 2014. The Navy appreciates the initiation of government-to-government consultation on this proposed action and remains committed to fulfilling its government-to-government consultation responsibilities in accordance with Navy policies. The Navy and the Tribes have held government-to-government consultation and staff level consultation meetings with the Port Gamble S'Klallam Tribe and the Jamestown S'Klallam Tribes to discuss details of the proposed action and tribal concerns. Government-to-government consultation for the proposed action is ongoing.</p>
PGST-02	<p>A. Background on the Tribe's Treaty Fisheries</p> <p>The Port Gamble S'Klallam Tribe is the successor in interest to Indian bands and tribes signatory to the 1855 Treaty of Point No Point, 12 Stat. 933.² According to S'Klallam oral traditions, the ancestral village of the Port Gamble people lived in the area of the level, sandy spit on the west shore of the mouth of Port Gamble Bay. The site was named "Teekalet," a S'Klallam word meaning "shining sand in full sunlight." Like other Washington treaty tribes, the S'Klallam people relied on their fisheries for much of their food supply, pre-dating the signing of the treaty by thousands of years.³ The tribes used all available species of fish, including all six species of salmon, herring and other smaller fish, and shellfish.⁴ Tribal customs and traditions reflected the importance of the fisheries by proscribing waste, regulating distribution of the catch, and discouraging water pollution.⁵ An annual First Salmon ceremony expressed the people's appreciation for their harvest.⁶ Trade in fish was a major element of the tribal economy, and the tribes developed a vibrant cultural life based on the wealth of their fisheries.⁷</p>	<p>The Navy appreciates the time taken by the PGST to provide the background on the Tribe's history, culture, and Treaty Fisheries.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>Each summer the S’Klallam dispersed by canoe to camps where they fished and met family and friends.⁸ The Treaty reserved to the S’Klallam the right to take fish at all these “usual and accustomed grounds and stations” (U&A)—an area roughly centered on Port Gamble Bay that includes all of the bay, most of the Hood Canal watersheds, and extends west along the Strait of Juan de Fuca to the Sekiu River, north to the San Juan Islands, east to Whidbey Island, and south through Hood Canal.⁹ Within these areas, the Port Gamble S’Klallam and other tribes that share the U&A are entitled to take half the harvestable fish and shellfish, and retain the right to access private property to fish and to shellfish.¹⁰</p> <p>Today, over 150 years after signing the Treaty of Point No Point, the Tribe retains deep cultural and economic ties to the surrounding waters and to their fisheries. Many tribal members earn all or a portion of their livelihood working as commercial salmon and shellfish fishers. Specifically, based on the Tribe’s licensing and catch reporting data from 2008 to 2012, more than 100 tribal members earned all or a portion of their livelihood working as commercial salmon fishermen, just over 50 tribal members earned all or a portion of their income working as commercial geoduck divers, and over 150 tribal members earned income participating in commercial shellfish harvest including clams, oysters, crab and shrimp. In addition, the Tribe conducts fisheries in its U&A to obtain fish for ceremonial use. Subsistence harvests from the Tribe’s U&A are a key element of the diet of many tribal members. For example, Region 10 of the United States Environmental Protection Agency (EPA) found that the consumption rate for tribal members was approximately 147 pounds of salmon per year, 68 pounds of other fish per year, and 400 pounds of shellfish per year. See Framework for Selecting and Using Tribal Fish and Shellfish Consumption Rates for Risk-Based Decision Making at CERCLA and RCRA Cleanup Sites in Puget Sound and the Strait of Georgia, EPA Region 10, Appendix B, Table B-2 (consumption rates based upon data from the Suquamish Tribe, a neighboring Tribe); see also Fish Consumption Survey of the Suquamish Indian Tribe of the Port Madison Indian Reservation, Puget Sound Region.</p> <p>2 United States v. Washington, 459 F. Supp. 1020, 1039 (W.D. Wash. 1978) (hereinafter Boldt II). 3 See United States v. Washington, 384 F. Supp. 312, 350-53 (W.D. Wash. 1974), aff’d 520 F.2d 676 (9th Cir. 1975), aff’d sub nom. Washington v. Wash. Commercial Passenger Fishing Vessel Ass’n, 443 U.S. 658 (1979) (hereinafter Boldt I). 4 Id. 5 Id. at 351, 357. 6 Id. at 351. 7 United States v. Washington, 626 F. Supp. 1405, 1433 (W.D. Wash. 1985); Boldt I, 384 F. Supp. at 350. 8 United States v. Washington, 626 F. Supp. at 1442; Boldt I, 384 F. Supp. at 350-51. 9 See United States v. Washington, 626 F. Supp. at 1442; Boldt II, 459 F. Supp. at 1041. 10 See, e.g., United States v. Washington, 873 F. Supp. 1422, 1444-45 (W.D. Wash. 1994) (hereinafter Shellfish I).</p>	
PGST-03	B. The Treaty of Point No Point Reserves Perpetual Fishing Rights to the Tribe, Which the Navy Cannot Infringe.	The Navy’s government-to-government consultation with the Jamestown S’Klallam Tribe and Port Gamble S’Klallam Tribe is

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>A proper conception of treaty fishing rights must begin with the history and purpose of the Treaty. In Article I of the Treaty of Point No Point, the S'Klallam people ceded to the United States most of their rights in their land. However, the Treaty reserves the right of the Tribe to take fish "at usual and accustomed grounds and stations." Treaty of Point No Point, 12 Stat. 933, Article IV. "[W]hatever land concessions they made, the Indians viewed a guarantee of permanent fishing rights as an absolute predicate to entering into a treaty."¹¹ Federal negotiators, led by Territorial Governor Isaac Stevens, obliged. "I want," Stevens said, "that you shall not have simply food and drink now but that you may have them forever."¹² Gov. Stevens' promise regarding the Tribes' continued access to traditionally-utilized resources is memorialized in Article IV of the Treaty:</p> <p>11 Id. at 1437. 12 United States v. Washington, Subproceeding 01-1, No. C70-9213, 2007 WL 2437166, at *11 (W.D. Wash., 2007) (hereinafter Culverts Summary Judgment); see also Washington v. Wash. Commercial Passenger Fishing Vessel Ass'n (Fishing Vessel), 443 U.S. 658, 667 n.11 (quoting Stevens: "This paper secures your fish").</p>	<p>ongoing. The Navy remains committed to fulfilling its government-to-government consultation responsibilities and addressing Tribal concerns as part of its ongoing consultations.</p>
<p>PGST-04</p>	<p>The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians, in common with all citizens of the United States; and of erecting temporary houses for the purpose of curing; together with the privilege of hunting and gathering roots and berries on open and unclaimed lands.¹³</p> <p>The right is not created by the Treaty; rather, the Treaty "secures" pre-existing Indian fishing rights.¹⁴ In other words, the Treaty of Point No Point did not grant fishing, hunting, and gathering rights to the Tribe; rather, it reserved to the Tribe its pre-existing rights to engage in those activities.¹⁵ This reservation of rights was intended to permanently secure the full breadth of pre-treaty resource procurement practices.¹⁶ Nothing in the treaty language or negotiations suggested, and neither side anticipated, that non-Indian development would ever hinder Indian fishing or deplete the seemingly inexhaustible abundance of resources.¹⁷</p> <p>The rights that the Tribe reserved in the Treaty are property rights, and like any private property cannot be taken for government use except upon payment of just compensation.¹⁸ Because the treaties are approved by Congress, only Congress can take or diminish tribal treaty rights – no regulation or decision of an executive department or agency may do so.¹⁹</p> <p>Implicit in the treaty bargain and the tribes' surrender of lands to the United States was a promise of federal protection, referred to now as "the trust relationship."²⁰ The trust relationship imposes upon the United States and all its agencies the obligation to follow "the most exacting fiduciary standards" in dealing with the tribes, as well as to protect tribal rights and property.²¹</p> <p>Consistent with this relationship of trust, federal courts require that ambiguities in federal laws regarding tribes must be construed in the tribes' favor.²² No statute will diminish treaty rights unless that is the clear intent of the Congress.²³ The Navy's policies</p>	<p>The Navy acknowledges that treaty rights are not created by the treaty, but are secured by the treaty.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>acknowledge the trust responsibility and obligate the Navy to consult with tribes when its actions affect tribal treaty rights or resources.²⁴</p> <p>On February 7, 2014, President Barack Obama wrote to the western Washington Treaty Tribes in commemoration of the 40th anniversary of the landmark decision in <i>United States v. Washington</i>, reflecting on the Tribes’ historic struggle to ensure the free exercise of their Treaty-protected right to fish as they had since time immemorial through direct and legal action. In closing, the President wrote, “As we commemorate this special milestone, let us reflect on progress made and look to the work before us still. And let us recommit to continuing our efforts to honor the government-to-government relationship and expand justice and equality to all.” The Tribe hopes the Navy takes the words of the Commander in Chief to heart as it plans its operations and development in Puget Sound.</p> <p>13 Treaty of Point No Point, Art. IV. 14 See, e.g., <i>United States v. Winans</i>, 198 U.S. 371, 381 (1905). 15 Id. 16 See <i>Boldt I</i>, 384 F.Supp.at 381 (“At the treaty council the United States negotiators promised, and the Indians understood, that the Yakimas would forever be able to continue the same off-reservation food gathering and fishing practices as to time, place, method, species and extent as they had”). 17 <i>Culverts Summary Judgment</i> at 10-11. See also <i>Fishing Vessel</i>, 443 U.S. at 668. 18 <i>Menominee Tribe v. United States</i>, 391 U.S. 404, 413 (1968). 19 See, e.g., <i>Confederated Tribes of Umatilla Indian Reservation v. Alexander</i>, 440 F.Supp. 553 (D. Or. 1977) (U.S. Army cannot build dam and flood tribal fishing places, where Congressional authorization does not expressly provide for taking of treaty fishing rights). Federal agencies may, however, regulate treaty fishing where necessary for conservation. See <i>N. Arapahoe Tribe v. Hodel</i>, 808 F.2d 741, 749-50 (10th Cir. 1987); <i>United States v. Eberhardt</i>, 789 F.2d 1354, 1359-60 (9th Cir. 1986). 20 <i>United States v. Kagama</i>, 118 U.S. 375, 384 (1886). 21 <i>Seminole Nation v. United States</i>, 316 U.S. 286, 296-97 (1942); <i>Parravano v. Babbitt</i>, 70 F.3d 539, 546 (9th Cir. 1995) (federal agencies have trust obligation to protect tribal treaty fishing rights). 22 <i>Parravano</i>, 70 F.3d at 544. 23 <i>Menominee</i>, 391 U.S. at 412-13. 24 Department of the Navy Policy for Consultation With Federally-Recognized Indian Tribes, SECNAV Instruction 11010.14A, ¶ 6.a. (Oct. 11, 2005).</p>	
PGST-05	<p>C. The Treaty of Point No Point Protects Three Essential Components of the Tribe’s Fishery: Access to Fishing Places, Sufficient Harvests, and Necessary Fish Habitat. The Navy’s continued and increased use of Hood Canal and other portions of Puget Sound for Training and Testing Activities Infringes Upon Each of These Aspects of the Treaty Right.</p> <p>More than a century of federal court decisions have fleshed out the components of the treaty right, including the right of access to places, the right to a share of harvest to meet tribal moderate living needs, and the right to protection of fish habitat. The Navy’s training and testing activities in Puget Sound have the potential to adversely affect each of these components, particularly when combined with the Navy’s numerous other activities in the region.</p> <p>The treaty fishing right applies to every “usual and accustomed” area (U&A).²⁵ Tribal U&A have been defined broadly by reference to entire water bodies.²⁶ This practice is</p>	<p>The Navy generally agrees with the statements regarding the existence and extent of off reservation fishing tribal treaty rights. With respect to the issue of habitat protection, the Navy acknowledges the decision of the federal district court in the sub-proceeding of <i>United States v. Washington</i> regarding culverts. However, the Navy notes that the court’s decision is on appeal and the existence and parameters of a right of habitat protection (also referred to as habitat degradation) are subject to interpretation and evolving court decisions. Additionally, the Navy notes that a <i>de minimis</i> interference with treaty rights is not necessarily a treaty violation. (See <i>Lummi v. Cunningham</i>, No. C92-1023, Western District of WA unpublished decision 1992).</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>consistent with the treaty language, which speaks not only of specific fishing “stations,” but of general fishing “grounds.”²⁷ The broad treatment of U&A is also consistent with the nature of the treaty fishing right—a reservation of preexisting rights. The Port Gamble S’Klallam Tribe’s U&A encompass the marine and nearshore areas of naval Base Kitsap – Bangor, Carderock Division at Bangor, Dabob Bay Range Complex, Hood Canal EOD Training Range, Admiralty Bay Chinook A and B, Navy 7 Operations Area, northern Whidbey Island and surrounding marine and nearshore areas. The right of the Tribe to access and fish at these places exists regardless of who owns the land beside or beneath the waterway.²⁸ The ability to access all potential fishing places has been and remains crucial for the Tribe to maintain harvest stability in the face of unpredictable local variations in the supply of fish.²⁹ Maintaining access to the entire terrestrial and marine landscape that was used by tribal ancestors is also of critical cultural importance, and helps to define the Tribe’s identity.</p> <p>Exclusion of treaty fishers from any of their U&A fishing places is a violation of tribal treaty fishing rights and subject to injunction.³⁰ The vehicle for the exclusion is immaterial. It may be fences that block the path to an onshore fishing site, or non-Indian fishing gear that monopolizes a stretch of water.³¹ It may be a dam that drowns fishing places under fathoms of water.³² It may be a marina that physically occupies the water.³³ It may be State regulations restricting the area to be fished, even if the regulations would increase a tribe’s harvest.³⁴ It may be exclusion zones surrounding naval vessels or equipment engaged in training and testing exercises, even when those exclusions zones may be temporary. The Navy may not choose to go forward with a plan that would prevent tribal access to usual and accustomed fishing places.³⁵</p> <p>It does not matter that the area taken may be a relatively small portion of the U&A, or that it may be taken for a relatively short duration.³⁶ “No case has been presented to this Court holding that it is permissible to take a small portion of a tribal usual and accustomed fishing ground, as opposed to a large portion, without an act of Congress, or to permit limitation of access to a tribal fishing place for a purpose other than conservation.”³⁷ Nor does it matter if there has been no recent fishing at a particular location. In <i>Muckleshoot v. Hall</i>, for example, fishing had been curtailed in the area proposed for the marina for several years but the marina was enjoined nonetheless as interfering with the Tribes’ ability to access that area in the future.³⁸</p> <p>The right of access to fishing places furthers the underlying right to take fish. The treaty right is more than the right merely to go fishing; it is the right to actually harvest fish.³⁹ The purpose of the fishing rights provision is to ensure the tribes sufficient harvest to sustain their livelihood, that is to say, a moderate living.⁴⁰ Because the tribes must share the fishery “in common” with non-Indians, however, tribal harvest is capped at 50% of the harvestable fish in each run or watershed.⁴¹ Non-Indians may not deprive the tribes of their share of the harvest by monopolizing the catch themselves.⁴² Neither may they drive tribal harvest down by placing obstructions in tribal fishing places that increase the</p>	

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>effort required to take the tribal share.⁴³ The Tribe's access right and harvest rights are independent.⁴⁴ Thus, an in-water structure or exclusion zone that precludes tribal fishing at a site may violate the treaties, even if the tribes remain able to harvest their full share of the runs.⁴⁵</p> <p>25 Muckleshoot Tribe v. Hall, 698 F. Supp. 1504, 1511 (W.D. Wash. 1988) [hereinafter Muckleshoot] (citing Washington v. Wash. St. Commercial Passenger Fishing Vessel Ass'n, 443 U.S. 658, 674 (1979) [hereinafter Fishing Vessel] and Boldt I, 384 F. Supp. at 332).</p> <p>26 Boldt I, 384 F. Supp. at 402; see, e.g., United States v. Washington, 626 F. Supp. at 1442.</p> <p>27 See Boldt I, 384 F. Supp. at 332 (distinguishing "grounds" from "stations").</p> <p>28 Winans, 198 U.S. 371 (right to cross fenced, private upland to reach fishing water); United States v. Washington 157 F.3d 630, 644-47 (9th Cir. 1998) (tribes have right to take shellfish on private and Stateowned lands).</p> <p>29 See Boldt I, 384 F. Supp. at 351-52 (local fish supplies varied, so tribes traditionally shifted fishery locations in response to relative abundance).</p> <p>30 See, e.g., United States v. Oregon, 718 F.2d 299, 303-04 & n.6 (9th Cir. 1983) (citing Fishing Vessel, 443 U.S. at 667, 675).</p> <p>31 Winans, 198 U.S. at 381-82.</p> <p>32 Umatilla Tribes v. Alexander, 440 F. Supp. 553, 555 (D. Or. 1977).</p> <p>33 Muckleshoot, 698 F. Supp. at 1511.</p> <p>34 United States v. Oregon, 718 F.2d at 304-05.</p> <p>35 Nw. Sea Farms v. U.S. Army Corps of Eng'rs, 931 F. Supp. 1515 (W.D. Wash. 1996).</p> <p>36 Muckleshoot, 698 F. Supp. at 1515.</p> <p>37 Id.</p> <p>38 Id. at 1522.</p> <p>39 Fishing Vessel, 443 U.S. at 678.</p> <p>40 Id. at 686 (treaty "secures so much as, but no more than, is necessary to provide the Indians with a livelihood-that is to say, a moderate living").</p> <p>41 Hoh Tribe v. Baldrige, 522 F.Supp. 683, 690 (W.D. Wash. 1981).</p> <p>42 Winans, 198 U.S. 371 (non-Indians may not take all harvestable fish with fish wheels); Wash. Dept. of Game v Puyallup Tribe, 414 U.S. 44 (1973) (non-Indian sport fishery may not monopolize harvest).</p> <p>43 Muckleshoot v. Hall, 698 F. Supp. 1504, 1509 n.5, 1515 (W.D. Wash. 1988) (proposed marina would occupy U&A and increase the effort necessary to harvest tribal share)</p> <p>44 United States v. Oregon, 718 F.2d 299, 304 n.6 (9th Cir. 1983) (multistate fish management plan may not dictate which parts of U&A tribes can fish, even if plan would increase tribal harvest).</p> <p>45 Nw. Sea Farms, Inc. v. U.S. Army Corps of Engineers, 931 F.Supp. 1515, 1522 (W.D. Wash. 1996) (Army Corps properly denied permit for overwater structure that would occupy part of tribe's U&A, although project would not substantially affect number of fish available for harvest); Muckleshoot Tribe v. Hall, 698 F. Supp. 1504.</p>	
<p>PGST-06</p>	<p>The final component of the Tribe's treaty fishing rights that is relevant here is the right to protection of the habitat without which there will be no fish to take. As discussed above, the Treaty of Point No Point promised the Tribe the ability to support itself through fishing as it has since time immemorial. Implicit in that promise is a commitment that non-Indians will not degrade the habitat and thereby diminish fish production, leaving the Tribe unable to catch fish sufficient to its moderate living needs.⁴⁶ For more than three decades, the United States has joined tribes in litigation successfully asserting the treaty right to habitat protection.⁴⁷ In January 2014, the United States again defended this right before the Ninth Circuit in the Culverts subproceeding of United States v. Washington. Having asserted for so long that the treaties impose habitat protection duties on others,</p>	<p>The Navy generally agrees with the statements regarding the existence and extent of off reservation fishing tribal treaty rights. With respect to the issue of habitat protection, the Navy acknowledges the decision of the federal district court in the sub-proceeding of United States v. Washington regarding culverts. However, the Navy notes that the court's decision is on appeal and the existence and parameters of a right of habitat protection (also referred to as habitat degradation) are subject to interpretation and evolving court decisions. Additionally, the Navy notes that a <i>de minimis</i> interference with treaty rights is not necessarily a treaty violation. (See Lummi v. Cunningham,</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>there is little doubt that the United States – and the Navy – are subject to such duties themselves.</p> <p>46 Culverts Summary Judgment at 11; see United States v. Adair, 723 F.2d 1394, 1410 (9th Cir. 1983) (reserved treaty right to fish impliedly reserves sufficient water in river to support fishery). 47 Culverts case, United States response to Washington’s Summary Judgment Motion, at 4 (Dkt. No. 313, Sept. 27, 2006); United States v. Washington, 506 F. Supp. 187, 190 (W.D. Wash. 1980) (“Phase II”); see also Adair, supra. When Phase II was appealed, the Ninth Circuit disagreed with the District Court over the scope of the implied right to habitat protection, but not over its existence. United States v. Washington, 694 F.2d 1374, 1389 (9th Cir. 1982) (treaties impose duty upon signatories to take reasonable measures to preserve fishery when their projects threaten existing harvests). This initial Ninth Circuit decision was later vacated on procedural grounds. United States v. Washington, 759 F.2d 1353 (9th Cir. 1985).</p>	<p>No. C92-1023, Western District of WA unpublished decision 1992).</p>
<p>PGST-07</p>	<p>D. The DEIS’s analysis of the effects of naval Training and Testing Exercises on Treaty Rights and Tribal Resources is inaccurate.</p> <p>The Navy’s DEIS inaccurately assesses the effects, and therefore the significance, of naval training and testing exercises on treaty rights. Port Gamble fishers actively fish throughout Hood Canal and other parts of Puget Sound within the Tribe’s U&A. Fishing activities include crabbing, shrimping, salmon fishing, intertidal clam and oyster gathering, dive fisheries for geoduck and other species and shore-anchored and vessel-based net and line fisheries for salmon and other finfish. The Navy’s training and testing exercises can seriously impede these activities for several reasons, and to a degree, that the DEIS does not disclose. Furthermore, the Navy’s inadequate and inaccurate analysis is especially distressing given the significant effort the Tribe has put into trying to make the Navy understand both treaty rights and how the Navy’s activities affect treaty rights in the last several years.</p> <p>The DEIS indicates it “considered all potential stressors and analyzed . . . accessibility (limiting access to the ocean), airborne acoustics, physical disturbance and strike stressors (activities using seafloor devices and deposition of military expended materials), [and] secondary impacts (from changes to the availability of marine resources)” with respect to Native American and Alaska Native traditional resources. DEIS at 3.11-1; see also 3.11-18. This list is hardly the full scope of effects arising from stress caused by the Navy’s training and testing activities. For instance, “access” goes far beyond whether tribal members maintain “access to the ocean.” Access just as easily can mean temporary displacement from traditional fishing grounds in Hood Canal due to the Navy clearing the area for a training exercise. Some fishing openers are quite short, such that any time lost spent moving to new grounds or pulling up gear from where they had already been set represents a potentially significant loss of harvest.</p> <p>The Navy repeatedly demonstrates its failure to comprehend the scope of the Treaties’ protection, as well as the impacts its training and testing exercises can have on treaty rights, throughout the DEIS’ analysis. In summarizing the effects of the Preferred Alternative (Alternative 1) on protected tribal and traditional resources, the Navy writes:</p>	<p>The Final EIS/OEIS has been revised throughout Section 3.11 to acknowledge the impacts as described in the comments. It is important to note that those proposed activities relevant to Tribal concerns are merely the continuation of ongoing activities that have been occurring in this same area for years. As the Navy will not be permanently shutting off access to fishing grounds but rather will be minimizing access issues to the maximum extent practicable, the Navy does not expect alternative fishing grounds to be necessary. As stated in Section 3.11.3.1 (Impeding Access to U&A Fishing Grounds or Traditional Fishing Areas), the Coast Guard issues Notices to Mariners to warn the public of upcoming Navy activities. In addition, the Navy directly notifies affected American Indian tribes to ensure that they can take action to avoid any potentially hazardous training or testing locations at sea.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>Impacts on Native American and Alaska Native protected resources and other traditional resources would not occur because inaccessibility to areas of co-use would be temporary, use of seafloor devices could create damage or loss to Native American fishing equipment but would not affect the use of the usual and accustomed fishing grounds, and marine species' population levels would not be altered to such an extent that tribes could no longer find their target species.</p> <p>DEIS 3.11-1; see also 3.11-38. The lack of understanding of treaty rights embodied in this paragraph and throughout the DEIS is staggering. To make matters worse, this paragraph is essentially cut and paste throughout section 3.11 of the DEIS.</p> <p>With virtually every clause in the excerpt above, the Navy admits that its activities will impact treaty fishing, but then the Navy concludes in the same breath that impacts "would not occur." The Navy reaches this conclusion despite the fact that training and testing activities will dramatically increase in U&A, with vessels impacting access alone doubling in Inland Waters, DEIS at 3.11-20, 3.11-25 to -27, and activities that disturb the seafloor, result in military materials polluting U&A, and cause aircraft noise rising dramatically as well. DEIS at 3.11-20. The disconnect must result from the author's determination that these impacts do not matter to the Navy, so they don't count as "impacts" at all. However, it is not the Navy's place to make judgments as to which impacts to treaty rights matter (only the Tribes can decide that); its role is to disclose impacts fully, accurately, and dispassionately, so that the agency and the public can accurately assess the full scope of impacts from a project and whether it is worth it to pursue the project in light of those impacts.</p>	
<p>PGST-08</p>	<p>The Navy's analysis demonstrates a lack of familiarity with the case law analyzing the Stevens Treaties, and it fails to take seriously the agency's trust responsibility. First, inaccessibility to areas of the Tribe's U&A is an impact to treaty rights, even if that inaccessibility may be "temporary." See DEIS 3.11-1; 3.11-19, 3.11-22. If tribal members cannot access part of their U&A, they cannot exercise their treaty right in that area. That may mean that a tribal member cannot fish in an area her ancestors taught her to fish (and may not be able to pass that knowledge to future generations). With openers of limited duration, it may mean that time (and therefore fishing opportunity) will be lost in resetting gear or travelling to other grounds if the Navy closes an area after fishing has commenced. Additional gas costs also result from such disruptions. Thus, while the Navy is correct that sufficient advance warning of naval activities may allow tribal members to avoid such consequences, it is wrong to say that displacement as a result of temporary range clearance procedures does not affect subsistence and commercial fishing activities merely because such "displacement is of limited duration (less than 24 hours)." DEIS 3.11-22, 3.11-23. In short, the Navy is incorrect to conclude: "There would be no anticipated impacts on Native American protected tribal resources or other traditional resources because inaccessibility to areas of co-use, such as usual and</p>	<p>As described in Section 3.11.3.1 (Impeding Access to U&A Fishing Grounds or Traditional Fishing Areas), the Navy acknowledges there is a potential that the Proposed Action will temporarily and intermittently interfere with U&A access (e.g., during transit protection, an important national security concern). The Navy also provides an analysis of the potential for the proposed action to affect fishing gear.</p> <p>As stated in Section 3.11.3.1 (Impeding Access to U&A Fishing Grounds or Traditional Fishing Areas), the Coast Guard issues Notices to Mariners to warn the public of upcoming Navy activities. In addition, the Navy directly notifies affected American Indian tribes to ensure that they can take action to avoid any potentially hazardous training or testing locations at sea.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>accustomed fishing areas, would be of short duration.”⁴⁸ DEIS 3.1-22, 3.1-24.</p> <p>While the Navy and the Tribe have generally worked well together to minimize the number of these occurrences resulting from training and testing exercises through a fairly effective notice system in Puget Sound, it is entirely inappropriate for the Navy to fail to disclose or discount the true impacts from its actions. And the Navy risks underestimating the amount of mitigation and preventative measures needed to ensure it lives up to its trust responsibility. See, e.g., DEIS 3.11-7, 3.11-17, 3.11-19, 3.11-22 (describing various mitigation and coordination measures that have been necessary to address impacts from naval activities to treaty fishing in various tribes’ U&A).</p> <p><small>48 The Navy’s focus on its activities having “temporary” effects does not mean that those effects are not meaningful or that they do not violate the treaty right. For instance, noise impacts during ceremonial activities may be “temporary,” but that does not mean that they would not have a detrimental effect on the people attending that ceremony and the ability for that cultural knowledge to be passed to younger generations. The potentially short duration of those impacts certainly does not warrant the conclusion that “no further analysis [including the analysis of individual alternatives] is required.” DEIS 3.11-28.</small></p>	
<p>PGST-09</p>	<p>Furthermore, the Navy is incorrect to suggest that it could “accommodate . . . access to tribes’ usual and accustomed areas” to the extent it deems possible. DEIS at 3.11-19. Only Congress or the Tribes themselves can so limit tribal members’ ability to access their U&A, not the Navy. Thus, the Navy must seek an accommodation from the Tribes if it would like tribal members not to access certain areas, not the other way around. Throughout the DEIS, the Navy also fails to disclose the extent of problems the Tribes have encountered in exercising their Treaty rights as a result of existing naval activities, including greatly increased vessel traffic resulting from naval operations (including convoys) and construction activities. Further, it underestimates the types of impacts that would be relevant to access limitations. For instance, although the Navy admits “changes in accessibility to human activities in the ocean or inland waterways would be an impact,” the Navy wrongly states that it would only be an impact if the changes in accessibility “directly contributed to loss of income, revenue, or employment.” DEIS at 3.11-21. For example, cultural knowledge may be lost if tribal members cannot teach children and grandchildren to fish in areas their ancestors before taught them.</p> <p>In the passage excerpted above, the Navy also indicates that “use of seafloor devices could create damage or loss to Native American fishing equipment but [that] would not affect the use of the usual and accustomed fishing grounds” and so “impacts . . . would not occur.” DEIS at 3.11-1, 3.11-29 to -32 (“Although Native American subsistence and commercial fishing equipment could be damaged by activities using seafloor devices, these training activities would not affect . . . the use of the usual and accustomed fishing grounds.”). Again, that’s incorrect. The right to fish in the Tribe’s U&A does not only cover the ability to physically access the fishing grounds, but also what happens within them. Gear damage or loss resulting from naval activities and structures reduces fishing opportunity and increase the amount of effort and resources required to catch the same amount of fish.⁴⁹ This is a treaty violation, and in fact, has been a consistent problem for</p>	<p>The Final EIS/OEIS has been revised to eliminate the language described in the comment referenced to the Draft EIS/OEIS on p. 3.11-19. It was not the Navy’s intent to suggest that it could limit access to U&A areas, and the EIS/OEIS has been revised accordingly.</p> <p>The vessel traffic referred to in the comment is likely the Transit Protection System activities described in Section 3.11.3.1.2.1 (Training) of the Final EIS/OEIS. Those activities are now described in Chapter 2, and analyzed for impacts in Section 3.11 (American Indian and Alaska Native Traditional Resources).</p> <p>The Navy construction activities mentioned in the comment are addressed in Chapter 4 (Cumulative Impacts) of the Draft EIS/OEIS in Section 4.3.4 (Other Military Activities). (This is renumbered Section 4.3.3 in the Final EIS/OEIS.)</p> <p>The Navy acknowledges and respects the reserved rights established in the Treaty of Point No Point and all Treaties. The Navy remains committed to fulfilling its government-to-government consultation responsibilities and addressing Tribal concerns as part of its ongoing consultations with the Port Gamble S’Klallam Tribe. Regarding Admiralty Claims: The Secretary of the Navy has sole authority for claims pursuant to 10 U.S.C. Chapter 7622. The Authority for processing is delegated to Deputy Assistant Judge Advocate General (Admiralty and Maritime Law) (Code 11) under 32 C.F.R. Part 752. All maritime claims arising from operation of a Navy vessel are handled by the Office of the Judge Advocate General (Code 11). Information on how to submit an Admiralty Claim can be found at</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>Port Gamble S'Klallam tribal members for quite some time. The Navy's gear loss replacement program is difficult to navigate, time-consuming, slow, and generally ineffective at remediating the losses tribal members incur. The Navy is well aware of this as it is a consistent topic and source of frustration at the government-to-government meetings we have engaged in over the last few years. Yet, nothing has been done to correct these problems, and the Navy now seeks to risk even more gear damage and loss through increasing its training and testing activities. The Navy should first reduce, minimize, and remediate the occurrences of gear loss and damage before it adds any further chance of such impacts, and it must accurately disclose these impacts as affecting the treaty right under NEPA.</p> <p>49 The same is true if spent military equipment ends up in tribal nets. DEIS 3.11-34.</p>	<p>http://www.jag.navy.mil/organization/code_11.htm</p>
PGST-10	<p>The Navy further demonstrates its failure to grasp the treaty right's scope and meaning by asserting in the excerpt above, that "marine species' population levels would not be altered to such an extent that tribes could no longer find their target species," and thus impacts to tribal resources and rights "would not occur." DEIS at 3.11-1 3.11-37. Again, this is wrong. When population levels dip, it becomes more likely that the tribal and state co-managers will close a fishery to harvest or strictly limit the duration of openers or the catch quota. Further, where there are less fish, more effort and time must be expended to catch the limit, and where fish populations are low (as they are now), greater effort means more fishermen may give up fishing as their main source of income. The relevant inquiry is not whether the target species can be found at all, but rather whether fishing opportunity is lost or diminished when population levels dip (or fish are displaced) as a result of the Navy's actions. The Navy is incorrect that "secondary impacts" only exist, or that they only count as an impact on treaty fishing, if the species is forever lost as a result. DEIS 3.1-1, 3.11-28, 3.11-37. Moreover, when analyzing treaty fishing rights, it is completely inappropriate to measure socioeconomic impacts based on whether "proposed activities led to changes to physical and biological resources to the extent that they would alter the way industries can use those resources" or "to such an extent that these tribes could no longer find their target species." DEIS 3.1-37. That is an extreme measure of whether naval activities will affect socioeconomics, particularly where much smaller disruptions can significantly affect tribal members who rely on fishing and shellfishing for subsistence or their livelihood.</p>	<p>As described in Sections 3.4 (Marine Mammals), 3.8 (Marine Invertebrates), and 3.9 (Fish), there would be no population-level impacts to any of the Tribe's target species. The discussion in the Final EIS/OEIS has been revised in Section 3.11.3 (Environmental Consequences) to acknowledge that training activities have the potential to impede Tribal access to U&A fishing grounds (e.g., during transit protection, an important national security concern).</p> <p>Section 3.11.3 (Environmental Consequences) of the EIS/OEIS provides analysis of the potential for the proposed action to impact access, availability of marine resources, and fishing gear.</p>
PGST-11	<p>Although the Navy may not view the effects of its activities as "significant," see, e.g., DEIS at 3.11-18, the effects do exist and do affect treaty resources. It is not enough to respond, for example, to concerns regarding contaminants from expended or unexploded ordnance building up in sediments and contaminating tribal food sources by making the bare assertion that "these [contaminants] generally are transported by tidal and wave action." DEIS 3.11-18. In fact, many heavy metals and contaminants from unexploded ordnance remain localized in nearshore areas for long periods of time (e.g., DEIS at 3.1-7, 3.1-32, 3.1-34). Also, assertions that the releases of hazardous materials</p>	<p>The Navy used the best available science in the analysis of expended materials and potential impacts to the quality of the water and sediments. There is no scientific research indicating that the Navy's expended materials have had or would have an impact on contaminants in marine species. The studies conducted in this regard all indicate no link between expended materials and contamination of marine species. For example, as described in Section 3.1.3.1.5.2 (Unconsumed Explosives) of the Final EIS/OEIS, chemical and</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>would be “diluted to a level that would be below a level of water quality that would affect living organisms” are unsubstantiated, and in any event, are cold comfort when existing water quality standards are designed to protect only those people who consume no more than 6.5 grams of local seafood per day, which is less than 2% of the amount surveys have estimated western Washington tribal members typically consume. DEIS 3.11-18.</p>	<p>conventional munitions disposed on the ocean floor approximately 5 mi. (8.05 km) south of Pearl Harbor, Hawaii, were recently studied (Hawaii Undersea Military Munitions Assessment 2010). Documents indicate that sixteen thousand 100 lb. (45 kg) mustard-filled bombs may have been disposed in this area in October and November 1944. The condition of the munitions ranged from “nearly intact to almost completely disintegrated.” The authors collected 94 sediment samples and 30 water samples from 27 stations at five locations. These samples were analyzed for chemical agents, explosives, metals (arsenic, copper, lead, and zinc), polycyclic aromatic hydrocarbons, pesticides, PCBs, phenols, and organic tin. No chemical agents or explosives were detected, and comparisons between the disposal site and reference sites showed no statistically significant differences in levels of munitions constituents, chemical agents, or metals.</p> <p>As stated in Section 3.1.3.2.2 (Approach to Analysis), most activities involving military expended materials with metal components would be conducted more than 3 nm offshore. And, in Section 3.1.3.2.3 (Impacts of Metals), several studies were cited in which areas with significantly greater densities of military expended materials than are proposed for NWTT resulted in no or only slight changes in water quality parameters.</p> <p>For impacts resulting from explosives or chemicals other than explosives, the extremely low level proposed for use in the Inland Waters is explained in Sections 3.1.3.1, 3.1.3.3, and 3.1.3.4.</p> <p>If the comment regarding the longevity of heavy metals and contaminants is referring to past actions, some of those issues are discussed in Chapter 4 (Cumulative Impacts). Except for analysis under Cumulative Impacts, the Navy’s past practices, and any measures which might be contemplated to clean up former disposal sites, are out of the scope of this document. The Navy has shown that the activities within the scope of this document have minimal impact on the environment.</p>
<p>PGST-12</p>	<p>Moreover, it is as though the person who wrote the subsections of the Native American and Alaska Native Traditional Resources that describe the impacts of the Navy’s training and testing exercises on treaty rights (or lack thereof, according to the Navy) had never heard of the topics discussed in subsections 3.11.1.3 and 3.11.1.3.1. And even in those sections, the uneven treatment of the treaty tribes is bizarre. Mentioning two of the treaties entered into with the United States in the “Fishing Rights” section without describing the many other such treaties suggests that those are the only two treaties of</p>	<p>The Navy has made significant changes to these sections to address comments and concerns. Section 3.11.1.3.1 (Tribal Treaty Fishing Rights) of the Final EIS/OEIS discusses all five of the Stevens Treaties established in the Northwest. Language throughout Section 3.11.1.3 (Federal Trust Responsibility and Tribal Treaty Rights: Reservation of Rights) has been updated.</p> <p>The text regarding the reservations was also revised.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>significance in the action area (and the only tribes to which a trust responsibility is owed). This is clearly not the case, and it is thus confusing to the general reader and perplexing to the unmentioned Treaty Tribes. See DEIS 3.11-3. Moreover, the discussion in the “Off Reservation Treaty Fishing Rights” section regarding the reservations established in the treaties is confounding. The Port Gamble S’Klallam Tribe’s reservation is on Port Gamble Bay very near NBK-Bangor; the Jamestown S’Klallam Tribe’s reservation is on Sequim Bay. DEIS at 3.11-3.</p>	
<p>PGST-13</p>	<p>The DEIS also notes that the data sources used to develop this DEIS come from prior NEPA documents, but not directly from the Tribes. This is a problem because the Tribe has noted numerous and significant problems with analyses in prior NEPA documents and the Navy’s failure to fully disclose the effects of naval activities on treaty fishing rights. For instance, the Port Gamble S’Klallam Tribe provided detailed criticisms of the EHW-2 EIS’ analysis of treaty right impacts (one of the NEPA analyses relied upon for this DEIS), which were not addressed in the final EHW-2 EIS. Further, past NEPA documents have failed not only to disclose the impacts of a project on treaty rights, but also the impact of a project at all (and, in turn, there has never been a NEPA analysis of the impacts of that unanalyzed project on treaty rights). For instance, the Navy’s barge mooring project Environmental Assessment discussed relocation of the Navy’s research barge at NBK-Bangor and the infrastructure needed for moorage, but it did not disclose the impacts from replacing the barge with one that was five times the size of the existing barge. In addition to these impacts never being analyzed or disclosed, the Navy appears to have failed to discuss the impacts the research, development, testing, and evaluation (RDT&E) activities that will be engaged in on the barge in the NWTT DEIS, despite promises in the Barge Mooring EA (Section 1.5.2, page 1-5) that it would do so. The Navy has the Tribe’s comments on both the EHW-2 and Barge Mooring Project in its files, but the Tribe would be happy to provide them again upon request.</p> <p>Another concern with the DEIS’ analysis is that there is a large disconnect between what the Navy has recognized as an impact to treaty fishing rights from its training and testing exercises in the past, including “potential restricted access to beach areas and usual and accustomed fishing (e.g., shellfish) grounds, potential damage to fishing gear, and effects on returning salmon in the streams,” and the fact that increasing the frequency and geographic scope of these activities will magnify those impacts. Compare DEIS at 3.11-7 (NUWC Keyport Range EIS impacts recognized) and 3.11-1 (summary of impacts from NWTT). These are impacts that should have been disclosed, and it is a violation of NEPA to fail to do so.</p>	<p>The Navy complies with the requirements of NEPA, uses the best available science in its analysis, and addresses all public comments.</p> <p>The Navy remains committed to fulfilling its government-to-government consultation responsibilities and addressing Tribal concerns as part of its ongoing consultations with the Port Gamble S’Klallam Tribe.</p> <p>The Navy adequately described proposed training and testing activities and considered the potential cumulative impacts of other activities in the Cumulative Impacts chapter.</p>
<p>PGST-14</p>	<p>II. The Navy’s plans for numerous construction projects and operational changes in Hood Canal and other areas of Puget Sound, including increases in the frequency and geographic scope of training and testing activities, severely infringe on the treaty fishing right, and the DEIS’s cumulative effects analysis is wildly inaccurate.</p>	<p>The Navy prepares EISs and Environmental Assessments (EAs) in order to comply with NEPA. These NEPA documents are intended to ensure decision makers consider the potential environmental effects of a proposed action and its alternatives, provide an opportunity for</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>Which raindrop caused the flood? That’s the rhetorical question with which Judge Ricardo Martinez concluded his opinion overturning issuance of an Army Corps of Engineers Section 10 Rivers and Harbors Act permit for construction of a barge-loading facility in Puget Sound. <i>Preserve our Island v. U.S. Army Corps of pact</i>, No. C08-1353RSM, 2009 WL 2511953, at *20 (W.D. Wash. Aug. 13, 2009). He answered his question as follows: No single project or human activity has caused the depletion of the salmon runs, the near-extinction of the SR Orca, or the general degradation of the marine environment of Puget Sound. Yet every project has the potential to incrementally increase the burden upon the species and the Sound.</p> <p>Id. He was writing about environmental impacts in Puget Sound, but the answer applies with equal force to all aspects of the treaty fishing right. Which pier in Hood Canal caused there not to be enough fish for tribal members to make a moderate living through fishing? Which naval training exercise caused tribal members to abandon a traditional fishing area? The obvious answer is that it is often not a single project or conflict but rather the collective impact of these activities that causes significant infringements of the treaty right. And, thus, it is the Navy’s job to consider—and reconsider in certain cases—its proposals in light of that truth and in light of the agency’s trust responsibility to the Tribes affected by its actions.</p>	<p>public involvement, and promote transparency by informing the public of potential environmental effects. Each NEPA document addresses a specific proposed action, separated from other actions by its purpose and need, independent utility, timing, and geographic location. Some NEPA documents are stand-alone documents; others tier off or expand the analyses of other NEPA documents. NEPA documents for training (e.g., Northwest Training and Testing EIS) focus on training activities occurring within a range complex or military operation area and involve different types of aircraft, ships, and range complex enhancements. NEPA documents for installations (e.g., Land Water Interface and Service Pier Extension EIS) focus on infrastructure enhancements for host and tenant command missions. Importantly, every environmental document considers the cumulative impacts to the environment from other relevant past, present, and reasonably foreseeable future actions (federal, state, local and private) in addition to the proposed action.</p>
<p>PGST-15</p>	<p>The detrimental effect of the Navy’s projects on treaty rights and tribal resources when examined in the aggregate cannot be overstated. Since locating in Puget Sound, the Navy has armored significant shoreline, built massive overwater structures, permanently destroyed acres upon acres of seafloor, spilled great amounts of oil, and greatly increased vessel traffic and vessel exclusion zones. These activities result in degraded habitat, diminished fish production, collisions with and loss of crab pots and other gear, increased fishing effort, temporary or long term avoidance of traditional fishing areas, and diminished harvest, at a time when the Tribe’s fisheries are already greatly diminished and are not providing the Tribe with a moderate living. These injuries to the treaty rights will grow if the Navy proceeds with its plans to increase the frequency and geographic scope of training and testing exercises in Puget Sound. When combined with the numerous other construction project and submarine reassignment proposals of which the Tribe is aware, these impacts are simply too great for the Navy to simultaneously meet its obligations under the Treaty and trust responsibilities to the Tribe. Significant downscaling and/or abandonment of certain activities and projects, such as the Electro-Magnetic Management Range proposed at NBK-Bangor, is necessary for the Navy to honor its duties to the Tribe.</p> <p>The Bangor waterfront alone currently includes seven major structures and supports significant naval vessel operations. In the past four years, the Navy has proposed—and, in some cases, has begun to implement—at least eleven additional major construction projects or operational shifts within the Port Gamble S’Klallam Tribe’s U&A. These</p>	<p>The Navy acknowledges and respects the reserved treaty rights of the Port Gamble S’Klallam Tribe and other tribes and remains committed to fulfilling its government-to-government consultation responsibilities and addressing Tribal concerns as part of its ongoing consultations with the Port Gamble S’Klallam Tribe.</p> <p>In Chapter 4 (Cumulative Impacts), the EIS/OEIS considers the cumulative impacts to the environment from other relevant past, present, and reasonably foreseeable future actions (federal, state, local and private) in addition to the proposed action.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>projects include:</p> <ul style="list-style-type: none"> • Repair and replacement of 138 piles at the first Explosives Handling Wharf; • Construction of and operations at a second Explosives Handling Wharf (EHW-2), including 6.3 acres of overwater structure, 1,250 piles, and additional vessel traffic in Hood Canal; • Permanent moorage of a new research barge, which is half an acre in size and five times the size of the existing research barge, and construction of new mooring facilities; • Construction of and operations at the proposed Service Pier Extension, adding up to 1.82 acres of overwater structure and up to 700 more pilings to the already massive Service Pier; • Relocation of the SEAWOLF Class submarine SSN-21 (SEAWOLF) submarine from NBK-Bremerton to NBK-Bangor, which will result in even more vessel traffic from the submarines and their security convoys in Hood Canal and destruction of more tribal fishing gear; • Relocation of the SEAWOLF Class submarine SSN-22 (CONNECTICUT) submarine from NBK-Bremerton to NBK-Bangor, which will result in even more vessel traffic from the submarines and their security convoys in Hood Canal and destruction of more tribal fishing gear; • Construction of the Land-Water Interface, including in-water fill, up to 136 pilings, two large overwater structures, and a terrestrial structure in the middle of the Bangor Beach, where a cooperative agreement with the Navy is in place and tribal shell-fishing activities are ongoing; • Construction and operation of the Electromagnetic Management Range (EMMR), which will interrupt tribal fishing with little to no prior notice to tribal fishermen and permanently destroy a portion of an actively harvested geoduck bed; • Construction of a Coast Guard Station dock in Port Angeles Harbor, which will increase vessel activity in the Harbor and permanently destroy important rock fish habitat; • Indian Island piling replacement, which will impact forage fish spawning habitat; and • Testing and training exercises occurring throughout tribal U&A, which results in closures of U&A, increased vessel traffic, and gear loss, among other impacts. <p>All of these projects occur within the Port Gamble S'Klallam Tribe's usual and accustomed fishing areas, and all of the projects affect the Tribe's treaty rights in one way or another. Most of the projects have obvious detrimental effects on tribal resources and treaty rights, and these effects are likely to last for decades into the future. For example, the proposed EMMR threatens to displace tribal fishermen from frequently used fishing grounds with little to no prior notice before a submarine and its safety detail enter the course. As described earlier, submarines and their entourages regularly run</p>	

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Commenter	Comment	Navy Response
	<p>over and destroy crab pots and other fishing gear. Moreover, naval convoys disrupt fishing activities during limited openings. Other projects recently proposed also detrimentally affect treaty fishing and tribal resources. For instance, the proposed Service Pier Extension threatens to destroy even more nearshore habitat, harming juvenile and adult salmonid migration and benthic species, and the proposed Land Water Interface threatens to destroy or make inaccessible shellfish beds currently harvested by tribal members. This is just a sampling of long-term impacts to tribal resources and treaty rights even without increased training and testing exercises in Puget Sound. In addition, impacts from infrastructure construction—such as in-water noise, sediment transfer, and increased construction vessel traffic—are likely to be acute over the next few years. The Navy’s cumulative effects perfunctory analysis does not disclose the extent of the Navy’s impact on the Port Gamble S’Klallam Tribe’s treaty right to fish. See DEIS at 4-47 (“As discussed in Section 3.11 (Native American and Alaska Native Traditional Resources), impacts are not expected on traditional resources, such as usual and accustomed fishing areas, because inaccessibility to areas of co-use would be temporary, and impacts to availability of marine species are not expected.”).</p> <p>Standing alone, each of the construction projects, operational shifts, and naval exercises mentioned above has a significant effect on treaty rights and natural resources. The impacts are amplified when examined collectively. Over the past few decades, Puget Sound, and especially Hood Canal, has become increasingly industrialized, its shoreline increasingly hardened and shaded, and its waters increasingly congested. The Navy’s infrastructure and operations contribute greatly to these trends. Tribal fishers feel these impacts when there are not enough salmon to harvest, when fishing is disrupted or gear lost as a result of naval vessel traffic and operational activities, and when shellfish beds are closed for security or contamination reasons. For the reasons set forth in these comments, the Navy’s conclusion that its training and testing exercises, even when greatly increased, will not contribute to the cumulative effects of the Navy’s activities in the Tribe’s U&A is in error. Because the Navy’s cumulative impacts analysis does not disclose the deleterious impact the Navy’s projects have had on treaty rights in the aggregate, the DEIS fails to comply with NEPA.</p>	
<p>PGST-16</p>	<p>The Tribe is extremely concerned that the Navy’s past, present, and proposed activities in its Usual and Accustomed Areas, including increasing training and testing exercises, incrementally threaten the Tribe’s treaty right with death by a thousand cuts. As the Tribe’s trustee, the Navy cannot allow that to happen. To summarize, the treaty fishing rights of the Port Gamble S’Klallam are a “sacred entitlement” promised to them in exchange for their part of the vast territory that is now Washington State.⁵⁰ Having promised to secure the Tribes their fisheries, the United States, including the Navy, has a fiduciary duty to fulfill that promise and protect the Tribe’s treaty rights. Exercising that trust responsibility requires the Navy to analyze and select action alternatives that do not add to the already great collective impact of the Navy’s actions on the Port Gamble</p>	<p>The Commanding Officer of Naval Base Kitsap invited both the Jamestown S’Klallam Tribe and the Port Gamble S’Klallam Tribe to consider initiation of government-to-government consultation (letters dated January 17, 2014). The Navy appreciates the initiation of government-to- government consultation by both Tribes on this proposed action. The Navy remains committed to fulfilling our government-to-government consultation.</p>

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Commenter	Comment	Navy Response
	<p>S’Klallam Tribe’s treaty rights. Consequently, the Tribe believes government-to-government consultation is necessary to discuss mitigation needed to redress the Navy’s significantly increased training and testing activities in the Tribe’s U&A.</p> <p>50 Shellfish I, 873 F. Supp. at 1435.</p>	
<p>PGST-17</p>	<p>III. The Navy failed to consider other important cumulative direct and indirect effects on various natural and cultural resources in its analysis.</p> <p>NWTT activities directly, indirectly and cumulatively impact resources, leading to damaged marine sediment, declined water and air quality, and degraded marine habitats and cultural resources over time. The DEIS should include an adequate scope of the effects from past, present and future projects on these resources and the Navy should assess and monitor the entire Puget Sound ecosystem to more accurately determine true effects. Cumulative effects from both the NWTT project itself, as well as from other Navy and non-Navy projects in the Tribe’s usual and accustomed area will likely have significant adverse effects on natural and cultural resources. Every five years, as the Navy increases the tempo and level of existing NWTT exercises and adds new exercises, the environmental impacts to natural and cultural resources will increase.</p> <p>Cumulative effects from increased acoustic sonar and other acoustic devices, underwater explosions, weapons firing, aircraft noise, vessel noise, electromagnetic signals, target strikes, in-water device strikes, expended materials, seafloor devices, cables and wires, release of air pollutants, explosives, metals, chemicals and other materials, physical disturbance, limited accessibility, underwater energy and physical interactions will likely impact natural and cultural resources and tribal fisheries in the Tribe’s usual and accustomed area. In addition to these proposed NWTT activities, past, current, and future Navy and non-Navy projects in the Hood Canal, Admiralty Inlet, Strait of Juan de Fuca and other areas should also be considered in the analysis of environmental effects. The proposed NWTT project, as well as other projects in aggregate located within the usual and accustomed area of the Port Gamble S’Klallam Tribe, will potentially have permanent and long-term cumulative impacts.</p> <p>The DEIS admits to some impacts on sediments and water quality, air quality, marine habitats, sea turtles, birds, marine invertebrates, fish, cultural resources, Native American and Alaska Native Traditional Resources, socioeconomic resources, public health and safety from NWTT stressors (DEIS Table F-5: Stressors by Resource). However, the DEIS does not consider the full and significant effect of NWTT activities to all of these resources cumulatively over time. As an example, under the cumulative effects chapter of the DEIS the Navy states,</p> <p>Based on the analysis presented in Section 3.9 (Fish), impacts of Alternatives 1 and 2 that might contribute to cumulative impacts on fish include mortality, injury, and disturbance or behavioral modification. Mortality or injury could be caused by underwater explosions or vessel strikes. Injury, in the form of PTS, could also be caused by sonar</p>	<p>The EIS/OEIS considers the cumulative impacts to the environment from other relevant past, present, and reasonably foreseeable future actions (federal, state, local and private) in addition to the proposed action. Sections 3.11.3 (Environmental Consequences) and 4.4.13 (American Indian and Alaska Native Traditional Resources) of the EIS/OEIS provides analysis of the potential for the proposed action to impact access, availability of marine resources, and fishing gear.</p>

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Commenter	Comment	Navy Response
	<p>use. The remaining stressors analyzed in Section 3.9 (Fish) are not expected to result in mortality. The incremental contribution of these remaining stressors to cumulative impacts on fish would be negligible. (DEIS Section 4.4.11.1 Impacts of Alternatives 1 and 2 That May Contribute to Cumulative Impacts).</p> <p>The above statement, which represents a typical DEIS analysis for all resources, seems to minimize the cumulative effects of the proposed NWTT activities on fish, stating that each individual stressor may affect but is not likely to adversely affect the resource (DEIS Table ES-2: Summary of Environmental Impacts for the No Action Alternative, Alternative 1, and Alternative 2). However since each stressor may individually affect fish, together in aggregate all of the individual stressors may cumulatively adversely affect this resource as well as other natural resources particularly as they increase in tempo and magnitude over time. By introducing the NWTT activities incrementally every 5 years as individual non-significant environmental effects the Navy minimizes the increasing direct and indirect effects on the environment and the likelihood of adverse effects increasing cumulatively.</p> <p>According to the DEIS (Chapter 4 Cumulative Effects), NWTT explosions and the byproducts of explosions and combusted propellants, as well as unexploded ordnance, non-combusted propellant, metals, chemicals and other materials will have impacts on the marine sediment and water quality in the project areas. Increased criteria pollutant emissions and hazardous air pollutant emissions from vessels, aircraft and munitions will impact air quality. Acoustic stressors (underwater detonations) and physical disturbance or strikes (interactions with vessels and in-water devices, military expended materials, or seafloor devices) will affect marine habitats. Potential impacts include localized disturbance of the seafloor, cratering of soft-bottom sediments, and structural damage to hard-bottom habitats. Impacts on marine mammals may include mortality, injury, and disturbance or behavioral modification, caused by underwater explosions or vessel strikes, sonar use, noise and pollution. Cumulative impacts to sea turtles may include mortality, injury, disturbance or behavior modification caused by underwater explosions, vessel strikes, sonar use, noise, pollution and habitat loss. Impacts to birds may include mortality, injury, disturbance or behavioral modification from underwater explosions, air strikes or vessel strikes, noise, pollution, and habitat loss. NWTT activities such as underwater explosions, interactions with vessels and in-water devices, military expended materials or seafloor devices could also affect marine vegetation, including localized disturbance and mortality, according to the DEIS. Acoustic stressors (tactical acoustic sonar, other acoustic devices, pile driving, underwater explosions, weapons firing noise, aircraft noise, vessel noise), electromagnetic stressors, physical disturbance or strikes (vessels and in-water devices, military expended materials, seafloor devices), entanglement (cables and wires, parachutes), and ingestion (military expended materials) may affect marine invertebrates. Underwater explosions or vessel strikes, sonar use, noise and pollution may cause fish mortality, injury, disturbance or behavioral</p>	

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Commenter	Comment	Navy Response
	<p>modification.</p> <p>According to the Environmental Law Institute, cumulative impacts result when the effects of human activities and uses amass and affect resources and ecosystems. From the ecosystem perspective, the term “cumulative impacts” refers broadly to the net effect of all human activities across economic sectors and legal jurisdictions.⁵¹ Although the above NWTT impacts and other project impacts within the project area in aggregate are likely to have a significant effect on the ecosystem according to the Environmental Law Institute definition, the Navy’s DEIS clearly minimizes the cumulative effects of these direct and indirect impacts. In every case, the Navy’s DEIS concludes that the incremental contribution of Alternatives 1 and 2 to cumulative impacts would be negligible rather than significant. The Navy’s analysis considers only the incremental effects of each individual stressor on each resource separately, rather than assessing the broader cumulative effects of all human activities on the ecosystem as a whole.</p> <p>In addition to the NWTT exercises, the increased vessel traffic associated with these exercises will have a significant cumulative effect in the Tribe’s usual and accustomed area. Vessel activity from all projects in aggregate will impact tribal fisheries and access to traditional fishing and harvesting areas throughout the Hood Canal. Cumulative vessel traffic limits harvesting and fishing during scheduled fish and shellfish openings, by requiring that fishing boats leave or stay away from particular areas of the Hood Canal to avoid vessel activity. Tribal fishers and harvesters also face the increased threat of lost or damaged gear from increase vessel traffic through fishing and harvesting areas.</p> <p>With regard to cumulative effects on cultural resources, the DEIS states, Impacts on submerged cultural resources from other actions would typically be avoided or mitigated through implementing federal agency programs. However, impacts could occur if avoidance or mitigation measures are not implemented or if inadvertent disturbance or destruction of unidentified resources occurs. Disturbance or destruction of submerged prehistoric sites would diminish the overall archaeological record and decrease the potential for meaningful research on Paleomarine traditions (6,500–5,000 Before Present) and early explorers of the Northwest coast (1700s–1800s) occupations. Disturbance or destruction of submerged historic sites, including shipwrecks, would diminish the overall record for these resources and decrease the potential for meaningful research on these resources. Based upon the analysis in Section 3.10 (Cultural Resources), when considered with other actions, Alternatives 1 and 2 would contribute to and increase the cumulative impacts on submerged prehistoric and historic resources. Further analysis of cumulative impacts on cultural resources is not warranted. (DEIS Section 4.4.12.3 Cumulative Impacts on Cultural Resources).</p> <p>In the above statement the Navy admits that NWTT activities would contribute to and increase the cumulative impacts of submerged cultural resources, but then goes on to say that further analysis is not warranted. Without a full assessment and complete analysis of existing submerged cultural resources, NWTT activities are likely to disturb or</p>	

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Commenter	Comment	Navy Response
	<p>destroy these important nonrenewable resources. It is essential that the Navy conduct a more comprehensive evaluation of submerged cultural resources and make every effort to avoid identified cultural resource areas.</p> <p>The cumulative effects of NWTT activities and all projects in Hood Canal in aggregate will have significant adverse effects on adjacent habitats, species abundance and distribution, and will impact ecosystem structures and functions at scales beyond the proposed project boundaries. The Navy should consider the cumulative impacts of vessel traffic, waves, and wakes, the cumulative destruction of habitat, stresses on aquatic species, risks of spills and releases, and other impacts from vessel activities over time. In the aggregate, the Navy’s projects and many other activities in the Hood Canal have a significant effect on the timing, location, quality and quantity of harvest for tribal members. The EIS for the proposed NWTT should take account of contributions toward the cumulative effects of activities encroaching on tribal resources and fisheries within the usual and accustomed areas of the Port Gamble S’Klallam Tribe.</p> <p>51 Environmental Law Institute, <i>Managing Our West Coast: The Cumulative Impacts Challenge</i>, 2011.</p>	
<p>PGST-18</p>	<p>IV. The Navy Failed to Examine a Reasonable Range of Alternatives, and its No Action Alternative is Improper.</p> <p>An agency must consider in its NEPA documents “alternatives to the proposed action.” 42 U.S.C. § 4332(2)(E); 40 C.F.R. § 1508.25(b). NEPA also requires that the agency “present complete and accurate information to decision-makers and to the public to allow an informed comparison of the alternatives considered in the EIS.” <i>Natural Res. Def. Council v. U.S. Forest Serv.</i>, 421 F.3d 797, 813 (9th Cir. 2005). The Council on Environmental Quality (CEQ) regulations describe the alternatives section as the “heart” of the EIS, and require that an EIS’s alternatives section “[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.” 40 C.F.R. § 1502.14. Regarding alternatives rejected for full evaluation, a court asks “whether the summary rejection of these [alternatives] was unreasonable, such that the EA failed to consider a reasonable range of alternatives.” <i>Surfrider Found. v. Dalton</i>, 989 F. Supp. 1309, 1328 (S.D. Cal. 1998), <i>aff’d per curiam</i>, 196 F.3d 1057 (9th Cir. 1999). A “viable but unexamined alternative renders [the EIS] inadequate.” <i>Natural Res. Def. Council v. U.S. Forest Serv.</i>, 421 F.3d 797, 813 (9th Cir. 2005).</p> <p>In examining the reasonableness of an EIS’s alternatives and elimination of alternatives from analysis, a court first looks to whether the “Purpose and Need” was reasonable, and then whether the alternatives considered were reasonable in light of that goal. <i>Surfrider Found.</i>, 989 F.Supp. at 1327. An agency may not define its objectives in such unreasonably narrow terms that only one course of action would satisfy the purpose and need. See, e.g., <i>Citizens Against Burlington v. Busey</i>, 938 F.2d 190, 196 (D.C. Cir. 1991); <i>Env’tl. Protection Information Ctr. v. Blackwell</i>, 389 F.Supp.2d 1174, 1199 (N.D.</p>	<p>The Navy’s Purpose and Need is stated in Section 1.4 (Purpose of and Need for Proposed Military Readiness Training and Testing Activities). The Navy’s selected alternatives must all meet the Purpose and Need, resulting in the alternatives analyzed in the EIS/OEIS.</p> <p>The EIS/OEIS complies with NEPA requirements. Please refer to Section 2.5.1 (Alternates Eliminated from Further Consideration) for a full discussion of the rationale used for determining or rejecting alternatives for consideration.</p> <p>Alternative locations were considered and eliminated from further discussion as described in Section 2.5.1.1 (Alternative Locations). Temporal or geographic limitations on where the Navy could train and test were discussed in Section 2.5.1.3 (Alternative with Temporal or Geographic Constraints within the Study Area).</p> <p>The Navy adequately and accurately described the Purpose and Need (Section 1.4) and the Proposed Action and Alternatives (Chapter 2).</p> <p>In response to the comment that the EIS includes in the baseline activities that have never been analyzed under NEPA, the Navy explains in Section 2.7 (Alternative 1: Adjustments to the Baseline and Additional Weapons, Platforms, and Systems) that those activities are not analyzed in the No Action Alternative, but only in Alternatives 1 or 2.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>Cal. 2004) (holding purpose and need must not be so narrow as to make selection of an alternative a “foreordained formality”). Because the statement of purpose and need sets the stage for the range of alternatives an agency must examine, it must not be so narrow as to artificially limit the alternatives considered. See, e.g., City of Carmel-by-the Sea v. U.S. Dep’t of Transp., 123 F.3d 1142, 1155 (9th Cir. 1997).</p> <p>The Navy failed to examine a reasonable range of alternatives because it examined only the No Action Alternative and action alternatives that would increase the frequency, duration, and geographic scope of training and testing exercises in the action area, including in Inland Waters. While the Tribe understands that some amount of training and testing must occur in its U&A in order to ensure national security needs are met, the Navy should also have considered an alternative that would reduce the impact of its activities in tribal U&A. Such an alternative would include eliminating testing and training exercises that are obsolete or ineffective, ensuring as many activities as possible occur within existing waterfront restricted areas, and directing other activities to areas outside of all tribal U&A. Instead, both of the action alternatives carry forward all, or substantially all, of the existing activities and add many more such activities. Finally, the No Action alternative is inaccurate because it includes in the baseline activities that have never been analyzed under NEPA. See ES-8 (EIS will “[a]nalyze the potential environmental impacts of training and testing activities in additional areas (areas not covered in previous documents) where training and testing historically occur, including Navy ports and naval shipyards.”). These activities should be included in the action alternatives, so that the activities are measured against the legal baseline and their impacts are fully analyzed, which has never before happened in a NEPA analysis.</p>	
<p>Port Gamble S’Klallam Tribal Historic Preservation Office</p>	<p>Thank you for contacting the Port Gamble S’Klallam Tribal Historic Preservation Office for review of the proposed increase in Naval Training and Testing Exercises. Port Gamble S’Klallam Tribal Resolution 11-A-073 outlines the Port Gamble S’Klallam Tribe’s definition and management priorities concerning cultural resources within the Tribes Adjudicated Usual and Accustomed Area and Traditional and Historic Use Areas. Tribal Resolution 11-A-73 was passed to protect historic properties, including archeological resources and other cultural resources as defined by the Port Gamble Tribe in resolution 11-A-073. To protect these irreplaceable cultural resources, the Port Gamble S’Klallam Tribal Historic Preservation Office reviews proposed project activities within the Tribe’s Adjudicated Usual and Accustomed Area in consideration of the impacts that proposed undertakings may have on cultural resources.</p> <p>The Tribe looks forward to working closely with the United States Navy through the Section 106 consultation process in the development of the Area of Potential Effect in order to provide the greatest degree of protection for Port Gamble S’Klallam cultural sites, and traditional resources throughout the proposed training and testing area. Should Cultural Resources be impacted through this proposed undertaking the Port Gamble S’Klallam Tribal Historic Preservation Office will exercise its legal right under</p>	<p>The Navy has initiated the National Historic Property Act Section 106 process and has defined the area of potential effect (APE) for NWTT as the entire area proposed for training and testing (the NEPA study area) and is consulting with interested parties and affected tribes to further refine the APE. The Navy will solicit information about specific properties of religious or cultural importance to the Port Gamble S’Klallam Tribe where the NWTT APE overlaps the tribe’s traditional territory.</p> <p>The Navy also acknowledges the PGST ‘s opinion that project-by-project and APE-specific consultation under the Section 106 process is not an adequate framework to address direct, indirect, and particularly cumulative effects with regard to properties of traditional importance, especially those that are part of their traditional maritime landscape. Additionally, the Tribe has indicated a desire for a more holistic approach in regard to overall Navy environmental planning. Other tribes, agencies, regulators, and NEPA and NHPA practitioners are currently struggling with the same challenges, exacerbated by the</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>Section 106 of the National Historic Preservation Act to participate as a consulting party and provide direction and comments on this proposed undertaking.</p> <p>Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. §§ 470 et. seq.) requires federal agencies to identify historic properties (which include archeological sites, Traditional Cultural Properties, and Traditional Native American Cultural Landscapes) within a proposed project's Area of Potential Effect (APE). 36 C.F.R. § 800.4(a) states that an APE is to be determined in consultation with the SHPO/THPO.</p> <p>An APE is defined in § 800.16(d) as: "The geographic area, or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." The Advisory Council on Historic Preservation (ACHP) offers further clarification of the definition of an APE stating that</p> <p>In developing the APE for an undertaking, consideration must be given to those effects that will occur immediately and directly as well as those that are reasonably foreseeable and may occur later in time, be farther removed in distance or be cumulative, but still resulting from the undertaking.</p> <p>The APE is not static but should be adjusted as a federal agency further develops the details of the undertaking and learns more about potential historic properties, and how they may be affected. The input of the consulting parties is crucial to this informed revision and refinement of the APE throughout Section 106 review.</p> <p>The Port Gamble S'Klallam Reservation is located on the eastern shore of Port Gamble Bay on the eastside of the northern part of Hood Canal within the testing and training area. The Tribe's usual and accustomed fishing areas are spread throughout the proposed testing and training area. From Hood Canal and through the Strait of Juan De Fuca there are multiple intertidal and sub tidal and marine cultural resource sites that offer unique historic insights into S'Klallam history and are of paramount cultural importance for the Port Gamble S'Klallam Tribe. These sites are also critical habitat for traditional resources. Many of these sites derive cultural and historic integrity from their critical role as gathering sites based on their unique habitats.</p> <p>Port Gamble S'Klallam Tribal members maintain deep cultural, historical and ecological knowledge about a wide-range of traditional harvest sites and areas throughout their usual and accustomed area. Consequently the marine waters used by Tribal fishers are composed of a network of cultural sites traditional resources and traditional resource harvest sites that are also cultural sites eligible for the National Register Eligible as Traditional Cultural Properties and Traditional Native American Cultural Landscapes. Cultural features within the Port Gamble S'Klallam maritime cultural landscape, spread throughout the proposed Northwest testing and training area spread throughout the</p>	<p>fact that (1) landscapes are not currently eligible for listing in the National Register, (2) that the National Park Service and Advisory Council on Historic Preservation are attempting to formally define traditional landscapes, and (3) there is a current lack of specific regulations or actionable guidance for how to address traditional cultural landscapes within the Section 106 framework.</p> <p>Accordingly, at a staff level at least, the Navy acknowledges that these challenging issues would be better addressed separately in a framework outside individual projects or Navy actions. There are a number of options for the THPO and Navy to consider, e.g., a NHPA 106 Programmatic Agreement pursuant to 800.14(b). The Navy looks forward to continuing this dialog with tribal staff.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>proposed Northwest Testing and Training area and are located in submerged, near shore, intertidal, and marine settings. Cultural features include but are not limited to clam and oyster beds and fishing stations, landmarks, and camps, underwater outcroppings, reefs, kelp beds.</p> <p>Many Traditional Cultural Properties are natural objects, or appear to have had little or no visible modification by humans. Yet a natural object, a traditional salmon set net site, shellfish beds, a yew tree, a kelp bed, or an underwater rock outcropping may be eligible for the National Historic Register based on local cultural and historic significance. The National Register Bulletin for Evaluating Traditional Cultural Properties (Parker and King 1998) states that the integrity of Traditional Cultural Properties are grounded in the relationship a community maintains with a site, feature, object or district. It is the identified property that is evaluated for its eligibility to the National Register, not the cultural practice. Yet, it is the relationship that a community maintains with the identified property that gives a potential property its integrity that qualifies it for the National Register of Historic Properties. It is the active engagement with a property by a community that gives the property its cultural integrity.</p> <p>Across the testing and training area are different sites that have unique cultural and historical distinctiveness for Port Gamble S'Klallam tribal members. Some sites have distinct and clear associations with important aspects of tribal history. Other sites have particular associations with particular Port Gamble S'Klallam families and significant associations with historic individuals significant in Port Gamble S'Klallam history. Other significant harvest sites may appear to lack individual distinction but are an integral part of broader traditional cultural network of maritime and marine cultural sites. The unique qualities of many of these sites meet multiple National Register Criteria as set forth in the National Register regulations (36 CFR Part 60) It is for this reason and others that such sites are such an integral dimension of Port Gamble S'Klallam identity and Being.</p> <p>It is the opinion of The Port Gamble S'Klallam Tribal Historic Preservation Office that the that the proposed expansion of training activities and testing exercises have the-potential to cause inadvertent impacts on cultural resources and Native American Traditional Resources that are harvested from intertidal, sub tidal and marine cultural landscape features that are also traditional cultural properties and Native American traditional cultural landscapes.</p> <p>The Tribe looks forward to working with the U.S. Navy through the Section 106 consultation process to address potential impacts to maritime cultural resources and to assist the Navy fulfill it's obligation to the National Historic Preservation Act and in order to protect national security.</p>	
<p>Quileute Tribe - 01</p>	<p>The Quileute Tribe has reviewed the materials provided by the Navy. We would like to thank you for being willing to provide us with the two-volume "hard copy". While all the materials are available by a DVD or at publicly at www.NWTIEIS.com, it is easier to</p>	<p>The Navy remains committed to fulfilling its government-to-government consultation responsibilities and addressing communications and other concerns as part of its ongoing</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>review, cross-compare materials in different chapters, and to mark sections for questions when one has the printed version. We also appreciate the time your staff gave to answer our questions along the way. Finally, thank you for the short extension we needed to achieve policy level review before sending our comments.</p> <p>We certainly recognize the need for these military exercises and support the Navy's engagement in them. However, as you surely know, they are occurring in an ecosystem still capable of supplying food, and where there is commercial fishing activity by the Washington State coastal treaty tribes. From a treaty perspective, the continued access to this off-reservation food supply and the chance to earn a moderate living from it (as later stated by the United States Supreme Court) were guarantees by the federal government when the tribal lands and waters were traded to the United States.</p> <p>It is our intent here to show you where we have areas of concern and how this document might be clearer to the reader in the future, when you next engage in a DEIS for the area. Federal regulations provide that we have the treaty right to fish between Sand Point (latitude 48° 07' 36" N) and the Queets River (latitude 47° 31' 42" N), out 40 nautical miles to longitude 125° 44' 00" W. Those last ten nautical miles can be particularly important for access to certain groundfish, such as halibut and blackcod. They might also be in the zone of missile activity.</p> <p>The Native American and Alaskan Native Section (3.11) addressed warnings to fishermen when native fishers are exercising their treaty rights in the ocean. They are advised to access USCG marine channel 16, and Notice to Mariners on the USCG website (http://www.navcen.uscg.gov/?pageName=InmMain) before going out, in order to avoid any harm from the training or testing activities. We shall work to make sure all our captains (and tribal members, generally) are advised of this, if they are not already. We can also ask our marina office to have this handy for others who use the marina in La Push.</p> <p>However, we have an additional, newly realized concern that may justify further telephone conferences with your staff. The 13 Treaty Tribes that fish commercially for halibut use very narrow time windows of two days or less, beginning in the first part of March around the date initially set by the IPHC. There are three successive seasons (see some sample regulations, attached) set by agreement. Active fishing on a commercial basis continues into May. Dates for the four Pacific tribes are sometimes changed at the last minute because of weather, per conferencing and agreement. We are not sure a week's notice (that USCG advisory page) will protect the four Pacific Tribes' treaty fishing opportunity <i>and</i> their persons. We note on page 3.0-42 of the DEIS that "While these estimates provide the average distribution of vessels, actual locations and hours of Navy vessel usage are dependent upon mission requirements, deployment schedules, annual budgets, and other unpredictable factors. Consequently, vessel use can be highly variable." Language similar to that is used throughout the DEIS. We understand the Navy's need for flexibility and confidentiality, but how can we protect our</p>	<p>consultations with the Quileute Tribe.</p> <p>As has been the Navy's practice, for activities proposed to occur in the Pacific Ocean in the area described in the comment (between latitude 48° 07' 36" N and 47° 31' 42" N), absent any unusual circumstances, the Navy has the flexibility to move its events and would not prevent the use of the area by fishing vessels or any other nonparticipants. As stated in the EIS/OEIS in Section 3.13.2.2.1 (Offshore Area), "Inability to obtain a 'clear range' could cause an event to be delayed, cancelled, or relocated." This is especially true of any potentially hazardous events, such as missile firing activities.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>halibut fishers and ensure their fishing opportunity under their treaty, and their safety, in this situation? <i>Please contact us on how to exchange information regarding timely notice of fishing seasons with both short notice of commencement and short duration.</i></p> <p>In reviewing 3.11-17 and 3.11-18 (pages), we observed that the Point No Point Tribes have a close exchange of information with the Navy regarding fishing regulations and changes in them because of emergency. This regards the Dabob Bay Range Complex Sites. In fact, a protocol was developed to exchange timely emails, or other important exchanges, if the weekly schedule was not sufficient. "Any significant emergent changes/updates to this schedule are sent to the points of contact via e-mail as they may occur. The affected Tribes provide a copy of the Annual Regulations for the various Tribal fisheries through the Point No Point Treaty Council to the NUWC Division Keyport. The Point No Point Treaty Council also notifies the NUWC Division Keyport of any emergency regulations that are made during the year."</p> <p>Regarding the Quinault Range discussed right below at subparagraph 3.11.2.4.4, "NUWC Division, Keyport would establish a communication process with the Hoh Tribe, Makah Tribe, Quileute Tribe, and Quinault Nation similar to the process established with affected tribes for the DBRC Site. This would establish points of contact to exchange information on NUWC Division, Keyport testing activity and tribal fishing regulations in order to avoid disruption of tribal usual and accustomed fishing patterns." This contact with our treaty tribes (Neah Bay and Olympia) may be faltering, but is surely important. We welcome a discussion with you on this point at your earliest convenience.</p>	
<p>Quileute Tribe – 02</p>	<p>The other Sections to which we paid particular attention are Sediment and Water Quality (3.1), Marine Habitats (3.3), Marine Vegetation (3.7), Marine Invertebrates (3.8) and Fish (3.9). These are the subjects of most immediate importance to us. With this being an enormous amount of material to fully review, a triage decision was made, to leave subjects such as air quality, marine mammals, turtles, and birds to others with expertise on these topics. We do understand the connectivity of these subjects to the ones we fully reviewed, however, and do not intend to minimize their importance by not having comments on them in particular. We have some brief comments regarding them, at the end.</p> <p>Sediment and Water Quality: One concern we have is the use of materials containing toxic heavy metals that remain in the ecosystem after testing/training. Your staff told ours in a call of 3/19 that the Navy has been using these materials and testing/training out in the Pacific open waters since World War II. On the good side, there is research going on to switch to effective materials that are less toxic in nature. As you know, the toxic heavy metals endure in the ecosystem and can move up the food chain. Microorganisms that live on the seafloor may break them down into smaller components, or corrosion might over time. (Your text references clay's binding capacity but in the fluid marine system, that is unlikely to happen without some time and compression.) As</p>	<p>The Navy uses the best available science in conducting its analysis of potential effects on the environment. As stated in Section 3.1.3.2.3 (Impacts of Metals), several studies were cited in which areas with significantly greater densities of military expended materials than are proposed for NWTT resulted in no or only slight changes in water quality parameters. One of those studies was conducted outside of but close to the Study Area (Nanoose).</p> <p>For impacts resulting from explosives or chemicals other than explosives, the extremely low level proposed for use in the Study Area is explained in Sections 3.1.3.1, 3.1.3.3, and 3.1.3.4.</p> <p>The commenter's concern is about movement of toxic metals through the food chain within its hunting and fishing grounds, and the potential effects on its subsistence. As discussed in Section 3.1.3.2.4.4 (Summary and Conclusions for Metals), the dispersal of toxic metals from expended Navy training materials into bottom sediments is not expected to substantially affect sediment quality; the portion of benthic flora and fauna potentially affected by such metals is expected to be very small. Additionally, the movement of toxic metals through the</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>microorganisms are eaten by marine invertebrates, the metals can move up the food chain. While you presented quantitative charts in Section 3.1, we would like to have a better handle on qualitative information in our fishing grounds. Perhaps next time that will be feasible. Current and climate being different, studies in other parts of the world are not automatically reassuring to us. You have a good table for Hood Canal, at 3.1-3. Perhaps for the next DEIS, our area can have a chart like that one, or like the one from Puerto Rico in Table 3.1-17. If there are no data for a qualitative chart for the Pacific Offshore, it suggests a data gap and a monitoring need, since Navy activities are occurring there and your comparable charts in other areas demonstrate recognition of the importance of such data. On another note, Figure 3.1-4 reflects water quality on the Pacific Coast and in the Sound, but does not extend up to our area. For the future, we test water quality regularly in our Port and send the data to EPA STORET. If you ever want it for baseline next time, we can send it to you as well. We use protocol that is EPA-approved and have several years of data by now.</p>	<p>marine food chain has not been broadly demonstrated.</p> <p>In reality, for trace metals biomagnification of contaminants in aquatic organisms is rare and at present is only known to occur regularly for methyl mercury, radiocesium, and perhaps polonium.</p> <p>As explained in Section 3.1.3.2.4.1 (No Action Alternative), because of slow corrosion rates and prevailing ocean currents, chemical and physical changes in sediment or water quality would not be detectable beyond the vicinity of the corroding metals, and potential effects of the Proposed Action would not be significant.</p> <p>Thank you for the offer of water quality data.</p>
<p>Quileute Tribe – 03</p>	<p>Marine Habitats: We thought substrate occurrence and types were rather generalized for the Offshore Area. While the general <i>kinds</i> of substrates are broadly and briefly discussed in subsections 3.3.2.3 through 3.3.2.5.1 (offshore), just where these substrates are found on our coast cannot be deduced from the large-scale illustrations at 3.3-3 or 3.3-4. It would improve our understanding of potential impact to habitat, to have more detailed maps. You have advised us that a far more detailed discussion of the seafloor will occur in a forthcoming Navy-NMFS Essential Fish Habitat Assessment. From the Navy's perspective, treaty tribes apparently won't have a chance to simultaneously engage in discussions. So we will look to our federal trustee at NOAA to find out how we can provide timely comment.</p>	<p>Because most of the Navy's proposed activities could be conducted throughout the offshore area, across all different bottom types, it was determined to be sufficient for the analysis to identify the bottom types on a similar scale. As noted in the comment, this scale does not allow for precise localization of substrates. However, as determined in the analysis, the proposed activities would not be expected to affect marine habitats, and the surface area of bottom substrate affected would be a fraction of the total training area available in the Study Area.</p> <p>The Navy has provided the EFHA to the Quileute Tribe and also made it available on the NWTTEIS.com website.</p>
<p>Quileute Tribe – 04</p>	<p>Marine Vegetation: In this Section, which goes into types of algae and flowering plants in some detail, we are again advised that the forthcoming Navy-NMFS Essential Fish Habitat Assessment will have more information for us. Section 3.7.3.4.1 advises that the "use of explosives and other impulse sources ... military expended materials, and seafloor devices during training and testing activities may adversely affect EFH by reducing the quality and quantity of marine vegetation that constitute EFH or Habitat Areas of Particular Concern." So we again, will contact NOAA to learn how we can obtain more information and provide timely comment.</p>	<p>The Navy has provided the EFHA to the Quileute Tribe and also made it available on the NWTTEIS.com website.</p>
<p>Quileute Tribe – 05</p>	<p>Marine Invertebrates: This section provides a lengthy discussion of the phyla (forams, sponges, corals, worms, bryozoans, mollusks, shrimp/crab, and stars/urchins) and their very general habitat (seafloor or water column). Reference is made to threats from human activity and climate change. Many of these important habitat or food animals are in decline from causes totally outside the role of the Navy. We acknowledge this. However, while many of these phyla are mobile and can react to "massive disturbance",</p>	<p>The EFHA had not been developed at the time of the release of the Draft EIS/OEIS. The analysis derived from the EFHA is now available and has been included in the Final EIS/OEIS.</p> <p>The EFHA is available for viewing or download on the NWTTEIS.com website.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>some of the benthic ones may not do so well, such as coral. In subsection 3.8.3.3 you allude to this but also, in fairness, to the long-term harmful impact of some trawling. And you acknowledge the decades that might be needed for coral communities to re-establish. In your telephone comments of 3/19, we recall the comment that coral because of where it occurs is unlikely to receive the brunt of impacts. We are not prepared to contradict that and accept this statement. However, in subsection 3.8.3.3.2.4, regarding stressors on sedentary invertebrate beds and reefs, we note: “the use of military expended materials during training and testing activities may have an adverse effect on EFH by reducing the quality or quantity of sedentary invertebrate beds or reefs that constitute EFH or Habitat Areas of Particular Concern. <i>The EFHA states</i> [emphasis added] that the impact to sedentary invertebrate beds would be minimal and long-term to permanent in duration (based on substrate impacts), whereas Impacts to reefs would be individually minimal and permanent in duration within the Study Area.” We thought the EFHA was <i>pending</i>, so are confused by that remark. If it is out, can we review it?</p>	
<p>Quileute Tribe – 06</p>	<p>Fish: In a preliminary set of questions, we asked if there could be a separate discussion of forage fish, because their habitat is usually in a shallower zone, while our commercial fish are benthonic or nektonic and often deeper. You note in a response that they are not specifically called out. Fish are presented by taxonomy, not their role in the ecosystem. What prompted our question was the amount of space given to salmon (3.9.13-3.9.31). (Rockfish also got some space.) Forage fish are important to juvenile salmonids. Your chart, Table 3.9-2 on taxonomic groups, only breaks down habitat for the taxa by “surface, water column, or seafloor”. It might be useful to see what taxonomic groups use waters of a certain depth range. The state is spending a significant amount of money right now to establish spawning information on forage fish for the Pacific coast of Washington. We understand a body of information already exists for the “inland” salt waters. We hope more on this can be discussed in your next DEIS, since some of the tests/training in shallower water may have more potential for impact than in deeper water. While the large fish are critical parts of our economy, their food is the unsung critical part, as well.</p>	<p>The Navy analysis included an examination of potential impacts to all fish, including forage fish. Forage fish are a known primary constituent element (PCE) of salmon critical habitat and were analyzed in the context of their role relative to salmon. The conclusions can be found in the EIS/OEIS in Section 3.9.3.6.6 (Impacts on Fish Habitat).</p>
<p>Quileute Tribe – 07</p>	<p>It appears from 3.9.3.1.3 that too little is known about the long-term impact on fish hearing from explosions. We can't fault the Navy for that. One day perhaps that will be better understood and may be an important consideration. Short-term, it might affect escape from predators, or conversely, the ability of predators to locate prey. We agree the likelihood of a strike is low. In the call of 3/19, we were told that NMFS in its negotiations with the Navy may set numbers for incidental takes or decide what can or cannot be exceeded in, for example, fish kills. We imagine this will come up in that EFH Assessment, which we hope to learn more about in the future.</p>	<p>As stated in Section 3.9.3.1.3.1 (No Action Alternative), it is possible for fish to be injured or killed by explosives; however, long-term consequences from a loss of a few individuals is unlikely to have measureable effects on overall stocks or populations. Therefore, long-term consequences to fish populations would not be expected.</p> <p>A copy of the Navy's Essential Fish Habitat Assessment was mailed to the Quileute Tribe on 4/8/2015.</p>
<p>Quileute Tribe</p>	<p>Regarding ingestion (at 3.9.3.5), some fish might ingest the leftover fragments from</p>	<p>In Section 3.9.3.6 (Secondary Stressors), the EIS/OEIS considered</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
– 08	<p>testing or training, but we suspect there a greater risk from the food chain issue discussed under water quality and sediment, above. You allude to this at the bottom of page 3.9-138: “Large predatory fishes near the seafloor feed opportunistically on or near the bottom, taking fish and invertebrates from the water column and form the seafloor (e.g., crabs, octopus). Bottom-dwelling fishes in the nearshore coasts...may feed by seeking prey and by scavenging on dead fishes and invertebrates .. “</p>	<p>secondary stressors, including ingestion of harmful materials from explosion by-products, unexploded ordnance, metals, chemicals, and other materials. In each of these, any potential effects are very localized and unlikely to impact fish populations.</p>
<p>Quileute Tribe – 09</p>	<p>Those are the Sections of greatest concern to us. However, briefly regarding some others:</p> <p>Air: The document presents charts on the types of emissions and their tonnage released in our area from Navy activity. We have no recommendations for how the Navy might reduce them, assuming that is feasible. We do note that with the rainfall in this area, some of this “air pollution” might well be addressed under the Water Quality Section.</p>	<p>As described in Section 3.2.3.1.2.4 (Summary – Alternative 1) of the EIS/OEIS, the amounts of air pollutants emitted in the Study Area and subsequently transported ashore would be minor because (1) emissions from Navy training and testing activities would be small compared to the amounts of air pollutants emitted by sources ashore, (2) the pollutants are emitted over large areas (i.e., the Study Area is an area source), (3) the distances the air pollutants would be transported are often large, and (4) the pollutants would be substantially dispersed during transport. The criteria air pollutants emitted over nonterritorial waters within the Study Area would be dispersed over vast areas of open ocean and thus would not cause significant harm to environmental resources in those areas.</p>
<p>Quileute Tribe – 10</p>	<p>Marine Mammals: This is perhaps your largest section. A considerable percent involves potential strikes and potential harm from sonar. The sonar has been the subject of litigation. We don't target marine mammal species and we don't have the expertise to challenge the Navy presentations here. There are several groups who have this expertise and who may challenge your content. We will defer to them. We are also mindful of the U.S. Supreme Court decision <i>Winter v. Natural Resources Defense Council, Inc.</i>: “...even if plaintiffs have shown irreparable injury from the Navy's training exercises, any such injury is outweighed by the public Interest and the Navy's interest in effective, realistic training of its sailors.” 555 U.S. 7 at 23 (2008).</p> <p>Sea Turtles: Similarly, we do not target these animals. We understand that the leatherback has been listed under ESA and critical habitat for this coast was designated in 2012. We defer to experts in sea turtles for any appropriate comments on threats to them from Navy activities and how those threats might impact their respective species.</p> <p>Birds: The Quileute are allowed to hunt some species of birds. We also gather seagull eggs. Many of the waterfowl, as well as bald eagles, are tourist attractions that bring visitors to our resort. This document addresses general threats such as entanglement with or ingestion of gear, noise pollution, or habitat loss, at 3.6.2.4. Table 3.6.2 shows the relationship between bird families and gross habitat (inland or offshore). Table 3.6-3 shows the type of test stressors. It lumps habitats together. What we don't see is a breakdown of a bird taxonomic group and the area it uses, and the stress factors for that area. Information is scattered throughout the chapter and it is difficult to pull pieces</p>	<p>Section 3.0.5 (Overall Approach to Analysis) of the EIS/OEIS includes descriptions of the stressors analyzed in the resource-specific sections of Chapter 3 (Environmental Consequences). This section includes information and tables identifying the location of training and testing activities in various parts of the Study Area (e.g., Offshore Area, Inland Waters, and Western Behm Canal Alaska). Table 3.6-5 also summarizes the location and number of activities for stressors applicable to birds. As outlined in Section 3.6.3 (Environmental Consequences), birds were evaluated as groups of species characterized by distribution, body type, or behavior relevant to the stressor being evaluated. Activities were evaluated for their potential effect on all birds in general, on each taxonomic grouping, and on the Endangered Species Act-listed marbled murrelet, northern spotted owl, short-tailed albatross, streaked horned lark, and western snowy plover. In other words, species-specific analyses were conducted for Endangered Species Act-listed birds because these species warrant the most concern based on their current status. The analysis for bird species that are not listed under the Endangered Species Act was conducted at the bird group level. The impact analysis concluded that the effects of Navy training and testing on the birds groups occurring within the Study Area would not be significant.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>together to form an understanding of how a conclusion can be reached, for example, the duck or the cormorant. This presentation problem is one that exists throughout the DEIS. We spot a sentence on page 3.6-72 that species like storm-petrels, albatrosses and shearwaters that forage for prey from the surface may ingest floating plastic debris. But this is the kind of information that would benefit from having a column on taxa, a column on habitat, type of debris or other risk (e.g., explosion), likely to exist, and then rank the risk as adverse, de minimus, or such. It is simply not easy to assess risk or dispute/agree with the Navy, the way material is laid out.</p>	
<p>Quileute Tribe – 11</p>	<p>General: We also find that spreading out information about the Offshore, in short paragraphs throughout a Section discussing all the other places where activities occur, makes it difficult to gage what is going on for the offshore. It is literally spread across a chapter. This DEIS might suffer from the author(s) knowing too much, and not realizing how people not immersed in the format and the background material that leads to conclusions can't jump onto the same bandwagon. It would benefit in the future from charts that link information, as was discussed in Birds, above. That comment applies to a number of sections.</p> <p>Thank you for the opportunity to review and comment on this DEIS. We are not asking for a government-to-government meeting and we have already had a good exchange between staff.</p>	<p>Thank you for your comments. Regarding the organization of the document, there are advantages and disadvantages to various approaches to organizing the information. The Navy determined that to make the analysis easier to follow, organizing by stressor was the best approach. Since this is the first level of organization, the area being analyzed is the second level. The Navy appreciates recommendations on improving the presentation of environmental analyses.</p>
<p>Suquamish Tribe-01</p>	<p>This letter transmits comments from the Suquamish Tribe (Suquamish) on the U.S. Navy's Northwest Training and Testing (NWTT) Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS). As a signatory to the 1855 Treaty of Point Elliott, Suquamish has reserved (not granted) rights to take fish at all "usual and accustomed [U&A] fishing grounds and stations" within its adjudicated U&A. Navy actions proposed by the NWTT EIS/OEIS would take place within the adjudicated U&A of the Suquamish, which includes marine waters of Puget Sound from the northern tip of Vashon Island to the Fraser River in Canada, including Haro and Rosario Straits, the streams draining into the western side of Puget Sound and also Hood Canal. In addition, fish migrations and use of various habitats occur within and extend well beyond the boundaries of the Tribe's fishing U&A. Therefore, increases in Navy activities that occur outside of Suquamish's fishing U&A have potentially negative impacts on the fisheries resources that are important to the tribe. Suquamish has concerns that proposed Navy actions may significantly impact treaty reserved fisheries for finfish and shellfish, as well as harm fish and other marine organisms and their habitats that the tribe depends on for its fisheries and way of life. Suquamish provided comments on a previous Navy expansion (NUWC Keyport Range Complex Extension EIS/OEIS) in a letter submitted to the Navy in March 2009. With respect to the current proposed NWTT, Suquamish submitted a letter to the Navy in April 2012 requesting a government-to-government consultation. In January 2014, Suquamish received</p>	<p>Thank you for the letter. The Commanding Officer of Naval Base Kitsap invited the Suquamish Tribe to consider initiation of government-to-government consultation (letter dated January 17, 2014). The Navy appreciates the initiation of government-to-government consultation by the Suquamish Tribe on this proposed action. The Navy remains committed to fulfilling our government-to-government consultation responsibilities with the federally recognized Tribes in accordance with Navy policies.</p> <p>In the EIS/OEIS, the Navy conducted a thorough analysis of potential impacts to fisheries. As stated in Section 3.12.3.4 (Secondary Impacts), "Analyses in Sections 3.4 (Marine Mammals), 3.8 (Marine Invertebrates), and 3.9 (Fish) concluded that impacts on marine species from training and testing activities are not anticipated. Based on these conclusions, secondary impacts on commercial transportation or shipping, commercial or recreational fishing, subsistence use, or tourism are not anticipated."</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>notification from the Navy of the availability of the NWTT DEIS, and a response to the Suquamish request for government-to-government consultation, identifying the need to coordinate such a meeting. Proposed Action and Alternatives The Navy proposes to conduct training and testing activities, including active sonar and explosives, within the NWTT Study Area, which includes parts of the Inland Waters of Puget Sound. Many, but not all, of the proposed training and testing activities have occurred historically in the NWTT Study Area and have been previously analyzed through NEPA. The Navy carried forward three alternatives for analysis in the DEIS (see Sect. 2.5.2, p. 2-45): 1) No Action - includes current baseline training and testing activities, as well as events that historically occur in the Study Area and have been subject to previous NEPA and Executive Order 12114 analyses. 2) Alternative 1 (Navy's Preferred Alternative) – includes adjustments to types and levels of baseline activities that are the No Action Alternative. This analysis also includes training and testing that would occur as in the past (i.e., according to the No Action Alternative “baseline”), but have not been subject to environmental analyses until now. 3) Alternative 2 – consists of Alternative 1 with adjustments in the tempo of training and testing activities. Under this alternative, all Maritime Homeland Defense training events would increase from one event every other year to one every year.</p>	
<p>Suquamish Tribe-02</p>	<p>Suquamish’s comments focus on sections of the DEIS that pertain to Navy training and testing actions having potential impacts on Suquamish fisheries and natural resources on Inland Waters of the Puget Sound region. Based on a review of the DEIS, Suquamish’s primary concerns regard the following issues at this time (Note: Suquamish may have additional comments based on consultation with the Navy): 1) Potential impact of proposed Navy actions on treaty-reserved fishing, including access to U&A fishing grounds and stations. 2) Potential impact of underwater noise generated by proposed Navy sonar, explosions, and other acoustic stressors on fish, shellfish, and marine mammals. 3) Potential impact to marine habitat and biota from proposed underwater explosions or strikes. 4) Potential cumulative impacts of Navy proposed increases in training and testing activities on the marine environment and to treaty-reserved fishing. 5) Mitigation for impacts. With Alternatives 1 and 2, the Navy proposes significant increases in the frequency of certain types of training and testing (T&T) activities. The DEIS provides a summary of baseline (No Action Alternative) and proposed (Alternatives 1 and 2) training (Table 2.8-1, p. 2-54) and testing (Table 2.8-2 p. 2-58) activities. Suquamish’s main questions and concerns with respect to proposed training in Inland Waters involve potential impacts resulting from the following Navy activities: • Increased mine neutralization – explosive ordnance disposal (EOD) at Crescent Harbor, Whidbey Island, and at Hood Canal • Increased Civilian Port Defense • Precision anchoring at Naval Station Everett, NAVBASE Kitsap Bangor, and NAVBASE Kitsap Bremerton • Sonar maintenance from submarines and surface vessels at NAVBASE Kitsap Bremerton, NAVBASE Kitsap Bangor, and Naval Station Everett Concerns and</p>	<p>Regarding the Suquamish Tribe’s concerns about the various training and testing activities listed in the comment, the analysis of impacts from those activities is included in Chapter 3 (Sections 3.3 for Marine Habitats, 3.4 for Marine Mammals, 3.5 for Sea Turtles, 3.6. for Birds, 3.8 for Marine Invertebrates, and 3.9 for Fish), as further described in the responses to comments that follow.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>questions with respect to proposed testing in Inland Waters involve potential impacts from the following Navy activities: • Torpedo testing at Dabob Bay Range Complex (DBRC) • Unmanned underwater and surface vehicle testing at DBRC and Keyport Range Site • Countermeasures testing at DBRC and Keyport Range Site • Acoustic test facility at DBRC and Keyport Range Site • Pierside acoustic testing at NAVBASE Kitsap Bangor • Performance testing at sea at DBRC • Development training and testing at DBRC • Proof of concept testing at DBRC • Pierside sonar testing at Naval Station Everett, NAVBASE Kitsap Bangor, NAVBASE Kitsap Bremerton</p>	
<p>Suquamish Tribe-03</p>	<p>Impacts to Treaty Reserved Fishing</p> <p>The DEIS at Section 3.11.2.3.2, p. 3.11-16 incorrectly states that “The Suquamish Tribe exercise usual and accustomed (U&A) fishing rights within the Keyport Range Site portion of the Inland Waters”. In addition to the Keyport Range Site, Suquamish has U&A fishing rights as described in the 2nd paragraph of this letter – which includes the marine waters of Puget Sound from the northern tip of Vashon Island to the Fraser River in Canada, including Haro and Rosario Straits, the streams draining into the western side of Puget Sound and also Hood Canal. Suquamish needs to better understand the implications of the Navy’s proposed activities on its fisheries. Suquamish is concerned about potential impacts to their treaty-reserved fishing rights, including access to usual and accustomed fishing grounds and stations, that would result from the proposed increases in the Navy’s training and testing activities, and “closures” to fishing waters. Table 3.11-1 (at Section 3.11.3, p. 3.11-20) indicates substantial increases in the numbers of Navy training and testing activities being proposed in Inland Waters involving vessels. Training activities including vessels would increase from 4 (No Action Alternative) to 28 (Alternative 1), and from 337 (No Action Alternative) to 582 (Alternative 1) associated with testing activities. This concern regarding potential impacts to treaty-reserved fishing activities extends to a number of other Navy activities that would be increased under the Navy’s proposal, including increased use of “in-water devices” (see DEIS Table 3.0-19, p. 3.0-43) such as unmanned vehicles. The DEIS at Section 3.11, p. 3.11-1, for the Navy’s preferred alternative (Alternative 1), concludes the following: “Impacts on Native American ... protected tribal resources and other traditional resources would not occur because inaccessibility to areas of co-use would be temporary, use of seafloor devices could create damage or loss to Native American fishing equipment but would not affect the use of the usual and accustomed fishing grounds, and marine species’ population levels would not be altered to such an extent that tribes could no longer find their target species.” Suquamish questions the above conclusion that the Navy’s activities, despite their increase in frequency and an introduction of new activities, would have no impact to treaty-protected fishing because they would temporarily close usual and accustomed fishing grounds and stations. Suquamish is concerned that the cumulative impacts of the Navy’s proposed increased activities resulting from repeated closed fishing waters may impact Suquamish’s ability</p>	<p>The Final EIS/OEIS has been revised to include the entire range of the U&A fishing rights as described in the comment.</p> <p>Section 3.11.1.3.1 (Tribal Treaty Rights) of the Final EIS/OEIS has been significantly revised to include discussion of Suquamish treaty fishing rights. The discussion in this section is not intended to describe all treaty rights, but only those that could be impacted by the Navy’s proposed activities in the Study Area.</p> <p>The discussion in the Final EIS/OEIS has been revised in Section 3.11.3 (Environmental Consequences) to acknowledge that training activities have the potential to impede Tribal access to U&A fishing grounds (e.g., during transit protection, an important national security concern). It is important to note that those proposed activities relevant to Tribal concerns are merely the continuation of ongoing activities that have been occurring in this same area for years. As the Navy will not be permanently shutting off access to fishing grounds but rather will be minimizing access issues to the maximum extent practicable, the Navy does not expect alternative fishing grounds to be necessary.</p> <p>Section 3.11.3.3 (Loss of Fishing Gear) addresses the potential for loss or damage to fishing gear from the Proposed Action.</p> <p>The Navy will continue to work to improve communication with the tribes about activity in U&A areas. Such communication goes both ways; providing the Navy with information about special tribal activities in these areas will help the Navy to deconflict scheduling when practicable while still accomplishing its mission.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>to access usual and accustomed fishing grounds and stations. The Navy acknowledges “the potential for conflict in timing and access between Navy training activities and desired traditional uses”, and that they “would strive to maintain safety and accommodate, to the extent possible, access to tribes’ usual and accustomed areas” (see Section 3.11.3, p. 3.11-19). Suquamish is also concerned about an increase in the potential for damaging tribal fishing gear as a result of proposed increased Navy training and testing activities. Although a gear damage claim reimbursement process currently exists (Section 3.11.3.3.1, p. 3.11-29), Suquamish requests that the Navy communicate with the Tribe to identify ways to better avoid and minimize the potential for gear damage to occur. The Navy currently notifies Suquamish and other affected tribes of training and testing activities at NUWC Division, Keyport (see Section 3.11.2.4.2, p. 3.11-17). However, it is not uncommon for Suquamish to receive this notification the same day that the Navy plans its activities. The potential for increased conflicts with tribal fisheries may occur commensurate with the proposed increases in these Navy activities. To avoid and minimize impacts to treaty-reserved fishing rights, including access to usual and accustomed fishing grounds and stations, Suquamish would like to work with the Navy in considering a communications protocol including more advanced notice on its training and testing activities, and in identifying means to avoid and minimize impacts to Suquamish fisheries resulting from the proposed training and testing activities (see Section 3.11.2.4.2, p. 3.11-19).</p>	
<p>Suquamish Tribe-04</p>	<p>Impacts from Sonar and other Acoustic Stressors Suquamish has concerns with the proposed increase in active sonar use within Inland Waters (see Table 2.8-1 and Table 2.8-2; and Table 3.8-2). Sonar and other active acoustic stressors associated with training would increase in Inland Waters from 0 hours (No Action Alternative) to 407 hrs./yr. (17 days/yr.) under Alternatives 1 and 2; sonar and other acoustic source testing would increase from 2,354 hrs./yr. (98 days/yr.)(No Action Alternative) to 5,448 hrs./yr. (227 days)(Alt. 1) and 5,939 hrs./yr. (247 days)(Alt. 2). In Alternative 1, surface ship sonar activity would increase from 108 to 140 hrs./yr. In addition, destroyer ships would replace frigates, and destroyers emit more powerful sonar than the frigates (see Section 2.7.1.3, p. 2-47). Contrasted with the open ocean such as Hawaii and Southern California, where the vast majority of scientific field work, research, and monitoring of sonar and marine mammals has occurred (see p. 3.4-278), Puget Sound is relatively shallow, has complex bathymetry, and is narrowly confined by landmasses. Suquamish is concerned that some marine mammals, birds, fish, and shellfish species may be more vulnerable to the impacts from sonar use in Puget Sound waters compared with the open ocean. In addition, the more frequent use (i.e., repeated exposures) of sonar combined with other acoustic stressors in parts of Puget Sound waters may result in cumulative impacts to marine mammals, fish, marine invertebrates, and marine birds with potential behavioral and injury impacts to individuals and populations (see Cumulative Impacts section below).</p>	<p>As shown in Table 2.8-1, nearly all of the Anti-Submarine Warfare training activities would occur in the Offshore Area, well outside of Puget Sound. Those are the activities that include sonar. The only ship hull-mounted mid-frequency sonar training that would take place in Puget Sound would be for pierside sonar maintenance, and the Navy is proposing 12 hours per year. There is lower powered high-frequency sonar training proposed as part of the Maritime Homeland Defense exercise proposed to occur once per year, and sonar testing while ships and submarines are pierside. That testing has occurred for years and is proposed to continue.</p> <p>There is also testing proposed for other acoustic devices in Puget Sound (shown as Inland Waters in Table 2.8-2), however, none of these sound sources are as powerful as hull-mounted sonar.</p> <p>The analysis contained in the EIS/OEIS considers all of these activities and can be found in the following sections: Sections 3.3 for Marine Habitats, 3.4 for Marine Mammals, 3.5 for Sea Turtles, 3.6. for Birds, 3.8 for Marine Invertebrates, and 3.9 for Fish.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
<p>Suquamish Tribe-05</p>	<p>Marine Invertebrates Potential impacts from the Navy’s proposed use of active sonar and other acoustic sources on marine invertebrates are summarized in Table 3.8-2, p. 3.8-19. Although marine invertebrates do not likely detect sound pressure the way some marine mammals and fish do (e.g., unlike fish, they do not possess a gas bladder), many marine invertebrates likely sense particle motion generated from underwater sounds (see Section 3.8.2.2, p. 3.8-4). These animals may be sensitive to noise from sonar, explosions, and other underwater acoustic activities when in close proximity to these activities. Because these animals are often sedentary or unable to quickly move away from disturbances such as noise, they may be particularly vulnerable to sonar and other underwater noise generated from Navy activities. The Navy concludes that population level impacts on survival, growth, recruitment, or reproduction of marine invertebrates would not be expected from Navy sonar training and testing under Alternatives 1 and 2 within Inland Waters. The Navy expects no more than short-term behavioral disturbances (see Section 3.8.3.1.1.2, p. 3.8-26). Suquamish questions whether our knowledge is sufficient with respect to the detection of sound by some marine invertebrates, including thresholds and cumulative impacts, to make these conclusions, particularly given the substantial increase in activities and hours during which these organisms would be potentially exposed. To address uncertainties around potential physiological and behavioral impacts to marine invertebrates and their populations, Suquamish recommends that the Navy conduct additional research to evaluate these potential impacts within Inland Waters of Puget Sound.</p>	<p>The Navy uses the best available science in reaching the conclusions in the EIS/OEIS. Additionally, the Navy has conducted similar activities for decades here and in other Navy range complexes, with no indication of harm to any marine invertebrate species. The Navy is committed to improving the body of scientific knowledge, and in fact is the largest funding source in the world on marine mammal and marine acoustic research.</p>
<p>Suquamish Tribe-06</p>	<p>Fish With substantial increases in Navy training and testing activities, stressors for fish would increase above the current activities (i.e., No Action Alternative) for several types of Navy training and testing activities proposed in Inland Waters with Alternatives 1 and 2 (see Table 3.9-4, p. 3.9-59). Under Alternatives 1 and 2, the Navy concludes that “the use of sonar and other active acoustic sources during training activities ... may affect, but is not likely to adversely affect ESA-listed” fish species (p. 3.9-76 – 3.9-78). With the proposed Navy actions, the primary concern for fish may not be direct mortality or injury from sonar, underwater explosions, or other acoustic stressors (although some mortality or injury could occur), but rather the potential for disrupting fish schooling, migration, reproduction, and feeding behavior. The DEIS acknowledges at Section 3.9.3.1.1.4, p. 3.9-67 that “there are little data available on the behavioral reactions of fish, and almost no research conducted on any long-term behavioral effects or the potential cumulative effects from repeated exposures to loud sounds (Popper and Hastings 2009c)”. Similar to the above request with respect to marine invertebrates, Suquamish recommends that the Navy conduct research to evaluate potential physiological and behavioral impacts to individual fish and populations, including ESA-listed and potentially other fish species</p>	<p>The Navy uses the best available science in reaching the conclusions in the EIS/OEIS. Additionally, the Navy has conducted similar activities for decades here and in other Navy range complexes, with no indication of harm to any fish or marine invertebrate species. The Navy is committed to improving the body of scientific knowledge, and in fact is the largest funding source in the world on marine mammal and marine acoustic research.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	(e.g., forage fish) within Inland Waters of Puget Sound.	
Suquamish Tribe-07	<p>Marine Mammals</p> <p>Suquamish questions the basis for the Navy’s conclusion that its proposed continuation of training and testing activities is unlikely to have long term negative impacts to populations of marine mammals for indicators 1 thru 3 (see Section 3.0.2.2.1, p. 3.0-8). Observed increases in marine mammal numbers, site fidelity, and presence of breeding and nursing individuals may reflect a host of other factors that are unrelated to Navy training and testing, including changes in prey abundance, competition, predation, disease, weather and climate patterns, water quality, contaminants, and habitat availability and quality. These factors and/or others may be masking or offsetting any detrimental effects from Navy activities. The lack of any observable effects to marine mammal populations resulting from Navy training and testing activities (Indicator 4) is based on just 6 years of data, and again, any negative impacts from training and testing on these populations may be masked by multiple factors including those listed above and potentially others.</p>	<p>The analysis of potential impacts to marine mammals based on the proposed activities is found in Section 3.4 (Marine Mammals). As described in Section 3.4.4 (Summary of Impacts [Combined Impacts of All Stressors] on Marine Mammals), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Although potential impacts to certain marine mammal species from the Proposed Action may include injury, impacts are not expected to decrease the overall fitness of any given population.</p>
Suquamish Tribe-08	<p>Impacts from Underwater Explosions</p> <p>In Sections 3.3.3.1.1.2 and 3.3.3.1.1.3 (p. 3.3-21) for Inland Waters under Alternatives 1 and 2, the DEIS describes how underwater explosions associated with training activities (apparently at Hood Canal and Crescent Harbor, Whidbey Island sites) would disturb an estimated 579.8 sf of substrate per year, and that bottom substrates and associated biota would recover. It is unclear from the DEIS what degree of disturbance would be expected from each individual detonation, and how quickly the physical and biological characteristics of the affected benthos and water column would recover to a baseline (i.e., pre-disturbance) condition. Suquamish recommends that the Navy conduct a study of the short and long-term impacts from these activities.</p>	<p>The underwater detonations described in the comment have been occurring for decades in these same areas. The areas are frequently disturbed but very small (less than a total of 20 x 30 feet), spread over the two sites. Although historically only a minority of charges are bottom placed, this analysis assumes a conservative overestimate that all would be bottom placed.</p>
Suquamish Tribe-09	<p>Cumulative Impacts</p> <p>As stated in the DEIS, the Council on Environmental Quality (CEQ) provides guidance on cumulative impact analysis that identifies cumulative impacts as those resulting “from spatial and temporal crowding of environmental perturbations. The impacts of human activities will accumulate when a second perturbation occurs at a site before the ecosystem can fully rebound from the impacts of the first perturbation” (Section 4.1, p. 4-1). Suquamish is concerned that repeated stressors resulting from increased Navy training and testing activity levels (e.g., sonar use) and/or new activities that spatially overlap or occur in close proximity to each other may cause cumulative impacts that are not being adequately addressed for some shellfish, finfish, and marine mammal species within Inland Waters. As described in the DEIS (Section 4.2.5, p. 4-3), stressor impacts considered individually by the Navy’s analysis to be negligible, have no effect, or that may affect but are not likely to adversely affect ESA-listed species were not analyzed in</p>	<p>As stated in the EIS/OEIS, Section 4.2.7 (Analyze Potential Cumulative Impacts), “The cumulative impacts analysis considered additive, synergistic, and antagonistic impacts.” This analysis considered the number of times that each activity is proposed to occur each year.</p> <p>In addition, the analysis conducted of each resource considered the potential effects of multiple stressors.</p> <p>Section 4.4.13 (American Indian and Alaska Native Traditional Resources), has been revised in conjunction with the revisions to Section 3.11 of the EIS/OEIS, which analyzes impacts on American Indian and Alaska Native Traditional Resources. Section 4.4.13.1 concludes that the Navy Proposed Action could result in impacts on American Indian and Alaska Native protected tribal resources and</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>detail in the cumulative impact analysis. A potential flaw in this analysis is that individual stressors considered negligible or to have low impacts may have additive or synergistic effects that rise beyond negligible when they are considered together.</p>	<p>other traditional resources, because inaccessibility to areas of co-use such as usual and accustomed fishing grounds, even of short duration, may prevent fishing in limited seasons.</p>
<p>Suquamish Tribe-10</p>	<p>Mitigation The Navy eliminated several potential mitigation measures that it considers impractical, or if the mitigation measure shifts impacts to another resource (Section 5.3.4). One of the factors the Navy considers in determining whether a mitigation measure is “practical” to implement is if it “does not result in an unacceptable increase in resource requirements (e.g., wear and tear on equipment, additional fuel, additional personnel, increased training or testing requirements, or additional reporting requirements)”. For example, the Navy considered conducting training and testing activities during times and in locations when sensitive marine habitats and/or species could be avoided or are less likely to be present (Section 5.3.4.1.11, p. 5-55). However, the Navy determined that to avoid these habitats would result in unacceptable impact on readiness, and would increase safety risks to personnel. If the Navy decides not to implement mitigation measures (to avoid, minimize, or compensate for resource impacts) because the mitigation measures are either 1) impractical for the Navy to implement, citing compromise to safety and/or readiness, and/or 2) the mitigation measure has potential impacts to other resources, the Navy is still obligated to identify and implement other adequate means to mitigate for the recognized impacts.</p>	<p>The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy’s specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p> <p>Several biologically important areas (BIAs) in the Pacific Northwest have been identified and published in March 2015 (Aquatic Mammals 2015; Calambokidis et al. 2015; Ferguson et al. 2015a, 2015b; Van Parijs 2015). A review of the final BIAs for humpback whales and gray whales against areas where most acoustic activities are conducted in the NWTT study area (especially those that involve ASW hull mounted sonar, sonobuoys, and use of explosive munitions) reveals that any spatial or temporal overlap between Navy activities within the NWTT Study Area and BIAs would be small, infrequent, and therefore biologically insignificant. Therefore, Navy’s proposed training and testing events are unlikely to significantly affect the marine mammal activities for which the BIAs were designated.</p> <p>It is important to note that the BIAs were not meant to define exclusionary zones, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas (see Ferguson et al. (2015a) regarding the envisioned purpose for the BIA designations). The delineation of BIAs does not have direct or immediate regulatory consequences. The intention was that the BIAs would serve as resource management tools and their boundaries be dynamic and considered along with any new information as well as, “existing density estimates, range-wide</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
		distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information” (Van Parijs 2015).
Suquamish Tribe-11	<p>Incidental Take Authorization</p> <p>Suquamish requests a copy upon its completion of the Biological Assessments produced by the Navy, and Biological Opinions developed by the NMFS and USFWS (The Services) for the Navy’s NWTT. Tribal Government-to-Government Consultation</p> <p>Suquamish requests further discussion with the Navy, including Government-to-Government consultation, on potential impacts from increased Navy Training and Testing Activities, including ramifications for treaty-reserved fishing. Please contact me to coordinate this meeting, and if you have any questions regarding these comments. Thank you for your commitment to effective communication and coordination between the Navy and the Suquamish Tribe. The Tribe looks forward to a constructive government-to-government meeting to discuss this project in the near future.</p>	<p>The Navy will provide the final Biological Evaluation to the Tribe upon finalization and submittal to NMFS. Once the Biological Opinion is issued the Navy will provide a link to the NMFS website when the document can be downloaded.</p> <p>The Navy remains committed to fulfilling its government-to-government consultation responsibilities and looks forward to addressing these concerns as part of its ongoing consultation.</p>
Yurok Tribe (Written & Electronic)	<p>On behalf of the Yurok Tribe, I request Government to Government consultation with the Navy in regard to the NWTT DEIS/OEIS. The Yurok Tribe has always managed the marine resources within our ancestral territory with an eye toward maintaining a balanced ecosystem for the benefit of future generations of Yurok People. We are concerned that the preferred alternative within the DEIS/OEIS may disrupt this balance, however we need to learn more regarding the proposed action and the analysis that was conducted to assess the effects upon our resources. Yurok People have inhabited lands along the Northern California Coast since time immemorial; from the mouth of Little River, near McKinleyville CA, to approximately 70 miles north near the mouth of Damnation Creek. We’ve always conducted wise stewardship of our environment while sustaining ourselves off the resources of ocean, the Klamath River, and surrounding lands. As mandated in our Constitution, we are mandated to “Restore, enhance, and manage the tribal fishery, tribal water rights, tribal forests, and all other natural resources....”. It is with this mandate as our guidance that we oppose any federal action that could impact our natural, cultural and subsistence resources. The Yurok Tribe fully supports the national security and associated armed forces of our country, as is reflected by the disproportionately large number of Yurok People that are veterans. Therefore, we will be assessing the effects of the proposed action with this commitment to our country’s defense in mind, as well as the protection of our resources for future generations of Yurok People. As noted in the DEIS/OEIS, consultations with Native American Tribes are anticipated to occur between January – December 2014 (DEIS/OEIS page 3.11-3). Therefore, I request that you contact myself or [personal information redacted] (Council’s Executive Assistant) at our tribal headquarters at your earliest convenience to schedule a time when we can consult regarding the proposed action and the DEIS/OEIS and any potential adverse impacts on resources of cultural,</p>	<p>The Navy remains committed to fulfilling its government-to-government consultation responsibilities and looks forward to addressing these concerns as part of its ongoing consultation.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	spiritual, subsistence and economic importance to the Yurok Tribe.	
AMERICAN INDIAN TRIBAL ORGANIZATIONS		
Point No Point Treaty Council (PNPTC) -01	Thank you for requesting comments for the Navy’s Draft Environmental Impact Statement for the proposed increase in tempo for the Northwest Testing and Training Exercises. The Point No Point Treaty Council (PNPTC) is concerned about the significant adverse effects on our Tribes’ Treaty Rights and natural resources with this project. Our tribes (Jamestown S’Klallam and Port Gamble S’Klallam) would like to request government-to- government consultations to resolve some of these major concerns.	Thank you for the comment letter. The Commanding Officer of Naval Base Kitsap invited both the Jamestown S’Klallam Tribe and the Port Gamble S’Klallam Tribe to consider initiation of government-to-government consultation (letters dated January 17, 2014). The Navy appreciates the initiation of government-to-government consultation by both Tribes on this proposed action. The Navy remains committed to fulfilling its government-to-government consultation responsibilities with the federally recognized Tribes in accordance with Navy policies.
PNPTC-02	The PNPTC is a tribal organization that provides fisheries support services to the Jamestown S’Klallam and Port Gamble S’Klallam Tribes, which have Usual and Accustomed Fishing Areas in Hood Canal, Strait of Juan de Fuca, and the Puget Sound. The Usual and Accustomed (U&A) fishing areas of both tribes includes the proposed testing and training areas. The Tribes rely on the healthy habitat conditions that sustain critical finfish and shellfish populations which support fishing activities that are fundamental to the economies and cultures of tribal communities.	The Navy’s government-to-government consultation with the Jamestown S’Klallam Tribe and Port Gamble S’Klallam Tribe is ongoing. The DoD and Navy policy is to conduct government-to-government consultation with each federally recognized tribes unless a tribe formally delegates its government-to-government authorities to another tribe or tribal organization. The Navy remains committed to fulfilling its government-to-government consultation responsibilities and is committed to addressing these concerns as part of its consultations with its two member Tribes.
PNPTC-03	<p>Treaty Rights</p> <p>The Treaty of Point No Point Reserves Perpetual Fishing Rights to the S’Klallam Tribes, which the Navy Cannot Infringe.</p> <p>A proper conception of treaty fishing rights must begin with the history and purpose of the Treaty. In Article I of the Treaty of Point No Point, the S’Klallam people ceded to the United States most of their rights in their land.</p> <p>However, the Treaty reserves the right of the Tribes to take fish “at usual and accustomed grounds and stations.” Treaty of Point No Point, 12 Stat. 933, Article IV.</p>	The Navy’s government–to-government consultation with the Jamestown S’Klallam Tribe and Port Gamble S’Klallam Tribe is ongoing. The Navy remains committed to fulfilling its government-to-government consultation responsibilities and addressing these concerns as part of its ongoing consultations.
PNPTC-04	<p>The right is not created by the Treaty; rather, the Treaty “secures” pre-existing Indian fishing rights.¹ In other words, the Treaty of Point No Point did not grant fishing, hunting, and gathering rights to the Tribes; rather, it reserved to the Tribes its pre-existing rights to engage in those activities.² This reservation of rights was intended to permanently secure the full breadth of pre-treaty resource procurement practices.³ Nothing in the treaty language or negotiations suggested, and neither side anticipated, that non-Indian development would ever hinder Indian fishing or deplete the seemingly inexhaustible abundance of resources.⁴</p> <p>¹ See, e.g., <i>United States v. Winans</i>, 198 U.S. 371, 381 (1905).</p> <p>² <i>Id.</i></p>	The Navy acknowledges that treaty rights are not created by the treaty, but are secured by the treaty.

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>3 See <i>Boldt I</i>, 384 F.Supp.at 381 (“At the treaty council the United States negotiators promised, and the Indians understood, that the Yakima’s would forever be able to continue the same off-reservation food gathering and fishing practices as to time, place, method, species and extent as they had”).</p> <p>4 Culverts Summary Judgment at 10-11. See also <i>Fishing Vessel</i>, 443 U.S. at 668.</p>	
<p>PNPTC-05</p>	<p>The Treaty of Point No Point protects three essential components of our Tribes’ fisheries: 1) Access to Fishing Places; 2) Access to Sufficient Harvests; 3) Access to necessary, healthy fish habitat.</p> <p>The Navy’s continued and increased use of Hood Canal and other portions of Puget Sound for training and testing activities infringes upon each of these aspects of the Treaty Right. Please also see letter submitted by the Port Gamble S’Klallam Tribe for additional information (March 27, 2014).</p> <p>Below, we have briefly reviewed the Draft Environmental Impact Statement (D.E.I.S). First, we are concerned that the proposed facility would impact our Tribes ability to access their Usual and Accustomed fishing grounds for shellfish, finfish and other species, which is our Tribes’ Treaty Right under the Treaty of Point No Point. Second, we have concerns regarding the environmental impacts on the area that will be utilized and disturbed under the impacted areas. Third, we are concerned that the D.E.I.S. does not adequately address all of our concerns and more detail needs to be provided. The following comments should be considered as you continue to develop the plans for the increased tempo for the new and old testing and training activities. Because of the short time frame for the progress of these proposed activities, we look forward to the continued consultation with the Navy as the draft E.I.S. moves forward.</p>	<p>The Navy appreciates the comments and looks forward to continued consultation with the member tribes of the PNPTC to address tribal concerns.</p> <p>The Navy acknowledges and respects the reserved rights established in the Treaty of Point No Point and all Treaties. The Navy remains committed to fulfilling its government-to-government consultation responsibilities and addressing these concerns as part of its ongoing consultations with the Jamestown S’Klallam Tribe and Port Gamble S’Klallam Tribe.</p>
<p>PNPTC-06</p>	<p>1. Impacts to Court-Affirmed Treaty Fishing Rights:</p> <p>The Tribes are concerned about the impacts the fishing activities and treaty rights that this DEIS does not accurately assess nor does it include the full range of detrimental effects on shellfish habitat, salmonid/finfish habitat and other important saltwater ecosystems. Any habitat impacts would translate directly to an infringement on tribal fisheries that are protected by court-affirmed treaties. The Port Gamble and Jamestown S’Klallam tribes actively fish through-out the Hood Canal, parts of the Strait of Juan de Fuca and the Puget Sound. Fishing activities include crabbing, shrimping, salmon fishing, intertidal clam and oyster gathering, dive fisheries for geoduck and other species and shore-anchored and vessel-based net and line fisheries for salmon and other finfish. The Navy’s training and testing exercises can seriously impede these activities for several reasons, and to a degree, that the DEIS does not disclose.</p> <p>Furthermore, the Navy’s inadequate and inaccurate analysis is especially distressing given the significant effort the Tribes have put into trying to make the Navy understand both treaty rights and how the Navy’s activities affect treaty rights in the last several years. Furthermore, the Treaty the S’Klallam Tribes signed with the U.S. Government protects access to known and productive fishing places, sufficient abundance of fish and</p>	<p>Thank you for presenting your concerns in detail. The Navy entered into government-to-government consultation with the Port Gamble S’Klallam Tribe and has been able to discuss these concerns in greater depth. The Navy has demonstrated in the Final EIS/OEIS that: (1) The combined effects of the proposed training and testing would not diminish the ability of soft shores, soft bottoms, hard shores, hard bottoms, or artificial substrates to function as habitat (Section 3.3.3.2); (2) Although potential impacts to certain fish species from the Proposed Action may include injury or mortality, impacts are not expected to decrease the overall fitness of any given population (Section 3.9.4.1, Combined Impacts of All Stressors); and (3) Regarding effects to shellfish, the Navy’s proposed activities are unlikely to impact populations (Section 3.8.3, Environmental Consequences). The Navy will continue to work with all the tribes with usual and accustomed fishing areas in the Study Area to improve communication with the tribes about activity in these areas.</p> <p>The Navy uses the best available science in reaching the conclusions</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	shellfish to harvest, and provides access to necessary fish/shellfish habitat.	in the EIS/OEIS. Additionally, the Navy has conducted similar activities for decades here and in other Navy range complexes, with no indication of harm to any marine habitats or species.
PNPTC-07	<p>2. Environmental Impacts to Tribal Fisheries:</p> <p>While we appreciate the table included (Chapter 4) the number of activities per year in the specific regions, we think the D.E.I.S. should add additional information about the impact to tribal fishers by describing these activities in more detail including costs associated with improved efficiencies and its explanation with regard to Treaty Rights and environmental impacts. Some examples of our concerns are below:</p> <p>a) Activity Window/ Communication/Notification: The draft EIS does not adequately describe the full impact of activities through specific timings. Tribal fishers and harvesters fish and crab regularly, and co-manage geoduck beds in the proposed project area. The DEIS should include an analysis of impacts to ESA-listed and non-listed species, including but not limited to summer chum, Chinook, steelhead and forage fish species of in-water testing and training windows.</p> <p>While the Navy and the Tribes have generally worked well together to minimize the number of these occurrences resulting from training and testing exercises through a fairly effective notice system in Puget Sound, it is entirely inappropriate for the Navy to fail to disclose or discount the true impacts from its actions. And the Navy risks underestimating the amount of mitigation and preventative measures needed to ensure it lives up to its trust responsibility. See, e.g., DEIS 3.11-7, 3.11-17, 3.11-19, 3.11-22 (describing various mitigation and coordination measures that have been necessary to address impacts from naval activities to treaty fishing in various tribes' U&A).</p>	<p>The Navy's analysis in the EIS/OEIS considers impacts to all species at all times of the year to include the fish at all stages of their life cycle. The Navy's proposed training and testing activities could occur at any time throughout the year, so there are no "testing and training windows."</p> <p>The discussion in the Final EIS/OEIS has been revised in Section 3.11.3 (Environmental Consequences) to acknowledge that training activities have the potential to impede Tribal access to U&A fishing grounds (e.g., during transit protection, an important national security concern). It is important to note that those proposed activities relevant to Tribal concerns are merely the continuation of ongoing activities that have been occurring in this same area for years. As the Navy will not be permanently shutting off access to fishing grounds but rather will be minimizing access issues to the maximum extent practicable, the Navy does not expect alternative fishing grounds to be necessary.</p> <p>All anticipated impacts have been disclosed, and all necessary mitigation measures are included (see Chapter 5, Standard Operating Procedures, Mitigation, and Monitoring).</p> <p>The Navy will continue to work with all the tribes with usual and accustomed fishing areas in the Study Area to improve communication with the tribes about activity in these areas. Such communication goes both ways; providing the Navy with information about special tribal activities in these areas will help the Navy to minimize its disturbance of the tribal activity as much as practicable while still accomplishing its mission.</p>
PNPTC-08	<p>b) Direct and Indirect Impacts to Finfish and Shellfish: In addition to fishing and harvesting impacts, the DEIS should describe all direct and indirect environmental impacts of the training and testing operations, given the proposed increased tempo of activity. Fishing activities include crabbing, shrimping, salmon fishing, intertidal clam and oyster gathering, dive fisheries for geoduck and other species and shore-anchored and vessel-based net and line fisheries for salmon and other fin-fish.</p>	<p>The Navy's analysis of all direct and indirect environmental impacts of the proposed training and testing activities are found in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Impacts to fishing are now described in Section 3.11.3.2 (Changes in the Availability of Marine Resources) of the Final EIS/OEIS.</p> <p>The Navy has demonstrated in the Final EIS/OEIS that: (1) The combined effects of the proposed training and testing would not diminish the ability of soft shores, soft bottoms, hard shores, hard bottoms, or artificial substrates to function as habitat (Section</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
		<p>3.3.3.3.2, Alternative 1); (2) Although potential impacts to certain fish species from the Proposed Action may include injury or mortality, impacts are not expected to decrease the overall fitness of any given population (Section 3.9.4.1, Combined Impacts of All Stressors); and 3) Regarding effects to shellfish, the Navy’s proposed activities are unlikely to impact populations (Section 3.8.3, Environmental Consequences).</p> <p>Working with the USFWS, the Navy determined that individual bull trout might be harmed during underwater explosive detonation training activities at two Explosive Ordnance Disposal training sites, but not from any of the other activities assessed.</p>
<p>PNPTC-09</p>	<p>c) Incorrect Assertions in the Draft EIS document: The Navy also indicates that “use of seafloor devices could create damage or loss to Native American fishing equipment but [that] would not affect the use of the usual and accustomed fishing grounds” and so “impacts . . . would not occur.” DEIS at 3.11-1, 3.11- 29 to -32 (“Although Native American subsistence and commercial fishing equipment could be damaged by activities using seafloor devices, these training activities would not affect . . . the use of the usual and accustomed fishing grounds.”). This statement is incorrect. The right to fish in the Tribes’ U&A does not only cover the ability to physically access the fishing grounds, but also what happens within them. Gear damage or loss resulting from naval activities and structures reduces fishing opportunity and increase the amount of effort and resources required to catch the same amount of fish. This is a treaty violation, and in fact, has been a consistent problem for Port Gamble S’Klallam tribal members and members of other Tribes for quite some time. The Navy’s gear loss replacement program is difficult to navigate, time-consuming, slow, and generally ineffective at remediating the losses tribal members incur. The Navy is well aware of this as it is a consistent topic and source of frustration at the government-to- government meetings we have engaged in over the last few years. However, nothing has been done to correct these problems, and the Navy now seeks to risk even more gear damage and loss through increasing its training and testing activities. The Navy should first reduce, minimize, and remediate the occurrences of gear loss and damage before it adds any further chance of such impacts, and it must accurately disclose these impacts as affecting the treaty right under NEPA.</p> <p>The Navy further demonstrates their failure to understand the scope of the Tribal Treaty Right, by asserting that the “marine species’ population levels would not be altered to such an extent that the tribes could no longer find their target species, “ and thus impact sot tribal resources and rights “would not occur.” (DEIS at 3.11-1, 3.11-37). This assertion is incorrect. When population levels lower, it becomes more likely that the tribal and state co-managers will close fishery harvest or strictly limit the duration of openers</p>	<p>The Navy revised the Final EIS/OEIS in Section 3.11 to include analysis of the impacts of Navy vessel traffic on fishing access (Section 3.11.3.1, Impeding Access to U&A Fishing Grounds or Traditional Fishing Areas) and damage to fishing gear (Section 3.11.3.3, Loss of Fishing Gear).</p> <p>The Final EIS/OEIS has been revised to correctly point out that in-water devices, not seafloor devices, could result in damage to fishing gear.</p> <p>The potential loss of fishing gear from any activity, including the use of in-water devices, is analyzed in Section 3.11.3.3 (Loss of Fishing Gear) in the Final EIS/OEIS.</p> <p>The Navy acknowledges that the gear damage claims process can be lengthy with no guarantee for payment. The Navy is currently bound by the Secretary of the Navy approval process that does not allow localized adjudication of claims in instances when tribal fishers gear is impacted by Navy vessels.</p> <p>The MSO activities, which have the greatest potential to affect tribal fishing gear, have been added to the document for analysis and are actually ongoing activities that are included in this EIS/OEIS for analysis, but will not result in an increase in the activity itself. It is important to note that those proposed activities relevant to Tribal concerns are merely the continuation of ongoing activities that have been occurring in this same area for years. As the Navy will not be permanently shutting off access to fishing grounds but rather will be minimizing access issues to the maximum extent practicable, the Navy does not expect alternative fishing grounds to be necessary.</p> <p>While the EIS/OEIS concludes there may be impacts from the</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	or catch quota.	Proposed Action to fish, those impacts do not translate into impacts to socioeconomic resources. Impacts analyzed in the EIS/OEIS consider the individual and the population. Impacts to single individuals do not translate to impacts on the entire population or the resource as a whole. Section 3.12.3.4 (Secondary Impacts) concluded that impacts to fishing are not anticipated. The conclusions presented in the EIS/OEIS are fully supported in the analysis.
PNPTC-10	<p>3. The Navy's has plans for numerous construction projects and operational changes in Hood Canal, Strait of Juan de Fuca and other areas of Puget Sound, including increases in the frequency and geographic scope of training and testing activities, which severely infringe on the Treaty Fishing right. Also, the DEIS's cumulative effects analysis is inaccurate and not comprehensive.</p> <p>As you are well aware, the detrimental effect of the Navy's projects on Treaty Rights cannot be overstated. Since locating in Puget Sound, the Navy has armored significant shoreline, built massive overwater structures, permanently destroyed acres of seafloor, spilled great amounts of oil, and greatly increased vessel traffic and vessel exclusion zones. These activities have resulted in degraded habitat, diminished fish production, collisions with and loss of crab pots and other gear, increased fishing effort, temporary or long-term avoidance of traditional fishing areas, and diminished harvest, at a time when the Tribes' fisheries are already greatly diminished and are not providing the tribal members with a moderate living. These injuries to the treaty rights will grow if the Navy proceeds with its plans to increase the frequency and geographic scope of training and testing exercises in Puget Sound. When combined with the numerous other construction project and submarine reassignment proposals of which the Tribe is aware, these impacts are simply too great for the Navy to simultaneously meet its obligations under the Treaty and trust responsibilities to the Tribes. Significant downscaling and/or abandonment of certain activities and projects, such as the Electro-Magnetic Management Range proposed at NBK-Bangor, is necessary for the Navy to honor its duties to the Tribes. PNPTC also supports the assertions put forth in the Port Gamble S'Klallam letter (March 27, 2014), for other remaining issues.</p>	<p>The Final EIS/OEIS has been revised. Section 4.4.13 (American Indian and Alaska Native Traditional Resources), has been revised in conjunction with the revisions to Section 3.11 of the EIS/OEIS, which analyzes impacts the American Indian and Alaska Native Traditional Resources. The EIS/OEIS considers the cumulative impacts to the environment from other relevant past, present, and reasonably foreseeable future actions (federal, state, local and private) in addition to the proposed action. Sections 3.11.3 (Environmental Consequences) and 4.4.13 (American Indian and Alaska Native Traditional Resources) of the EIS/OEIS provides analysis of the potential for the proposed action to impact access, availability of marine resources, and fishing gear.</p> <p>Recommendations to downscale or abandon the projects mentioned in the comment are beyond the scope of the NWTT EIS/OEIS.</p>
PNPTC-11	<p>4. Cumulative direct and indirect effects on various natural and cultural resources have not been adequately addressed:</p> <p>In the aggregate, the Navy should include an analysis of the cumulative effects of these activities on Treaty Rights and its effect on tribal fisheries (both finfish and shellfish). It should take into account the effects on timing, location, quality and quantity of harvest for tribal members. The DEIS should include an examination of the cumulative effects of these projects that the Navy has proposed in last few years and for the next few years. All these proposed actions, should include the combined past, present and reasonably foreseeable future actions that could impact Tribal resources due to changes in access</p>	<p>Further discussion of cumulative impacts to American Indian and Alaska Native Traditional resources have been added to Section 4.4.13 (American Indian and Alaska Native Traditional Resources) in the EIS/OEIS. Sections address the contributions of impacts from Alternatives 1 and 2 to cumulative impacts. As well as impacts of other actions in the Study Area and their cumulative impact on American Indian and Alaska Native Traditional Resources.</p> <p>Section 4.4.13 (American Indian and Alaska Native Traditional Resources) of the Final EIS/OEIS has been revised to acknowledge</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>to traditional fishing and foraging areas and loss of geoduck, and other shell fishing and fishing activities. Some major areas of concern include (but are not limited to):</p> <ul style="list-style-type: none"> a) Increased acoustic sonar, underwater explosions, weapons firing, aircraft noise, vessel noise, electromagnetic signals, target strikes, in-water device strikes, expended materials, seafloor devices, cables, wires, release of air pollutants, explosives, metals, chemicals, physical disturbance, limited accessibility, underwater energy and physical interactions will likely impact natural and cultural resources and tribal fisheries in the S'Klallam Tribes' Usual and Accustomed Area. b) Issues with sediment, water quality, air quality, marine habitats, sea turtles, birds, marine invertebrates, fish, cultural resources, Native American and Alaskan native traditional resources, socioeconomic resources, public health, and safety from NWTT stressors (DEIS Table F-5: Stressors by resource). This does not address the CUMULATIVE effects over time. c) Cumulative effects of all projects (not just the NWTT) should be calculated and included in the DEIS. Additional items should include: wave action, vessel traffic, wakes, risks of spills and releases (as happened recently), cumulative destruction of habitat and stresses on many important aquatic species. d) Effects of increased vessel traffic: The final E.I.S. should include detailed maps showing all vessel traffic patterns, including shipping lanes, security zones, and other details. Maps are needed to show more specifically the areas within Admiralty Inlet, Hood Canal, Strait of Juan de Fuca, etc. where all activities (air, land & water), particularly inclusive of security boundaries around the vessels in transit during certain times of the year. 	<p>the cumulative impacts of more activity in areas where some treaty rights could be impacted. The cumulative impacts analysis included the effects of all relevant projects in the Study Area. Oil spills and other non-anticipated accidents or emergencies are not included in the NEPA analysis.</p> <p>It is important to note that those proposed activities relevant to Tribal concerns are merely the continuation of ongoing activities that have been occurring in this same area for years. As the Navy will not be permanently shutting off access to fishing grounds but rather will be minimizing access issues to the maximum extent practicable, the Navy does not expect alternative fishing grounds to be necessary.</p> <p>The Navy does not believe that the modest changes in activity patterns assessed in this EIS/OEIS will lead to significant changes in vessel traffic within the approaches to the Port of Seattle. The largest apparent increase from the activity baseline, Transit Protection System (TPS), is not a new activity, but an on-going activity. TPS was added to the scope of activity being assessed in the Final EIS/OEIS partly in response to concerns such as this raised in comments. Further, additional assessment of Navy vessel movement was completed with respect to Biologically Important Areas proposed by the National Marine Fisheries Service. The Navy did not find sufficient reason to expect that Navy vessel movement, considered alone without respect to all the commercial and recreational use of the same waters, would pose a significant risk to marine mammals. The Navy does not expect any vessel strikes of marine mammals.</p> <p>When transiting, Navy vessels and aircraft follow established navigation routes (see Figure 3.0-5 in the Final EIS/OEIS). Moving security zones around MSO events are described in the Final EIS/OEIS in Section A.1.7.1 (Maritime Security Operations) of Appendix A.</p>
<p>PNPTC-12</p>	<p>5. Need for better analysis of alternatives and why they were not chosen: The DEIS should include a more reasonable range of alternatives and a rationale for determining their rejection to other alternatives. However, due to the extremely sensitive biological, geological, cultural and economic nature of the Hood Canal, Strait of Juan de Fuca and the region for the Tribes and the community at large, the DEIS should explore some additional alternatives that lie outside of the tribal Usual and Accustomed Fishing Area.</p> <p>We also request that the Navy notify us directly and with ample time to comment on documents related to this project and upcoming projects. This process is ongoing and</p>	<p>This EIS/OEIS assesses a program of Navy activity intended to fulfill mission requirements. There are limited alternatives available for meeting mission requirements as the requirements often specify where, when, and how frequently various events need to occur.</p> <p>Please refer to Section 2.5.1 (Alternatives Eliminated from Further Consideration) for a full discussion of the rationale used for determining or rejecting alternatives for consideration.</p> <p>Regarding the suggestion to explore alternative locations that lie outside of currently proposed areas, please refer to Section 2.5.1.1</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>we need more time to consider the cultural, historical and economic effects of this project to our Tribes. We reserve the right to expand and modify our comments based on additional information.</p>	<p>(Alternate Locations) in the EIS/OEIS. To summarize that discussion, the Navy's requirements dictate that much of the Navy's training and testing occur in locations proximate to shore-based facilities and infrastructure, near homeports, where instrumented ranges are located, and where environmental conditions maximize training realism and testing effectiveness. Those requirements preclude the Navy's training and testing in alternate locations.</p> <p>The Navy will continue to provide future notices to the Point No Point Treaty Council regarding this project.</p>
<p>InterTribal Sinkyone Wilderness Council (Written)</p>	<p>The Draft EIS is a step in the process for the Navy's goal to obtain its next permit (2015-2020) under the Marine Mammal Protection Act. The final steps would include an EIS, a new 5-year MMPA permit for the Navy, and consultation with the National Marine Fisheries Service over these activities' impacts on threatened and endangered species. The Navy plans to complete this process sometime later this year or in early 2015.</p> <p>The InterTribal Sinkyone Wilderness Council, is a consortium of ten federally recognized tribes from Mendocino and Lake Counties, including: Cahto; Coyote Valley; Hopland; Pinoleville; Potter Valley; Redwood Valley; Robinson; Round Valley; Scotts Valley; and Sherwood Valley. The Sinkyone Council is the lead plaintiff in a case against the National Marine Fisheries Service's previous approvals of Navy training (from 2010-2015). Last fall, the federal court ruled in our favor and made clear that any approval of naval training exercises must rely on the best available science and must consider the impacts of such activities over the long term. While that case was against the National Marine Fisheries Service, it applies with equal force to the Navy's analysis in this EIS. Regardless of whether it's the Navy or the Fisheries Service doing the analysis, the real test is whether the agencies are applying the latest and best science, considering the full range and extent of harm from sonar and other activities, and aggressively seeking ways to avoid or mitigate that harm.</p> <p>This Draft EIS shows that the Navy has a long way to go to comply with the law. For example, while the Navy is proposing to increase training and testing in these waters (including another increase in sonar use), it does not propose any meaningfully different or additional mitigation to protect marine mammals from these increased activities. Leaning on the same old (and inadequate to begin with) measures to protect marine life from additional harm isn't an acceptable mitigation strategy. The Navy can- and must- do far more to justify its training needs while at the same time ensuring that it does not harm the web of marine life along the Northwest Coast.</p> <p>Additionally, the Sinkyone Council, on behalf of its member tribes, has requested the Navy to initiate formal tribal consultation regarding concerns the tribes have about the impacts of the Navy's testing and training activities on traditional tribal use of marine resources. To date, the Navy has ignored this request for formal tribal consultation,</p>	<p>The Navy complies with NEPA and continues to apply the best available science to its analysis of proposed activities. The analysis considers the full range and extent of potential harm to all resources from these activities. The Navy's mitigation measures were carefully designed in coordination with NMFS to protect marine resources while allowing the Navy to conduct its required training and testing.</p> <p>The Navy has provided consultation invitations to all federally recognized tribes that are within or near the Study Area.</p> <p>The Commanding Officer of Naval Air Station Whidbey Island invited government-to-government consultation on this proposed action with each of the 10 member tribes of the InterTribal Sinkyone Wilderness Council (letters dated January 14, 2014). The Navy's government-to-government consultation with these member tribes are ongoing. In accordance with Executive Order 13175, the DoD and Navy policy is to conduct government-to-government consultation with each federally recognized tribes unless a tribe formally delegates its government-to-government authorities to another tribe or tribal organization. The Navy remains committed to fulfilling our government-to-government consultation responsibilities and is committed to addressing these concerns as part of its ongoing consultations with its member Tribes or with the InterTribal Sinkyone Wilderness Council since some tribes have delegated authority to the InterTribal Sinkyone Wilderness Council.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>which is required by the Navy's 2005 Policy for Consultation with Federally Recognized Indian Tribes and the President's Executive Order 13175 on Consultation and Coordination with Tribal Governments (November 6, 2000). The Navy's policy requires consultation on a "government-to government basis in recognition of Tribal Government sovereignty," and further requires that such consultation must begin "at the earliest possible juncture in the planning process." Executive Order 13175 likewise requires such consultation to ensure "meaningful and timely input by tribal officials." Section 5. The Navy's failure to initiate formal consultation several years after the Sinkyone Council's request plainly violates these policies.</p>	
<p>InterTribal Sinkyone Wilderness Council (Oral – Ft. Bragg)</p>	<p>The Draft EIS is a step in the process that the Navy goal is to obtain its next permit 2015 to 2020. Under the marine Mammal Protection Act the final steps would include an EIS, a new five-year MMPA permit for the Navy and consultation with the National Marine Fisheries Service over these activities' impacts on threatened and endangered species. The Navy plans to complete this process sometime after this year or in early 2015. The Intertribal Sinkyone Wilderness Council is a consortium of 10 federally-recognized tribes from Mendocino and Lake Counties, including Cahto, Redwood Valley, Hopland, Pinoleville, Potter Valley, Redwood Valley, Robinson, Round Valley, Scotts Valley and Sherwood Valley. The Sinkyone Council is a lead plaintiff in this case against the National Marine Fisheries Service. Its previous approvals of Navy training -- approvals of naval training exercise must rely on the best available science and must consider the impacts of such activities over the long-term. While that case was against the National Marine Fisheries Service it applied with equal force to the Navy's analysis and this EIS. Regardless of whether it's Navy or Fisheries Services doing the analysis, the real test is whether the agencies are applying the latest and best science, considering the full range of extent of harm from sonar and other activities and aggressively seeking ways to avoid or mitigate that harm. This Draft EIS shows that the Navy has a long way to go to comply with the law. For example, while the Navy is proposing to increase training and testing in these waters, including another increase in sonar use, it does not propose any meaningful, different or additional mitigation to protect marine mammals from this increase in activities. Leaning on the same old inadequate measures to begin with to protect marine life from additional harm isn't an acceptable, efficacious strategy. The Navy can and must do far more to justify its training needs, while at the same time ensuring that it does not harm the web of marine life along the north coast. Additionally, the Sinkyone Council, on behalf of its member tribes, has requested the Navy to initiate formal tribal consultation regarding concerns and tribes -- the tribes have about the impacts of the Navy's testing and training activities on traditional tribal use of marine resources. To date the Navy has ignored this request for formal tribal consultation, which is required by the Navy's 2005 policy for consultation with federally-recognized indian tribes and the President's Executive Order 13175 on consultation. In coordination with the tribal government's November 6th, 2000, the Navy's policy requires consultation on a</p>	<p>See response above to InterTribal Sinkyone Wilderness Council written comment.</p>

Table I.4-2: Responses to Comments from American Indian Tribes, Nations, and Tribal Organizations (continued)

Commenter	Comment	Navy Response
	<p>government-to-government basis in regard to recognition of tribal government's sovereignty. Tribal requests require that such consultation must begin as early as possible a juncture in the planning process. Executive Order 13175 likewise requires such consultation to ensure a full and timely consult by tribal officials. Thank you.</p>	
<p>Skagit River System Cooperative (Swinomish Indian Tribal Community and the Sauk-Suiattle Indian Tribe) (Electronic)</p>	<p>Skagit River System Cooperative Dear Ms. Kler: Skagit River System Cooperative (SRSC) makes the following comments on behalf of the Swinomish Indian Tribal Community and the Sauk-Suiattle Indian Tribe. The Swinomish Tribe and the Sauk-Suiattle Tribe are federally recognized Tribes and signatories to the Treaty of Point Elliott of 1855. Navy training and testing activities may affect resources vital to the Tribes. SRSC will concentrate our comments on the Crescent Harbor Explosive Ordinance Disposal (EOD) Range which is the area of greatest concern for Tribal resources. The Crescent Harbor EOD Range is in close geographic proximity to the Skagit River and provides important early lifestage rearing habitat for ESA-listed Chinook salmon and well as important habitat for other salmonids and forage fish. The EIS does not quantify the current level impact (no action alternative) to salmonids and forage fish, only stating the impact is not significant because the activity is infrequent. If the Navy has data from monitoring of past training activities at the Crescent Harbor EOD Range it should be included in the Final EIS. If such data does not exist a monitoring plan should be developed to evaluate the impact of training activities on salmonids and forage fish. Training activities at the Crescent Harbor EOD Range should not be increased until the current level of impact is fully evaluated. Relocating EOD training to a less environmentally sensitive area should be evaluated based on monitoring of current training activities. The Swinomish Tribe and/or the Sauk-Suiattle Tribe may wish to have government-to-government meetings with the Navy at the staff and/or policy level on the impact of training activities on Tribal resources at the Crescent Harbor EOD Range. Skagit River System Cooperative appreciates the opportunity to comment on the Northwest Training and Testing Draft EIS/OEIS. If you have any questions about our comments please contact me</p>	<p>The Navy appreciates the initiation of government-to-government consultation on this proposed action and remains committed to fulfilling its government-to-government consultation responsibilities in accordance with Navy policies. The Navy and the Swinomish Indian Community held a government-to-government consultation meeting on May 22, 2015. The Navy provided the requested information at that meeting.</p>

Table I.4-3 contains comments from state and local agencies received during the public comment period and the Navy’s response.

Table I.4-3: Responses to Comments from State and Local Agencies and Elected Officials

Commenter	Comment	Navy Response
<p>Alaska Department of Environmental Conservation/ Division of Air (Electronic)</p>	<p>The State of Alaska's Department of Environmental Conservation/Division of Air has no comments on the Northwest Training and Testing (NWTT) Draft Environmental Impact Statement/ Overseas Environmental Impact Statement Draft (EIS/OEIS). Thank you for providing the opportunity to participate in this process.</p>	<p>Thank you for reviewing the NWTT Draft EIS/OEIS.</p>
<p>Alaska Department of Fish and Game (ADFG)- 01 (Written)</p>	<p>The Alaska Department of Fish and Game (ADF&G) has reviewed the Department of the Navy draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for military readiness testing activities that occur at the southeast Alaska acoustic measurement facility (SEAFAC) in western Behm Canal. The testing has previously been authorized pursuant to the National Environmental Policy Act and would continue under the proposed No Action Alternative, as it has for about 22 years. Alternative 1 would increase testing activities 5% and increase Navy vessel movements to 60, and alternative 2 would increase testing activities 15% and increase Navy vessel movements to 83. Testing adjustments include navy diver cold water training, countermeasures testing, electromagnetic measurement, project operations, and target strength trials.</p> <p>The SEAFAC covers an area about 48 square nautical miles and includes an underway measurement area and a mooring site in western Behm Canal. Restricted areas protect sensors, cables and public safety. Active acoustic sources are used for communications and range calibration, and to provide position information for submerged units. Land based support facilities are located on Back Island.</p> <p>The EIS comprehensively describes the marine community composition of western Behm Canal. The EIS states the majority of fish exposed to non-impulse sources would have mild behavioral reactions to testing, if any, because acoustic exposures are intermittent and unlikely to repeat over short periods. Since long-term consequences for individual fish are unlikely, long-term consequences for populations are not expected. ADF&G acknowledges that the National Marine Fisheries Service (NMFS) is a Cooperating Agency with the Navy, has prepared biological opinions, and participated in the development of the draft EIS/OEIS. We defer to NMFS expertise regarding potential impacts to fish from acoustic sources.</p>	<p>The restrictions imposed on the western leg of Behm Canal due to naval operations are described and limited in C.F.R. 334.1274, as mentioned in the NWTT EIS. This C.F.R. describes the areas of the western leg of Behm Canal restrictions are imposed on, and the transitory restrictions the Navy is authorized to put into effect. The C.F.R. describes 5 areas. Areas 1 through 4 are permanently in place, and generally prohibit anchoring, towing, or dragging in those areas. The concern is for the equipment the Navy has deployed in those areas.</p> <p>Area 5 encompasses a significant portion of the lower section of western leg of Behm Canal. The restrictions imposed in that area are more of an operational nature to ensure public safety and effective conduct of testing while naval vessels are in the area.</p> <p>The Navy believes all of the comments from the Alaska Department of Fish and Game concern area 5 only. Specific responses to comments from the Alaska Department of Fish and Game follow.</p>

Table I.4-3: Responses to Comments from State and Local Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
ADFG-02	<p>The Navy tests from May 1 through September 15 annually, and the EIS states that free vessel transit is available at least 89% of the time. When the Navy is going to close an area for testing, they notify mariners at least 72 hours prior with most closures lasting less than 20 minutes. We provide the following information to help the Navy refine testing timing to avoid conflicts with commercial and sport fisheries.</p>	<p>The Alaska Department of Fish and Game’s interpretation could be incorrect, in that their comment could be read that the Navy tests only May 1 through September 15. The Navy tests year around. It is during the periods of 1 May through 15 September, the Navy is limited to 15 operational days. (C.F.R. 334.1275: “During the period May 1 through September 15 annually, the Navy will only conduct acoustic measurement tests which will result in transitory restrictions in Area #5 for a total of no more than 15 days.”)</p> <p>Also, as stated in the Draft EIS/OEIS on p. 3.12-6: “From May 1 through September 15 annually, the Navy conducts acoustic measurement tests which will result in only transitory restrictions in Area #5 for a total of no more than 15 days.”</p> <p>The Final EIS/OEIS has been revised to eliminate any confusion that testing may only be from the periods of 1 May through 15 September.</p>
ADFG-03	<p>In western Behm Canal, spring troll fisheries targeting Chinook <i>Oncorhynchus tshawytscha</i> salmon begin in May and continue through June, and summer troll fisheries targeting chum <i>O. keta</i> and coho <i>O. kisutch</i> salmon begin in July and continue through September. A sablefish <i>Anoplopoma fimbria</i> longline fishery begins in June and continues through mid-August and a sablefish pot fishery occurs in September.</p>	<p>Per C.F.R. 334.1275, “Transitory restrictions in Area #5 will not be enforced during daylight hours when Navy testing coincides with pre-scheduled special events in Behm Canal. Special events are defined as summer holidays or celebrations, competitions, or economic endeavors scheduled by an agency or organization, and typically occurring every year for the utilization of natural resources of Behm Canal. Special events include commercial emergency seine fishery openings from 25 July through 15 September, historic salmon derbies lasting eight days or less, Memorial Day, Labor Day, Independence Day or any nationally recognized three day weekend to celebrate these holidays.”</p> <p>The Navy wants to assure the Alaska Department of Fish and Game that Navy is precluded by regulation to restrict transits during any daylight period that there is a commercial opening for fishing of any type between 1 May and 15 September. Additionally, the Navy does not want to test during those times of high volume vessel traffic in Western Behm Canal due to concerns over public safety, and the fact that the Navy typically cannot get meaningful acoustic data during those times due to the high level of noise generated by commercial vessels.</p> <p>As stated in your letter, you provide this information to the Navy, for which the Navy thanks you. Additionally, the Navy’s Site Director, located in Ketchikan, AK also monitors regularly and emergency scheduled commercial fishing openings. He passes this information along to ensure that the Navy does not conduct testing, if at all</p>

Table I.4-3: Responses to Comments from State and Local Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
		avoidable, during those periods, and does not implement transit restrictions during daylight hours, if the opening is occurring. The Navy believes the EIS/OEIS covers this issue adequately by calling out C.F.R. 334.1275.
ADFG-04	<p>From May through September, sport fishers target Chinook, coho, chum and pink O. gorboscha salmon, and bottom fish in western Behm Canal. A popular spring Chinook salmon derby occurs annually Memorial Day weekend and the subsequent two weekends. Though the Navy minimizes impacts to sport fishers by allowing small craft to operate at less than 5 knots within 500 yards of the shoreline during the 20 minute closures, it may be worthwhile to suspend testing Saturday and Sunday during those three weekends when several hundred boats are in the area.</p> <p>We recommend you remove references to the Ketchikan coastal management plan in the EIS as the program has been eliminated in the State of Alaska. If you have any questions or need to contact specific ADF&G personnel, please contact me at [contact information redacted].</p>	<p>The Navy is precluded by regulation to restrict transits during any daylight period that there is a historical fishing derby scheduled. This includes the Memorial Day weekend and the following two weekends. The Navy is also precluded from implementing transit restrictions during the Independence Day, and Labor Day weekends. The Navy believes the EIS/OEIS covers this issue adequately by calling out C.F.R. 334.1275.</p> <p>As a course of practice, the Navy typically does not test on any weekend between Memorial Day and Labor Day due to the high volume vessel traffic in Western Behm Canal during those periods. Although not precluded from implementing transit restrictions during non-holiday weekends, the volume of traffic is of a safety concern to the Navy. Additionally, the noises generated due to the high volume of sports fishers preclude the Navy from obtaining meaningful acoustic data. Although the Navy reserves the right to implement restrictions during the non-holiday weekends not associated with the sport salmon derby, the Navy has not done it over the twenty years of operating in the Behm Canal area.</p> <p>Thank you for the recommendation to remove references to the coastal management plan. Reference to the Ketchikan coastal management plan was retained in Section 3.2 (Air Quality) of the Final EIS/OEIS, as that reference provides historical perspective of past air quality observations.</p>
Humboldt County (California) Board of Supervisors	<p>Re: Request for 60-day Extension of Deadline for Public Comments on Two Letters of Authorization from NOAA Fisheries for the Incidental Take Permits (ITP) of Marine Mammals for US Navy and Navy NWTT Draft EIS/OEIS.</p> <p>I am writing on behalf of the Humboldt County Board of Supervisors regarding the Navy's request for authorization from the NOAA/National Marine Fisheries Service for the incidental take permits of marine mammals and the Navy Draft EIS/OEIS. As a result of lack of public noticing efforts and community awareness, we feel that it is in the best interest of the community to extend both the deadlines for public comments on the ITP permits and Navy NWTT Draft EIS/OEIS.</p> <p>The length of the Navy Draft EIS is approximately 2,000 pages in length. Additionally, the two letters of request for approval from the NOAA Fisheries for incidental take</p>	<p>In response to requests to provide additional review time for the Draft EIS/OEIS, the Navy extended the comment period by three weeks, keeping the comment period open from 24 January 2014 to 15 April 2014.</p> <p>NOAA/National Marine Fisheries Service, not the Navy, is responsible for any extensions to the comment period on Incidental Take Permits.</p>

Table I.4-3: Responses to Comments from State and Local Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>permits are nearly 300 pages in length. Local community leaders and advocates feel that due to the length of these documents, more time is required in order to adequately gather public comments from members of the community and surrounding areas.</p> <p>Our Board previously expressed concerns about expansion of activities within the NWTT in April of 2009. As Humboldt County's coastline and adjacent waters are some of the richest in the world with robust fisheries, the behavioral impacts of mid-range sonar on marine mammals, the impacts of proposed underwater training minefields on our fishing industry and near shore operations have the potential for devastating our scenic resources and quality of life here on the North Coast.</p> <p>We recognize and appreciate the Navy's attempts to reach out to the public in order to gather comments on their Draft EIS/OBIS and their two letters of authorization from the NOAA Fisheries for the incidental take permits. The board however would greatly appreciate an extension on these deadlines mentioned above, and believes this extension is necessary to allow for more meaningful public input.</p> <p>Thank you for your attention to our concerns.</p>	
<p>Ketchikan Gateway Borough (Alaska) Mayor</p>	<p>The Southeast Acoustic Measurement Facility (SEAFAC) located in the Western Behm Canal near Ketchikan conducts high fidelity passive acoustic signature measurements important to the defense of the country. SEAFAC is part of the diverse community of southern southeast Alaska and is a good neighbor to Ketchikan.</p> <p>The Navy is seeking comments on a Draft Environmental Impact Statement (EIS) to update the Navy's northwest military training and testing activities in the region. The Draft EIS includes analysis of the potential environmental impacts of three alternatives summarized below:</p> <p>No Action Alternative</p> <p>Under the No Action Alternative, SEAFAC would continue baseline training and testing activities, as defined by existing environmental planning documents, including the Northwest Training Range Complex EIS, the Naval Undersea Warfare Center Division Keyport Range Complex Extension EIS, and the SEAFAC Environmental Impact Study.</p> <p>Alternative 1 (Preferred Alternative)</p> <p>Alternative 1 includes activities in the No Action Alternative, plus adjustments to the types and levels of training and testing activities conducted within the Study Area as necessary to support current and planned requirements for activities. This alternative includes activities associated with force structure changes, such as those resulting from the development, testing, and ultimate introduction of new vessels, aircraft, and weapons systems into the fleet; training exercises in support of Civilian Port Defense; and testing activities.</p> <p>Alternative 2</p>	<p>Thank you for reviewing the NWTT Draft EIS/OEIS.</p>

Table I.4-3: Responses to Comments from State and Local Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>Alternative 2 consists of all activities that would occur under Alternative 1, plus additional adjustments to the levels of training and testing activities.</p> <p>The Ketchikan Gateway Borough supports SEAFAC's preferred alternative, Alternative 1. The added activities increasing the levels of training will help achieve SEAFAC's objectives and better serve Ketchikan, Alaska, and the United States ability to protect and defend.</p>	
<p>Lane County (Oregon) Commissioner</p>	<p>Re: Request for 60-day Extension of Deadline for Public Comments on Two Letters of Authorization from NOAA Fisheries for the Incidental Take Permits (ITP) of Marine Mammals for US Navy NWTT Draft EIS/OEIS.</p> <p>I am writing regarding the Navy's request for authorization from the NOAA National Marine Fisheries Service for the incidental take permits of marine mammals and the Navy Draft EIS/OEIS. As a result of lack of public noticing efforts and community awareness, I feel it is in the best interest of the community to extend both the deadlines for public comments on the ITP permits and NWTT Draft EIS/OEIS.</p> <p>The length of the Navy Draft EIS is approximately 2,000 pages in length. Additionally, the two letters of request for approval from NOAA Fisheries for incidental take permits are nearly 300 pages in length. I feel that due to the length of these documents, more time is required in order to adequately gather public comments from members of the community and surrounding areas.</p> <p>As the Oregon coastline and adjacent waters are some of the richest in the world with robust fisheries, the behavioral impacts of mid-range sonar on marine mammals, the impact of proposed underwater training minefields on our fishing industry and near shore operations have the potential for devastating our scenic resources and quality of life on the Oregon Coast.</p> <p>I recognize and appreciate the Navy's attempts and efforts to reach out to the public in order to gather comments on their Draft EIS/OEIS and the two letters of authorization from the NOAA Fisheries for the incidental take permits. Despite these attempts and efforts, however, I would greatly appreciate additional time to allow for more meaningful public input.</p> <p>Thank you for your attention to my concerns.</p>	<p>In response to requests to provide additional review time for the Draft EIS/OEIS, the Navy extended the comment period by three weeks, keeping the comment period open from 24 January 2014 to 15 April 14.</p> <p>NOAA/National Marine Fisheries Service, not the Navy, is responsible for any extensions to the comment period on Incidental Take Permits.</p>
<p>Lincoln County (Oregon) Commissioner</p>	<p>Re: Request for 60-day extension of deadline for public comments</p> <p>I am writing on behalf of the Lincoln County Board of Commissioners regarding the Navy's request for authorization from the NOAA/National Marine Fisheries Service for the incidental take permits of marine mammals and the Navy Draft EIS/OEIS. We feel that it is in the best interest of the community to extend both of the deadlines for public comments on the ITP permits and Navy NWTT Draft EIS/OEIS.</p> <p>Due to the length of the documents available for review, we feel that more time is</p>	<p>In response to requests to provide additional review time for the Draft EIS/OEIS, the Navy extended the comment period by three weeks, keeping the comment period open from 24 January 2014 to 15 April 2014.</p> <p>NOAA/National Marine Fisheries Service, not the Navy, is responsible for any extensions to the comment period on Incidental Take Permits.</p>

Table I.4-3: Responses to Comments from State and Local Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>required in order to adequately gather public comments from members of the community and surrounding areas.</p> <p>We recognize and appreciate the Navy's attempts to reach out to the public in order to gather comments on their Draft EIS/OEIS and their two letters of authorization from the NOAA Fisheries for the incidental take permits. The board however would greatly appreciate an extension on these deadlines mentioned above, and believes this extension is necessary to allow for more meaningful public input.</p> <p>Thank you for your attention to our concerns.</p>	
<p>Washington State Historic Preservation Officer</p>	<p>Thank you for your letter of January 17, 2014 to the Washington State Department of Archaeology and Historic Preservation (DAHP) regarding the above referenced action proposed by the U.S. Navy (USN). Based upon the Notice, I understand that the USN has prepared a Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for Northwest Training and Testing (NWTT) activities. These activities include training and testing activities including use of active sonar and explosives within the NWTT Study Area. In Washington, these study areas include waters of the Salish Sea, Puget Sound, Hood Canal, Carr Inlet, Strait of Juan de Fuca, and Pacific Ocean.</p> <p>In response and on behalf of the Washington State Historic Preservation Officer (SHPO) we appreciate notification of the availability of the NWTT Draft EIS/OEIS. Additionally, the SHPO and DAHP staff will anticipate initiation of consultation by the USN in accord with Section 106 of the National Historic Preservation Act to assess effects of the NWTT on cultural and historic resources listed in, or eligible for listing in, the National Register of Historic Places. To this end, we look forward to receiving a letter formally initiating consultation and to include a project description, a request for our comments on the project area of potential effect (APE), and a public participation plan. In view of the large and scattered study areas we anticipate the consultation to include a robust resource identification and evaluation effort and public engagement process.</p> <p>Finally, we appreciate receiving any correspondence or comments from concerned tribes and other parties that you receive as you consult under the requirements of 36 CFR800.4(a)(4).</p> <p>The above comments and recommendations are based on the information available at the time of this review and on behalf of the SHPO pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR 800.</p> <p>Please note that DAHP requires that all historic property inventory and archaeological site forms be provided to our office electronically. If you have not registered for a copy of the database, please log onto our website at www.dahp.wa.gov and go to the Survey/Inventory page for more information and a registration form. To assist you in conducting a survey, DAHP has developed a set of cultural resource reporting</p>	<p>Navy has provided a subsequent letter to the Washington State Historic Preservation Officer (see Appendix C, Agency Comments) and will work through the NHPA requirements in future consultation.</p>

Table I.4-3: Responses to Comments from State and Local Agencies and Elected Officials (continued)

Commenter	Comment	Navy Response
	<p>guidelines. You can obtain a copy from our website. Also, DAHP requires that all cultural resource reports be submitted in PDF format on a labeled CD or transmitted electronically. For further information please go to http://www.dahp.wa.gov/documents/CR_ReportPDF Requirement.pdf.</p> <p>Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me at [<u>Contact</u> information redacted]</p>	

Table I.4-4 contains comments from non-governmental organizations received during the public comment period and the Navy’s response. Responses to these comments were prepared and reviewed for scientific and technical accuracy and completeness.

Table I.4-4: Responses to Comments from Organizations

Commenter	Comment	Navy Response
<p>Center for Whale Research (CWR)-01</p>	<p>The training and testing area proposed by the US Navy. These waters happen to be some of the most productive US coastal waters in the eastern North Pacific Ocean, as illustrated in the SEAWIFS images to the left above (dark red is most productive, blue is least productive. There are many species of marine animals that depend upon these nutrient-rich waters for their survival requirements. Among these are seven species of cetaceans that are listed as Endangered under the ESA of 1973 et. seq., as well as other marine mammals, birds, and turtles that are “protected” by federal law. Virtually the entire Olympic Coast National Marine “Sanctuary” is within the boundaries of the proposed Navy training area (see left image; sanctuary border in red). The species of most concern to the Center for Whale Research is the killer whale, <i>Orcinus orca</i>, specifically the Endangered Southern Resident ecotype (SRKW) that travels and forages in the Olympic Coast National Marine Sanctuary in all months of the year. The Northwest Fisheries Science Center has extensive data on the locations and travels of members of this population from sighting reports, our CWR Winter Studies report, NOAA cruises, and satellite tagging studies: (SRKW tracks in red on charts below)</p> <p>The general movements of pods and members of the SRKW community are now well known, with most of this population frequenting the inland marine waters of Washington State and southern British Columbia at approximately weekly to biweekly intervals from May through September each year following and foraging upon runs of salmon (principally Chinook, <i>O. tshawytscha</i>) to Salish Sea rivers to spawn. Whenever the SRKW's are not in the interior waters of the Salish Sea during these months, they are in the coastal waters of southern British Columbia or in the Olympic Coast National Marine Sanctuary/NWTTTC, preponderantly on the continental shelf. From October through December, the SRKW's frequent the Salish Sea at weekly to tri-weekly intervals following and foraging upon runs of salmon that now include Chum, (<i>O. keta</i>). From January through April, the SRKW distribution pattern differs slightly by pod, with J pod continuing to frequent Salish Sea at variable intervals (in some years remaining in Salish Sea waters for consecutive weeks), while K and L pods typically travel and forage in US coastal waters as far south as central California. During these travels, they may break into smaller groups composed of matrilineal lines that may be as far apart as hundreds of miles. But, with travel speeds on average about 75 miles per day, the entire population can gather together within a week and disperse again depending upon foraging success in any given region. In most Februarys there is a gathering of all SRKW's in or near the Strait of Juan de Fuca, the Critical Habitat in both the US and Canada. Then, the coastal waters of Washington State from the Olympic Coast National Marine Sanctuary to the Columbia River are typically frequented by all three SRKW pods in March and April, coinciding with early Chinook salmon runs to the Columbia.</p>	<p>Thank you for providing a comment and note that as provided in the Draft EIS/OEIS, this information was already incorporated into the analysis that has been presented. Additionally, the Navy and NMFS as a cooperating agency in the preparation of this document communicated with scientists and researchers in the Northwest, including those at the Northwest Fisheries Science Center. The Navy is committed to protecting the marine environment and marine life during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment and marine life while training and testing for nearly a decade.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
CWR-02	<p>Our particular concern involves the Navy deployment of explosive devices (bombs) in the proposed training area (Table 2.89.1 in Draft EIS/OEIS):</p> <p>Specifically, our concern is with the BOMBEX [A-S] activities in which for all alternatives there are proposed 10 HE bombs in Offshore Area W-237, subarea not specified. We respectfully request that no HE devices be detonated in areas W-237 A through E, or in continental shelf and escarpment waters to the south, as these are documented high use areas by SRKW's. NOAA charts plot numerous examples of unexploded ordnance on the sea-floor in the W-237 area that have been deployed in the past, and these should be neutralized (good demolition training). The track of J26 on the previous page shows his travels extensively in explosive dumping areas.</p>	<p>[The comment states "Table 2.89.1," but is apparently referring to Table 2.8-1.]</p> <p>The BOMBEX activities mentioned in the comment all occur 50 nm or greater from the coast, outside the referenced track of J26 as provided. Also, BOMBEX is prohibited in the Olympic Coast National Marine Sanctuary, which includes much of W-237 A, B, and E.</p> <p>The Navy is aware of the charted WWII and Cold War-era explosive disposal sites in the Pacific. Beginning in 1917 with policies for munitions disposal and up until 1970, at-sea disposal of munitions was considered one of the safest alternatives available, and the Department of Defense disposed of excess, obsolete, unserviceable, and captured enemy munitions in the waters off the shores of the United States until 1970; the practice ended over 4 decades ago. The Navy's proposed activities do not include recovery and neutralization of any materials from historic dump sites, given there is currently no risk to humans or the environment, it would be prohibitively expensive, and most importantly, attempting to recover those materials would pose a risk to humans and the environment where none now exists. Furthermore, this would not meet the primary needs or requirements for demolition training. For more on the general topic of WWII era munitions disposal sites, see the referenced University of Hawaii (2010) regarding the state of a similar historic dump site off the south shore of Oahu, Hawaii.</p>
CWR-03	<p>Furthermore, we request that the statistical study by the Navy for its Table I-1 be revisited, at least with respect to SRKW's:</p> <p>This revisit/review should include:</p> <ol style="list-style-type: none"> 1) realistic probabilities of a direct strike using actual whale track data and actual bomb deployments within subareas. This data is available for SRKW's and some other species. 2) realistic probabilities of TTS, injury, and mortality to a marine mammal using published ranges of such impacts, not just direct hits: 3) delete the following statement and do the necessary homework: "Though marine mammals are not randomly distributed in the environment, a random point calculation was chosen due to the intensive data needs that would be required for a calculation that incorporated more detailed information on an animal's or military item's spatial occurrence." (Appendix I, Page I-2) <p>i.e., - obtain the already available together with past and future correlating data required for more detailed information on an animal' spatial occurrence; and, pre-plan the military</p>	<ol style="list-style-type: none"> 1) Note that bombing exercise (BOMBEX) events are infrequent (10 HE bombs per year), the BOMBEX occurs 50 miles or greater off the coast, which is outside the SRKW tracks, and the Appendix I (Appendix H in the Final EIS/OEIS) results were designed to be overestimates of likely impacts for the SRKW and other marine mammals. The track data and the location of the BOMBEX events do not overlap, and if that data had been used rather than a random distribution, the final conclusion would have been the same. <p>Even though Navy is authorized to conduct up to 30 BOMBEX events per year, historically, the Navy conducts far fewer than the total authorized, and future training events are expected to occur with similar frequency.</p> <ol style="list-style-type: none"> 2) Realistic probabilities for TTS, injury, and mortality to marine mammals from in-water explosive detonations were presented in the EIS/OEIS (see Section 3.4.3.2.2, Impacts from Explosives); please note that the acoustic modeling has a different methodology than the

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>item's spatial occurrence (together with the FR anticipated take ranges), to bring the probability of strike, injury or mortality of an SRKW to zero.</p> <p>[This is not as difficult as it may seem. The SRKW's do not often travel off the continental shelf, and when they do, they do not travel far into low productivity areas. BOMBEX A-S can be conducted in areas W-237 F through J will little chance of either striking or explosively impacting a SRKW. Navy training can kill some other threatened or Endangered species, as Andrea Balla-Holden (Navy Fisheries and Marine Mammal Specialist) said to me at an earlier requested meeting with San Juan County County Commissioners. It is relatively easy for much of the year to keep the training elements appraised of the known whereabouts of SRKW's in the Salish Sea - the information is available on the web.]</p>	<p>direct strike analysis as described in Section 3.4.3.1.14 (Quantitative Analysis).</p> <p>3) Please note that the probability of strike, injury, or mortality of an SRKW is currently "zero." As described in Section 3.4.3.1.14 (Quantitative Analysis), the random distribution methodology was chosen as the most reasonable approach. This is consistent with the approach taken for all of the Navy's analyses and is consistent with the methodology in previously approved MMPA authorizations. Also, as described above, the limited data available would make the results unreliable.</p> <p>This comment misrepresents Ms. Balla-Holden's statement. Ms. Balla-Holden was representing the Navy's position, which reflects a concern for all species, and that by tailoring Navy activities to avoid SRKW only, the Navy could be increasing the risk to other endangered species (see the mitigation discussion presented in Chapter 5, Standard Operating Procedures, Mitigation, and Monitoring). Ms. Balla-Holden's comment reflected that the Navy does not expect any marine mammal mortalities as a result of its proposed activities. The Navy is aware of the websites providing the whereabouts of SRKW's in the Salish Sea and is continuing to fund additional research related to SRKW distribution and habitat use.</p>
CWR-04	<p>The information on coastal distribution of other cetacean species is not as well known as that for SRKW's, but that data base can be greatly improved. Within the Olympic Coast National Marine Sanctuary the information can be gathered by existing staff and supporting contracts if the Navy really wants to fill this data gap. The equipment, techniques and expertise is available to address this urgent data need, and the gap can be filled with relatively little expense. We note that NMFS recently awarded nearly \$1 M in a grant to the Washington State Fisheries Enforcement to enforce a 200 yard keep away zone by public boaters from SRKW's. That level of funding to OCNMS research would go a long way toward filling the Navy's NWTTC data gap.</p>	<p>Please see the discussion of past and future Navy-funded research as presented in Section 5.5 (Monitoring and Reporting) and Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities). There has been substantial and recent data gathered in the NWTTC Study Area and that data has been cited and incorporated into the analyses presented in Section 3.4 (Marine Mammals).</p>
CWR-05	<p>We fully appreciate the Navy's need to conduct training, and that some training exercises may result in "takes" of marine mammals despite precautions taken. Our suggestions:</p> <p>1) utilize existing satellite products such as http://www.orbit.nesdis.noaa.gov for predicting oceanic and biological conditions on a dynamic basis for the NWTTC prior to training events.</p>	<p>The Navy uses the best available science in its analysis. The currently best available science lacks robust models for all species, and for those that do exist, the predictions are still subject to a high degree of uncertainty. Also note that marine mammals exploit all areas of the ocean, and the absence of one species in an area likely means another species is filling that environmental niche; there is likely never a place meeting the Navy's training or testing needs that would be absent any marine mammals. Additionally, the Navy believes that real-time observations of the water space around an activity as detailed in</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) has not evolved to the point at which satellite data can be used for dynamic predictive modeling or that it can be done with the precision necessary and on a time scale applicable to the advance planning required.
CWR-06	2) obtain more information on marine mammal occurrence and distribution in the NWTTC, or at least within the Olympic Coast National Marine Sanctuary, for correlation with the data available from satellite products for developing predictive models.	As discussed in Section 3.4.3.1.14.1 (Marine Species Density Data), and the referenced Navy's Pacific Marine Species Density Database Technical Report (U.S. Department of the Navy 2014), the Navy is already employing the use of habitat based modeling based on satellite data to predict and improve marine species density data and will continue to follow emergent science in this regard. Regarding obtaining more information, as presented in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), the Navy is funding multiple studies in the PNW, including two new SRKW distribution projects. Please also be aware of the reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
CWR-07	3) with real data, completely revisit the statistical analyses of potential impacts of training activities.	Realistic probabilities for potential impacts to marine mammals from training and testing are presented in the EIS/OEIS in Section 3.4.3 (Environmental Consequences). Please specifically note Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), where there is a summary regarding over 8 years of monitoring effort at intensively used range complexes that has found no evidence that Navy training or testing activities have had any impact on marine mammal populations in the Pacific in areas such as Southern California and Hawaii, where Navy training has been occurring year-round for decades.
CWR-08	4) conduct BOMBEX A-S events at least 25 nautical miles off the continental shelf edge to provide minimal probability of impacts to SRKW's.	See response to CWR-03. The Navy's mitigation measures that have been coordinated with NMFS are effective for all endangered species. The Navy's high explosive BOMBEX activities occur well beyond 50 miles from shore, which is generally past the continental shelf edge throughout the NWTT Study Area. Conducting these exercises greater than 50 nm from shore has the practical effect of affording environmental protections to certain species such as southern resident killer whale, salmonids, and harbor porpoise.
CWR-09	5) completely revisit the mitigations section 5 for adequacy with respect marine mammals that are protected by US law, not just insert the ubiquitous Navy statements of	The Navy's mitigation measures were carefully designed in coordination with NMFS to protect marine resources while allowing the

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	"impracticality" and "unacceptable impact on readiness". The Navy should seek Presidential or Congressional exemption from the law for each event, if required for practicality or readiness.	Navy to conduct its required training and testing. Please see the discussion of the assessment process in Section 5.2 (Introduction to Mitigation) and why mitigation measures may be ineffective at reducing environmental impacts, have an unacceptable operational impact based on the operational assessment, or are incompatible with Section 5.2.2 (Overview of Mitigation Approach).
CWR-10	6) deploy satellite-tagged ocean surface current "drifters" at each explosive or high-energy impulsive event (eg. SONAR), and search the plume for potential injuries and mortalities that may not have been observed during or immediately after the event.	As described in Section 5.5 (Monitoring and Reporting) and as part of the adaptive management approach, a Scientific Advisory Group of leading marine mammal scientists continues to develop recommendations and guidance for how to most efficiently and effectively invest the marine species monitoring resources, which would include ideas such as the use of the "drifters" mentioned in the comment. Please note that Navy has already incorporated before, during, and after research and monitoring into its programmed research. Also see the discussion of past and future Navy-funded research as presented in Section 5.5 (Monitoring and Reporting) and Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities).
CWR-11	7) overhaul the reporting of SONAR and bombing events to NMFS so that meaningful post-analysis of stranding information or other observations can be conducted. Currently, these reports are made to NMFS in annual tabular form and inappropriately classified "Confidential". No correlation with the stranding network data is even possible in this system as it is designed.	Navy and NMFS have been engaged in conducting coordinated scientific investigations of strandings for well over a decade (see the discussion in Section 3.4.3.1.8, Stranding). Due to the need to protect classified national security information, some details regarding training or testing events are only provided to the appropriately cleared personnel at NMFS. In that context, the Navy does provide details on the activities that could be used to correlate with stranding data, and Navy and NMFS have coordinated investigation on potentially unusual or suspect stranding events to gather information outside the routine reporting as the need arises. For further information, the Navy's stranding protocol is described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring). As stated in Section 5.5.3.2 (Additional Reporting Requirements), "Navy personnel shall ensure that NMFS is notified immediately (or as soon as clearance procedures allow) if an injured, stranded, or dead marine mammal is found during or shortly after, and in the vicinity of, any Navy training exercise utilizing mid-frequency active sonar, high-frequency active sonar, or underwater explosive detonations."
CWR-12	8) disavow the extensive post-mortem 'mitigation' efforts (spin-doctoring away from potential or real impacts) that undermine public confidence in our government.	The comment is unclear and cannot be responded to as an issue within the scope of this analysis. With regard to topics involving mitigation, see the discussion of past and future Navy funded research

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>as presented in Section 5.5 (Monitoring and Reporting). Regarding a summary of likely impacts to marine mammals, see Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities). Also, the Navy’s mitigation measures were carefully designed in coordination with NMFS to protect marine resources while allowing the Navy to conduct its required training and testing.</p>
<p>Columbia Basin Environmental Council - 01</p>	<p>I am the President of the Registered Non-Profit Columbia Basin Environmental Council. I and 4 members of the Council have reviewed the NWTTEIS, and have solicited comments from the entire membership. One of our members has performed an on site inspection of the area to be subject to sonar testing, both pierside and at sea. We fully support the proposed action, and reject both the No Action Alternative and Alternative One. The US Navy is to be commended on the Environmental Resources to be analyzed. After a diligent search of scientific papers we can find no widely accepted basis for opposing the proposed actions. Sincerely, William Riley(signed)</p>	<p>Thank you for participating in the NEPA process.</p>
<p>Johns, Monroe, Mitsunaga, Kolouskova</p>	<p>This office represents Hood Canal Sand and Gravel, LLC, a property owner and business which may be affected by the Navy’s activity under review as provided for in the NWTTEIS. We provide you with the following comments and correction related to specific assertions and assumptions in the DEIS.</p> <p>We have found that the NWTTEIS makes several erroneous assumptions in Volume 2, 4-18, Section 4.3.6 “Other Environmental Considerations.” We have cited the pertinent subsection language, below, with our corrections set forth in italics.</p> <p>4.3.6.1 Fred Hill Materials Thorndyke Resource (Pit-to-Pier) Project</p> <p>DEIS Statement: Fred Hill Materials, a materials supply firm based in Poulsbo,</p> <p>Correction: the entity is Hood Canal Sand and Gravel, LLC which has active applications in process for Condition Use Permit and attendant permits and approvals for the identified activities.</p> <p>DEIS Statement: constructed a 4-mile (mi.) (6.4-kilometer [km] conveyor belt connecting a 781 ac. (316 ha) inland gravel mine to 1,100 ft. (335 m) long, 80 ft. (24 m) high pier and 900 ft. (274 m) long moorage dock.</p> <p>Correction: 520-acre extraction area 100-acre Operations Hub. 990 ft. long 90 ft. high pier and six 20x20 ft. breasting dolphins and two 20x20 ft. mooring dolphins, spaced evenly apart. with the distance from end-to-end approx. 920 ft.</p> <p>DEIS Statement: The shipping facility is on the west shore of Hood Canal, 5 mi. (8 km) south of the Highway I 04 Hood Canal Bridge. When fully operational the “pit to pier” operation would mine, transport, and ship an estimated 60,000 tons (54,432 metric tons) of gravel loading into barges and ships bound for domestic and foreign ports.</p> <p>Correction: the projected tonnage is 6.75 million tons annually, subject to market</p>	<p>The Navy completed its purchase of a bedlands easement in Hood Canal in July 2015 and the State of Washington has denied Hood Canal Sand and Gravel’s Joint Aquatic Resource Permit Application for its proposed project. Therefore, the Hood Canal Sand and Gravel pit to pier project is no longer reasonably foreseeable and has been removed from our cumulative impact analysis.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>demand, of sand and gravel loading into barges and ships. Hood Canal Sand and Gravel has never asserted any intention to serve foreign markets; all vessels are to be US flagged.</p> <p>DEIS Statement: Operations would be 24 hours a day and each vessel would travel under or through the opening or the floating Hood Canal Bridge. There is considerable uncertainty as to whether this project will be implemented.</p> <p>Correction: Hood Canal Sand and Gravel strongly disagrees as to the assertion of uncertainty. Permits and approvals are underway and the project is economically viable. Please be advised that Hood Canal Sand and Gravel's operations are viable and an ongoing business interest. The project is undergoing active environmental review and a DEIS under the Washington State Environmental Policy Act is expected later this spring***</p> <p>In addition to the foregoing, we provide you with a copy of our analysis related to an ongoing effort on the part of Washington State Department of Natural Resources to explore a lease or the grant of an easement to the US Navy for aquatic land.</p> <p>Thank you for the opportunity to provide these comments. We request that you make all necessary corrections to your environmental documentation and incorporate these comments, with your attendance corrections, into the final EIS.</p>	
<p>Lost Coast League - 01</p>	<p>I'm the secretary of the Lost Coast League, which has as its mission statement the preservation of the public trust values of the North Coast. And this is our home. This is our habitat. We regard everything beyond us in a westerly direction, the marine part of our habitat, just as dearly as we regard going east. It's all part of our own natural habitat. Your activities will certainly affect our habitat in a negative way, in terms of cumulative impacts, not -- not -- I mean, you have enumerated on an individual species effect basis, but the entire habitat will be degraded. This isn't just NIMBY-ism, this -- this regard for our own particular habitat. It's -- it's -- it has to do with the entire planet. And I'd like to suggest, as other people have suggested, that there be a no-project alternative. There -- the project is not -- not a project that -- that is independent of itself. Of course we know where the Navy stands in regard to our own foreign politics. We have -- we have boats sailing in and out of the Straits of Hormuz. We have huge squadrons, 12 enormous squadrons all over the Pacific. And these training projects, just as Mr. Mosher and Mr. Hahn stated, are feeding directly into the strengthening of this whole system of dominating the planet militarily. For us, we -- we think that this domination is what's causing a lot of the enemies that you've discussed and you discussed in the other room: Enemy submarines, possible explosives. And -- and as such, we regard your kind of blockade of our coast with these exercises as part of a -- a hostile occupation. The Navy -- as the Navy hostile league occupies the planet, the U.S. Navy -- other navies are very small -- as the Navy occupies the planet, so you occupy our coast and intimidate us, in no way which is different from the occupation of a foreign -- what you would call an</p>	<p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	enemy. Thank you.	
Natural Resources Defense Council (NRDC)-01	<p>On behalf of our organizations and our millions of members, activists, and supporters, we write to submit comments on the Navy’s Draft Environmental Impact Statement/Overseas Environmental Impact Statement (“DEIS”) for its training and testing activities in the Pacific Northwest. See 79 Fed. Reg. 4158 (January 24, 2014); 79 Fed. Reg. 5389 (January 31, 2014). Please include these comments in the administrative record.¹</p> <p>The Navy’s compliance with the National Environmental Policy Act (“NEPA”), 42 U.S.C. 4321 et seq., for its training and testing activities in the Pacific Ocean has entered a new phase. Building on compliance work for training and testing activities taking place in Hawaii and Southern California from December 2013 to December 2018, the Navy is providing a more comprehensive picture of the training and testing activities it is conducting and plans to conduct from 2015 to 2020 in the Pacific Northwest and the impacts to the environment from those activities.</p> <p>¹ We are aware that comments may be submitted separately by government agencies, individual scientists, environmental organizations, and the public. All of these comments are hereby incorporated by reference.</p>	<p>Please be aware that for decades Navy has been conducting largely the same training and testing activities using the same type of equipment in the NWTT Study Area without any evidence of harm to marine species as a result of those activities. In particular, see Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) regarding the likely long-term consequences from those activities. Also note that as described in Section 1.9 of the EIS/OEIS, previous analyses have taken place regarding a comprehensive understanding of Navy activities in the Pacific Northwest involving training and testing at sea. Specifically with regard to the Proposed Action, see <i>Northwest Training Range Complex Final Environmental Impact Statement/Overseas Environmental Impact Statement</i> (September 2010) and the <i>Final Environmental Impact Statement/Overseas Environmental Impact Statement NAVSEA NUWC Keyport Range Complex Extension</i> (May 2010).</p>
NRDC-02	<p>Unfortunately, it is a picture of unremitting harm: more than 500,000 instances of marine mammal “take” (behavioral impacts, harassment, injury) over five years (from 2015 to 2020), including almost 275,000 instances of temporary hearing loss, and more than 600 instances of permanent hearing loss from the use of sonar and explosives. DEIS at 3.4-150 to 151; 3.4-158 to 159. While these predictions of injury are shocking—and, we believe, still underestimate the harm to marine mammals from the Navy’s activities—they confirm what stranding events have evidenced, scientists have studied, and the public has believed for years: Navy training and testing activities endanger whales and dolphins at intolerable levels.</p>	<p>Please note that “take” is by no means equivalent to “unremitting harm.” Please see Section 3.4.3.1.18 (Application of the Marine Mammal Protection Act to Potential Acoustic and Explosive Effects) for a description of “take” and note that the overwhelming majority of take are behavioral harassments that are unlikely to have long-term consequences to populations of marine mammals.</p>
NRDC-03	<p>Unfortunately, the latest evidence of direct injury to marine mammals from naval activities is the stranding event that just occurred in Greece, where up to 11 Cuvier’s beaked whales stranded on Crete between April 1 and April 6 concurrent with U.S., Israeli, and Greek naval exercises.</p>	<p>The Navy is aware of the Crete stranding, but the findings of that stranding are not yet finalized. The Navy will continue to track this, to further its understanding of marine mammal stranding events.</p> <p>As presented in the NWTT EIS/OEIS, there are no Major Exercises in the NWTT Study Area.</p>
NRDC-04	<p>While the scale of impacts does not change the Navy’s obligations under NEPA, it highlights why it so important that the Navy’s DEIS fully comply with both the letter and spirit of the law. As Congress intended when it passed NEPA, faced with such harm, the DEIS must help decision makers make fully informed decisions on the proposed activities; after reviewing the DEIS, decision makers must understand the breadth of harm to impacted species, must be able to choose a course of action from a range of alternatives that provide options for meeting the Navy’s goals while still reducing harm to species, and must have at their disposal a range of mitigation measures that will</p>	<p>The Navy complies with all applicable environmental laws, including NEPA. As such, the Navy has developed this EIS/OEIS to meet the requirements of these laws. Please see Chapter 2 (Description of Proposed Action and Alternatives), which includes selection criteria and alternatives considered but eliminated (Section 2.5.1 Alternatives Eliminated from Further Consideration). Please see Chapter 3 (Affected Environment and Environmental Consequences) for the description of the affected environment and environmental</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>significantly lessen environmental impacts. For the reasons discussed in detail below, we believe that the DEIS fails to meet these requirements and does so in such a way that the failures cannot be remedied through the issuance of a final EIS. Accordingly, we believe that the document must be thoroughly revised and reissued as a draft for further public review and comment.</p>	<p>consequences of the Navy's Proposed Action. Chapter 4 contains a comprehensive cumulative impacts analysis. Information on mitigation measures, which were developed in coordination with NMFS, can be found in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS. Please see <i>Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis</i> technical report on the project web site for a discussion of the acoustic impact modeling approach, which addresses the scientifically established criteria for injury, mortality, and harassment under the MMPA.</p> <p>As discussed in detail in the document, the evidence indicates that strandings are not expected to result from the continuation of training and testing in the NWTT Study Area. As summarized in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) and based on almost 8 years of focused scientific monitoring and research, long-term consequences to populations of marine mammals as a result of the Proposed Action in the NWTT Study Area are not expected.</p>
<p>NRDC-05</p>	<p>Our overriding concern is the Navy's failure to protect biologically important areas for marine mammals within the Northwest Training and Testing ("NWTT") Study Area. There is a general consensus among the scientific community, as NOAA has recognized, that "[p]rotecting marine mammal habitat is...the most effective mitigation measure currently available" to reduce the harmful impacts of mid-frequency sonar on marine mammals.² Nonetheless, the DEIS does not consider establishing any protection zones in the NWTT Study Area where training or testing could be limited or excluded, despite the common-sense efficacy of such measures.³</p> <p>² See Letter from Jane Lubchenco, Under Secretary of Commerce for Oceans and Atmosphere to Nancy Sutley, Chair, Council on Environmental Quality dated Jan. 19, 2010, available at http://www.nrdc.org/media/docs/100119.pdf; see also Agardy, T., Aguilar Soto, N., Cañadas, A., Engel, M., Frantzis, A., Hatch, L., Hoyt, E., Kaschner, K., LaBrecque, E., Martin, V., Notarbartolo di Sciara, G., Pavan, G., Servidio, A., Smith, B., Wang, J., Weilgart, L., Wintle, B., and Wright, A. A global scientific workshop on spatio-temporal management of noise. Report of workshop held in Puerto Calero, Lanzarote, (June 4-6, 2007); ECS Working Group: Dolman, S., Aguilar Soto, N., Notarbartolo di Sciara, G., Andre, M., Evans, P., Frisch, H., Gannier, A., Gordon, J., Jasny, M., Johnson, M., Papanicolopulu, I., Panigada, S., Tyack, P., and Wright, A. Technical report on effective mitigation for active sonar and beaked whales. Working group convened by European Cetacean Society, (2009); OSPAR Commission, Assessment of the environmental impact of underwater noise. OSPAR Biodiversity Series, (2009); Parsons, E.C.M., Dolman, S.J., Wright, A.J., Rose, N.A., and Burns, W.C.G. Navy sonar and cetaceans: just how much does the gun need to smoke before we act? Marine Pollution Bulletin 56: 1248-1257 (2008).</p> <p>³ While the Atlantic Fleet has taken the important step of designating several planning awareness areas where it will, when feasible, avoid conducting major exercises, this mitigation measure is specific to the use of sonar during major exercises and does nothing to mitigate the harm from unit- level sonar exercises, the use of explosives, or testing activities.</p>	<p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p> <p>Please see Section 5.3.3 and 5.3.4, in which protection zones were considered and discussed. In addition, as described in Section 5.3.2 (Mitigation Zone Procedural Measures), the Navy has considered and established activity-specific mitigation zones for the protection of species that may be present no matter where the activity may occur.</p>
NRDC-06	<p>The Navy's failure is in stark contrast to both the unprecedented level of harm and the varied activities taking place over such a large area. In all, the NWTT Study Area encompasses air, surface, and subsurface operating areas, including a more than 120,000 square nautical mile offshore area extending approximately 250 nautical miles into the Pacific Ocean from the coastlines of Washington, Oregon, and Northern California, an area the size of the state of California. The Navy's preferred alternative would use many different sources and frequencies of active sonar, including over 2,500 hours from mid-frequency sources every year. DEIS at 3.0-29. These exercises would also employ a battery of other acoustic sources and explosives detonations in ocean surface and undersea areas, special use airspace, and training land areas.</p>	<p>The Proposed Action is not "unprecedented" given many of these same Navy training and testing activities have been occurring for decades in the NWTT Study Area, there are predicted to be only seven total annual effects that could be considered injury; this is approximately 46 percent fewer effects than are currently authorized. Furthermore, the majority of these same ongoing activities were subject to previous NEPA analysis and regulatory oversight in the <i>Northwest Training Range Complex Final Environmental Impact Statement/Overseas Environmental Impact Statement</i> (September 2010) and the <i>Final Environmental Impact Statement/Overseas Environmental Impact Statement NAVSEA NUWC Keyport Range Complex Extension</i> (May 2010). There have been no indications of population-level impacts to marine mammals in the Study Area. As detailed in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) and based on scientific monitoring and research across the Navy, long-term consequences to populations of marine mammals as a result of the Proposed Action in the NWTT Study Area are not expected.</p>
NRDC-07	<p>The Navy's failure is particularly troubling in light of the emerging information on potentially important habitat for marine mammal populations in the NWTT Study Area. Over the last few years, the National Oceanic and Atmospheric Administration ("NOAA") has been guiding the work of two working groups to improve the tools available to agencies, including the Navy, to evaluate and mitigate the impacts of anthropogenic noise on marine mammals. The Working Groups' draft products were recently released and one key product of this effort was the Cetacean Density and Distribution Mapping Working Group's (CetMap) identification of density and distribution maps for marine</p>	<p>The Navy has and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap). This working group has two objectives: First, to create regional cetacean density and distribution maps that are time- and species-specific, using survey data and models that estimate density using predictive environmental factors. With the exception of the Atlantic and Gulf of Mexico, the Navy has considered this information as part of the impact</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>mammal populations in the Pacific Northwest—potentially important habitat for marine mammals. Nonetheless, this information was not incorporated into the Navy’s analysis through the development of reasonable alternatives or examined as possible mitigation measures based on limiting or excluding training and testing activities in these areas. The fact that the Navy must analyze this new information and determine how it will impact its development of alternatives and mitigation measures supports a revision of the DEIS, which would place the Navy’s analysis of this critical information before the public, giving the public an opportunity to comment thereon.</p> <p>As you know, NEPA requires the Navy to employ rigorous standards of environmental review, including a full explanation of potential impacts, a comprehensive analysis of all reasonable alternatives, a fair and objective accounting of cumulative impacts, and a thorough description of measures to mitigate harm. Unfortunately, the DEIS released by the Navy falls far short of these mandates and fails to satisfy the Navy’s legal obligations under NEPA. Thus, the Navy must revise the environmental impacts, alternatives, cumulative impacts and mitigation analysis in the DEIS (described in detail in Appendix A) and reissue the document for public review and comment. It must also fully address the considerable scientific record that has developed around sonar and whale injury and mortality, and adjust its acoustic impacts analysis and assessment model accordingly (discussed in Appendices B and C).</p>	<p>and mitigation assessment process. Second, and separately, to augment the more quantitative density mapping and provide additional context for impact analyses, the CetMap also identifies areas of specific importance for cetaceans, such as reproductive areas, feeding areas, migratory corridors, and areas in which small or resident populations are concentrated, otherwise referred to as “biologically important areas.” The working group determined that “hot spots” is not an appropriate term and chose to call them biologically important areas. Biologically important areas information was based largely on observational data of animals exhibiting biologically important behaviors. These areas are not critical habitat and are not intended to have any regulatory management. The biologically important areas were only characterized for species, areas, and seasons where there were enough data to support the biologically important areas identification within the U.S. Exclusive Economic Zone. Most of these assessments are not based on CetMap density work products but on published and often unpublished data held by individual researchers.</p> <p>The Navy complies with all applicable environmental laws, including NEPA. As such, the Navy has developed this EIS/OEIS to meet the requirements of these laws.</p> <p>See Section 3.4.3 (Environmental Consequences) regarding discussion of the scientific record involving potential impacts from sonar and other acoustic sources having potential impact. The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas.</p> <p>Note that the Navy’s acoustic analysis and modeling reflect the current best available science, as evident by the National Oceanic and Atmospheric Administration having recently proposed for adoption use the same criteria and thresholds used by the Navy for PTS and TTS after undergoing an internal review and an external peer review (see http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm for more details).</p> <p>See Section 3.4.3.1.8 (Stranding) and the referenced Navy technical</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		report, (“Marine Mammal Strandings Associated with U.S. Navy Sonar Activities”) which provides further details regarding strandings and is available on the NWTT EIS/OEIS website.
NRDC-08	We also have concerns regarding the Navy’s public meetings for the NWTT DEIS. We received feedback from numerous concerned citizens attending these open houses that the process was highly stage managed and discouraged effective public comment, that the Navy personnel on hand could not answer many of the questions asked about the DEIS, and that the hours and locations of these events were severely restricted. Indeed, as we have noted in the past, the Navy again failed to schedule any of these events in a major metropolitan area of the northwest coast. While we believe the locations the Navy chose are an acceptable starting point for public involvement, the Navy must recognize that citizens in more populated areas are also affected by the Navy’s activities and their impacts on the environment.	<p>The Navy went to a great amount of effort to coordinate and organize the public meetings to meet the needs of all of the public. The format allowed for ample opportunity for valuable exchange of information between the public and Navy subject matter experts. The subject matter experts were available and answered questions throughout the entire meeting. The meetings also provided opportunity for individuals to comment publicly or privately, orally or in writing.</p> <p>Based on extensive experience, the meeting hours chosen for these public meetings suits the majority of public attendees, and is consistent with numerous other NEPA projects across the United States.</p> <p>Because of the large size of the NWTT Study Area for this EIS/OEIS, it is not feasible to hold a public meeting in every location where there may be public interest. Generally, the Navy has tried to locate public meetings in locations central to training or testing areas and potentially affected communities. Meeting locations were also identified based partially on suggestions received from the public, feedback from elected officials and other stakeholders, attendance levels of previous public meetings for similar projects, and the number of public comments received during the scoping phase.</p> <p>The majority of comments received during the scoping phase from Washington came from Whidbey Island (Clinton, Freeland, Oak Harbor, Coupeville, Greenbank) and Friday Harbor, with Seattle following after that. No public comments were received from Portland, Oregon, and only one comment each was received from San Francisco and Sacramento, California. Previous Navy experience with other Northwest projects is that meetings held in larger population centers are often poorly attended. The Navy held one public meeting for this project in a large population center (Everett, Washington, near Seattle), and that meeting was the least attended of all eight public meetings. In addition to the meeting venues, the public could download and review the document, and make comments to it, on the website, which is available throughout the world.</p>
NRDC-09	The Navy Has Not Taken a “Hard Look” Under NEPA NEPA requires that the potential environmental impacts of any “major Federal actions	The Navy has complied with all applicable statutes, regulations and relevant court decisions in crafting its EIS/OEIS, providing sufficient information for assessing the environmental consequences of the

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>significantly affecting the quality of the human environment” be considered through the preparation of an environmental impact statement (“EIS”). <i>Robertson v. Methow Valley Citizens Council</i>, 490 U.S. 332, 348 (1989); 42 U.S.C. § 4332. The fundamental purpose of an EIS is to compel decision-makers to take a “hard look” at a particular action—both at the environmental impacts it will have and at the alternatives and mitigation measures available to reduce those impacts—before a decision to proceed is made. 40 C.F.R. §§ 1500.1(b), 1502.1; <i>Baltimore Gas & Electric v. NRDC</i>, 462 U.S. 87, 97 (1983); <i>Robertson</i>, 490 U.S. at 349. While NEPA “does not commend the agency to favor an environmentally preferable course of action,” an agency may only make a decision to proceed after taking a “hard look” at environmental consequences. <i>Sabine River Auth. v. Dep’t of Interior</i>, 951 F.2d 669, 676 (5th Cir. 1992)(internal citations omitted).</p>	<p>proposed action.</p> <p>The Navy considered the best available science in preparation of this EIS/OEIS and is in consultation with NMFS as the regulator and a cooperating agency with regard to the Proposed Action, the potential environmental impacts, and any resultant mitigation measures as conditions of anticipated authorizations under the MMPA or reasonable and prudent measures resulting from issuance of a Biological Opinion under ESA.</p>
<p>NRDC-10</p>	<p>As the DEIS makes clear, the proposed activities pose a significant risk to whales, fish, and other wildlife that depend on sound for breeding, feeding, navigating, and avoiding predators—in short, for their survival. Under every Alternative, the Navy would employ mid-frequency active sonar, which has been implicated in mass injuries and mortalities of whales around the globe.⁴ The same technology is known to affect marine mammals in countless other ways, inducing panic responses, displacing animals, and disrupting crucial behavior such as foraging. The Navy expects to take more than 25 different species of marine mammals, including 8 species listed as endangered or threatened under the Endangered Species Act (“ESA”). DEIS at 3.4-4 to 9. The Pacific Fleet’s training and testing activities would also affect fisheries and essential fish habitat, injure sea turtles, and release a large amount of hazardous and expended materials into the waters. See Appendices A and B for a detailed discussion of impacts.</p> <p>⁴ Military sonar generates intense sound that can induce a range of adverse effects in whales and other species – from significant behavioral changes to injury and death. The most widely reported and dramatic of these events are the mass strandings of beaked whales and other marine mammals that have been associated with military sonar use. A brief summary of the stranding record appears in Appendix B.</p>	<p>The Navy shares your desire to preserve marine life. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a species-level risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_social_report.pdf].</p> <p>An integrated monitoring plan for the activities in the NWTT Study Area is also planned as presented in Section 5.5.1.1 (Integrated Comprehensive Monitoring Program) of the EIS/OEIS. In addition, the Navy implements, to the maximum extent practicable, mitigation measures during its training and testing events as developed with NMFS as the regulatory agency under MMPA and ESA. The Navy will continue to implement the monitoring and research programs where training has been occurring to determine if there are identified impacts as a result of those activities and will do so in the NWTT Study Area associated with future training occurring there. The Navy will continue to be a leader in funding of research to better understand the potential impacts of Navy training activities and to operate with the least possible impacts while meeting training and testing requirements.</p> <p>Please see for example Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) regarding the likely long-term consequences from those activities since the EIS/OEIS does not find or suggest there will be significant risk to whales or other marine mammals. In fact, and as presented in the EIS/OEIS, there is no direct evidence that routine Navy training and testing spanning decades has</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>negatively impacted marine mammal populations at any Navy Range Complex.</p> <p>Please read Section 3.4.1.8 (Stranding), in which this issue is discussed. Although there have been a few strandings associated with use of sonar in other locations, there have been none in any Range Complex in the Pacific (see the cited Stranding Technical Report, U.S. Department of the Navy 2013).</p>
NRDC-11	<p>While the Navy has made progress in assessing the impacts its activities have on the environment, it continues to underestimate harm by disregarding a great deal of relevant information and using approaches that are the opposite of precautionary when factoring uncertainty. As discussed in Appendix C, in revising its DEIS, the Navy must adjust its thresholds for impact and modeling by incorporating the considerable scientific record showing that impacts are even greater than the Navy estimates.</p>	<p>The criteria and thresholds for determining potential effects to marine species used in the NWTT EIS/OEIS and related consultation documents were carefully revised from those used in previous Navy EISs based on best available science, which included lowering the thresholds over much of the hearing range of many species of marine mammals. This included revising the permanent threshold shift threshold for all marine mammal species based on best available science.</p> <p>Please see Section 3.4.3.1.14.4 (Model Assumptions and Limitations) for an understanding of the impact analysis. This section lists the factors and assumptions integrated into the acoustic impact modeling that result in a conservative overestimation of impacts where uncertainty exists in available data or the current state of the science.</p> <p>Please read the discussion presented in Section 3.4.3.1.10 (Thresholds and Criteria for Predicting Acoustic and Explosive Impacts on Marine Mammals) and the cited Finneran and Jenkins (2012) for an understanding of the conservative assumptions integrated into the development of the thresholds. Also note that NMFS has recently proposed the same TTS and PTS thresholds the Navy used in the EIS/OEIS be adopted for wider application in acoustic impact analyses by other parties seeking an MMPA Letter of Authorization.</p> <p>In December 2013, NOAA released for public comment a “Draft Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammals: Acoustic Threshold Levels for Onset of Permanent and Temporary Threshold Shifts” (78 Federal Register [FR] 78822). The Draft Guidance was generally consistent with the Navy’s PTS/TTS criteria used in the NWTT EIS/OEIS and as detailed within Finneran and Jenkins (2012). Prior to the finalization of this guidance by NOAA, the Navy suggested revisions to the criteria (e.g., auditory weighting functions and PTS/TTS thresholds) based on a number of newly available studies (Finneran 2015). NOAA chose to incorporate this</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>new study (Finneran 2015) into a revision of its Draft Guidance; that revision was recently published in the Federal Register for public review and comment (80 FR 45642). At the time of printing for this Final EIS/OEIS, the revised Draft Guidance comment period is still open and final guidance has not been issued. Therefore, the Navy has not adopted these proposed criteria in this Final EIS/OEIS. Please see the Final EIS/OEIS Section 3.4.3.1.11.2 (Hearing Loss – Temporary and Permanent Threshold Shift) for more details regarding this emergent and preliminary science.</p>
NRDC-12	<p>The Navy Fails to Identify and Analyze Reasonable Alternatives</p> <p>As you are aware, both of the Navy’s action alternatives (Alternative 1 and 2) would increase the amount of training and testing in the Pacific Northwest and subject marine mammals to a considerable level of harm, including hearing loss and significant behavioral reactions like habitat abandonment. Neither alternative presents an option that would significantly reduce the predicted harm to the marine environment and wildlife. For example, both of the Navy’s alternatives result in the exact same number of marine mammal takes from training with sonar. For training then, the DEIS offers no alternative for a decision maker wishing to reduce the harm to marine mammals.</p>	<p>The differences between Alternatives 1 and 2 are detailed in Sections 2.7 (Alternative 1: Expansion of the Study Area Plus Adjustments to the Baseline and Additional Weapons, Platforms, and Systems) and 2.8 (Alternative 2: Includes Alternative 1 Plus Increased Tempo of Training and Testing Activities) of the Final EIS/OEIS. The Navy developed the alternatives considered in this EIS/OEIS after careful assessment of the Navy’s training and testing requirements by subject matter experts, including military units and commands that perform the training and testing, and Navy environmental managers and scientists. A reduction in training and testing activities would fail to meet the Purpose and Need and would not allow the Navy to meet its obligations under Title 10 of the United States Code. Refer to Section 2.5 (Alternatives Development) of the Final EIS/OEIS for an explanation of the development of alternatives.</p> <p>The statement that “both alternatives result in the exact same number of marine mammal takes” is not correct. See Section 3.4.3.2.1.5 (Alternative 1) regarding the Civilian Port Defense exercise, which is biennial under Alternative 1 and annual under Alternative 2, resulting in 3,566 fewer exposures (see Table 3.4 17) under Alternative 1 over the 5-year period being considered. Also note that both alternatives offer the maximum possible mitigation consistent with the Navy mission.</p>
NRDC-13	<p>It is obvious that the Navy’s alternatives were not selected to “inform decision-makers and the public” of how it could “avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1. While the Navy presents two purportedly reasonable alternatives, which themselves cover only a very narrow range of options, it leaves no room for decision makers to choose anything but its preferred alternative, which is “necessary to support current and planned Navy training and testing requirements.” DEIS at ES-8 (emphasis added). A decision maker that wishes to meet the Navy’s needs is compelled to choose the preferred alternative.</p>	<p>The EIS/OEIS reviewed potential environmental consequences (Chapter 3, Affected Environment and Environmental Consequences) of the Proposed Action and Alternatives, and provides sufficient information for careful agency decision making. The Navy attempted to establish alternatives based on geographical alternatives (Section 2.5.1, Alternatives Eliminated From Further Consideration and Section 5.2.2.1, Lessons Learned from Previous Environmental Impact Statements/Overseas Environmental Impact Statements), but this</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>While Alternative 2 also meets the Navy’s strategic necessity and planned training and testing requirements, if a decision maker felt free to considering choosing it over the Navy’s preferred alternative, he or she would be hard pressed to identify which alternative works to avoid or minimize adverse environmental impacts, let alone enhance the quality of the human environment. Both alternatives inflict a substantial amount of harm on marine life. Neither alternative was developed with an eye to minimizing adverse environmental impacts, but instead reflect differences entirely unrelated to the proposed action’s environmental impacts. Such differences—in capabilities, tempo, and locations—are entirely based on operational needs, not on factors related to environmental impacts. As such, they fail to provide the public and decision makers with any options for significantly limiting the impact to marine wildlife. The development of alternatives in this manner violates NEPA, reflecting a classic post hoc rationalization for a decision unlawfully made before environmental impacts and reasonable alternatives were considered.</p>	<p>approach proved to not be feasible. The Navy is not obligated by NEPA to consider alternatives that are not feasible. Therefore, the only reasonable alternatives for the Navy to consider to meet its purpose and need must differ in training tempo, capabilities, and locations. The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under Title 10. The selection of an alternative by the decision maker will be based on a review of all relevant facts, impact analyses, comments received via the EIS/OEIS public participation process, and the requirements of the Navy in order to fulfill its mission.</p> <p>The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. Most impacts from the Proposed Action are expected to be brief and recoverable. Long-term impacts to a small number of individuals are not expected to have long-term population consequences.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding development of the alternatives, which provides more details than can be found in the Executive Summary.</p> <p>Please read Section 3.4.3.2.1.6 (Alternative 2) training in comparison to Section 3.4.3.2.1.6 (Alternative 1) training and note the second bullet with the change for the Civilian Port Defense exercise being biennial in Alt 1 and annual in Alt 2. Additionally, note that the alternatives being considered also include testing activities, which are also different between the two alternatives. Finally, the decision maker has the ability to choose not to implement a part of the Proposed Action as they see fit.</p> <p>Please see Section 5.2 (Introduction to Mitigation) and note that the environmental benefit of all Navy-recommended proposed mitigation measures will apply to all alternatives analyzed in this EIS. The alternatives all contain the same mitigation measures, which are designed to reduce or avoid potential impacts on marine resource. The Navy’s overall approach to assessing potential mitigation measures was based on two principles: (1) mitigations are reasonably effective at reducing potential impacts on the resource; and (2) from an operational perspective, the mitigations must be practicable and executable while not compromising safety and readiness. Through extensive discussion, and based on the best available science and monitoring training and testing over the course of 9 years, NMFS and Navy have identified mitigation measures that are practicable and</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>reasonably effective. Therefore, impacts are reduced or avoided no matter which alternative is chosen.</p> <p>The Navy complies with all applicable environmental laws, including NEPA. As such, the Navy has developed this EIS/OEIS to meet the requirements of these laws.</p>
<p>NRDC-14</p>	<p>The Navy Fails to Consider Effective Mitigation</p> <p>There is general consensus that protection areas—in which the use of mid-frequency sonar would not occur—represent the most effective means currently available to reduce the impacts of mid-frequency sonar on marine mammals.⁵ In 2010, the National Oceanic Atmospheric Administration (“NOAA”) completed a review of the Navy’s sonar mitigation. It concluded that “ongoing mitigation efforts, in our view, must do more” to address uncertainties and protect marine mammals.⁶ Nonetheless, the Navy’s DEIS proposes the same mitigation scheme that NOAA found lacking. While NOAA emphasized the importance of habitat identification and avoidance, stating that “[p]rotecting important marine mammal habitat is generally recognized to be the most effective mitigation measure currently available,” the Navy makes no provision for protecting areas in the NWT Study Area.⁷</p> <p>⁵ Supra, note 3.</p> <p>⁶ See Letter from Jane Lubchenco, Under Secretary of Commerce for Oceans and Atmosphere to Nancy Sutley, Chair, Council on Environmental Quality dated Jan. 19, 2010, available at http://www.nrdc.org/media/docs/100119.pdf</p> <p>⁷ Id.</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy has chosen the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. Specific mitigation measures are outlined in Section 5.3.1 (Lookout Procedural Measures) and Section 5.3.2 (Mitigation Zone Procedural Measures).</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Areas of Importance). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>Please see Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) regarding the likely long-term consequences from the proposed activities. There is no direct evidence that routine Navy training and testing spanning decades has negatively impacted marine mammal populations at any Navy Range Complex.</p> <p>Please see Section 5.2.2.1 (Lessons Learned from Previous Environmental Impact Statements/Overseas Environmental Impact Statements) and Section 5.3 (Mitigation Assessment) regarding the changes made in the previous mitigation measures since 2010.</p> <p>Please see Section 5.3.2 (Mitigation Zone Procedural Measures) describing the mitigation zones established for each activity, which have been designed solely for the purpose of reducing potential impacts on marine species from training and testing activities. These</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC-15	<p>Appendix A contains a detailed description of mitigation measures that the Navy can—and should—adopt. At a minimum, however, the Navy must assess the value of marine mammal habitat in the NWTT Study Area and protect any higher-value areas identified. As noted, NOAA recently completed a series of workshops designed to learn more about important marine mammal habitats. The results of these workshops are now available and the Navy must assess the information and develop mitigation measures based on protecting such areas. To offer full protection to the marine mammals found in these regions, the Navy should develop mitigation measures that bar the use of sonar in the areas and provide a buffer for them that limits the received level of sound. At a minimum, the Navy should establish cautionary areas in these habitats.</p>	<p>measures apply throughout the NWTT Study Area.</p> <p>Through careful exploration of all mitigation measures to determine which were the most effective, the Navy has chosen the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train and test for real world conditions. Specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas) addresses important habitat areas.</p> <p>The Navy is in consultation with NMFS as the regulator and a cooperating agency with regard to the Proposed Action, the potential environmental impacts, and any resultant mitigation measures as conditions of anticipated authorizations under the MMPA or reasonable and prudent measures resulting from issuance of a Biological Opinion under ESA.</p> <p>The mitigation measures identified throughout Chapter 5 will apply to protect all marine mammals year round, and will be applied regardless of the location of the activity.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>Please see Section 5.3.2 (Mitigation Measures Considered but Eliminated) addressing the mitigation measures presented in Appendix A of this comment letter.</p> <p>As noted above in the comment letter, the Navy has been part of the working group discussions. Also as noted above in the comment, the products from these CetMap workshops are draft and not yet available. Once the products are final, Navy will consider that information in its future analyses. Please see Section 5.3.2 (Mitigation</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>Zone Procedural Measures), describing activity specific mitigation zones for the protection of species that may be present no matter where the activity may occur.</p>
<p>NRDC-16</p>	<p>Conclusion</p> <p>Our organizations recognize the Navy’s important role in ensuring national security. We also value the security a clean and healthy environment provides. National security and environmental integrity are not mutually exclusive, and we encourage the Navy to train and test in ways that protect the Pacific Northwest’s valuable natural resources. Thus, for the reasons set forth above and in greater detail in the Appendices below and attached critique by Dr. David Bain, we urge the Navy to satisfy its obligations under NEPA and other applicable laws by revising its DEIS, taking a “hard look” at impacts and identifying and analyzing reasonable alternatives and mitigation measures that will significantly reduce the impact to the marine environment.⁸ Upon revision the DEIS should be released to the public for review and comment.</p> <p>⁸ While the Navy states that its DEIS “will serves as NMFS’ NEPA documentation for the rule- making process under the [Marine Mammal Protection Act]” (DEIS at ES-3), we note that without significant revision this DEIS cannot fulfill NMFS’ obligations under NEPA. For example, the DEIS defines a purpose and need that is unrelated to NMFS’ statutory obligations and presents alternatives that are unrelated to NMFS’ rulemaking.</p>	<p>The Navy complies with all applicable environmental laws, including NEPA.</p> <p>The Navy considered the best available science in preparation of this EIS/OEIS and is in consultation with NMFS as the regulator and a cooperating agency with regard to the Proposed Action, the potential environmental impacts, and any resultant mitigation measures as conditions of anticipated authorizations under the MMPA or reasonable and prudent measures resulting from issuance of a Biological Opinion under ESA.</p> <p>Thank you for this recognition. The Navy agrees that national security and environmental protection are not mutually exclusive, as has been demonstrated historically in the Navy Range Complexes. Please see Section 1.6 (The Navy’s Environmental Compliance and At-Sea Policy) for more background in this regard.</p> <p>As evidence from the title of the critique, it is in reference to an older (2007–2009) proposed action which analyzed proposed activities in another location (the Hawaii Range Complex). Please note that all comments from Dr. Bain’s critique (all comments within that critique) were previously responded to in the 2009 Hawaii Range Complex Final Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). Furthermore the Navy’s analysis from 7 years ago has been superseded by an updated analysis that includes (1) a change in the modeling methodology, (2) updated density data, (3) updated criteria and thresholds, (4) a discussion involving the science that has emerged since 2009, and integration of data gathered from monitoring training and testing activities at Navy Range Complexes nationwide.</p> <p>Please read the EIS/OEIS starting with Section 1 (Purpose and Need) regarding a discussion of the purpose and need for the Proposed Action and see Section 2 (Description Of Proposed Action and Alternatives) regarding the identification and development of the alternatives.</p>
<p>NRDC-17</p>	<p>THE NAVY’S DEIS IS FATALLY FLAWED AND FAILS TO COMPLY WITH THE BASIC REQUIREMENTS OF NEPA</p> <p>As set forth below, the Navy’s DEIS does not meet the rigorous standards set forth in the</p>	<p>As explained above, the Navy’s statement of the purpose and need for the Proposed Action is detailed and specific, the scope of the Proposed Action is described in exhaustive detail after careful</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>National Environmental Policy Act. We urge the Navy to revise and then reissue its DEIS, substantially altering the approach it has taken thus far. The Navy’s scope of review must be expanded, its alternatives analysis broadened, its mitigation plan significantly improved, and its impact assessment revised to reflect the scientific evidence of mid-frequency sonar’s effects on marine life. These critical steps must be undertaken if the Navy’s EIS is to comply with federal law.</p> <p>I. Legal Framework: The National Environmental Policy Act</p> <p>The fundamental purpose of an EIS is to force the decision-maker to take a “hard look” at a particular action – at the agency’s need for it, at the environmental consequences it will have, and at more environmentally benign alternatives that may substitute for it – before the decision to proceed is made. 40 C.F.R. §§ 1500.1(b), 1502.1; Baltimore Gas & Electric v. NRDC, 462 U.S. 87, 97 (1983). This “hard look” requires agencies to obtain high quality information and accurate scientific analysis. 40 C.F.R. § 1500.1(b). “General statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.” Klamath-Siskiyou Wilderness Center v. Bureau of Land Management, 387 F.3d 989, 994 (9th Cir. 2004) (quoting Neighbors of Cuddy Mountain v. United States Forest Service, 137 F.3d 1372, 1380 (9th Cir. 1998)). The law is clear that the EIS must be a pre-decisional, objective, rigorous, and neutral document, not a work of advocacy to justify an outcome that has been foreordained.</p> <p>In nearly every respect, despite the length and information provided, the Navy’s DEIS fails to meet the high standards of rigor and objectivity required under NEPA. The Navy has failed to conduct the “hard look” necessary to thoroughly examine the many environmental consequences of its proposed action.</p>	<p>assessment of training and testing requirements, and the alternatives have been developed in accordance with NEPA standards. The EIS/OEIS is the product of extensive analysis applying best available science, including methodologies for analyzing impacts of mid-frequency active sonar on marine mammals that were developed in close consultation with NMFS, a cooperating agency in the development of this EIS/OEIS, the recognized experts in the marine environment, and the agency designated by law under the MMPA with jurisdiction over the protection of the marine environment. The Navy has developed, refined, and adopted mitigation measures to address environmental impacts in every affected resource area, and has identified any unavoidable impacts of the Proposed Action. The Navy has further conducted an appropriate analysis of cumulative effects of its Proposed Action. The Navy complies with all applicable environmental laws, including NEPA.</p> <p>Please read for example, Section 3.4 (Marine Mammals) with regard to comprehensive and detailed presentation of the analysis in regard to that resource area.</p> <p>Please read the EIS/OEIS starting with Section 1 (Purpose and Need) regarding a discussion of the purpose and need for the Proposed Action and see Section 2 (Description Of Proposed Action and Alternatives) regarding the identification and development of the alternatives.</p>
NRDC-18	<p>II. The Navy Fails to Properly Analyze Impacts on Marine Mammals</p> <p>The Navy’s DEIS does not properly analyze environmental impacts. Despite the unprecedented level of harm the Navy predicts, its analysis nonetheless understates the potential effects of its training and testing activities on marine wildlife and fails to acknowledge risks posed to a wide range of marine species from its activities. Thus, after disclosing that its activities may result in more than 500,000 instances of temporary hearing loss and significant behavioral impacts and more than 125 instances of permanent hearing loss on the region’s whales, dolphins, and other marine mammals, the DEIS concludes that no “marine mammal strandings or mortality would result from the operation of sonar during Navy exercises within the Study Area.” DEIS at 3.4-166. The Navy reaches this conclusion despite acknowledging the importance of sound to marine mammal existence and the hundreds of thousands of instances of hearing loss its activities will inflict on marine mammals. For example, the Navy states that “it is likely that a relationship between the duration, magnitude, and frequency range of hearing loss could have consequences to biologically important activities (e.g., intraspecific</p>	<p>The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS, using the most current, relevant scientific information.</p> <p>With regard to the critique by Dr. David Bain, this same critique was provided as comment on the 2009 HRC EIS/OEIS, the 2012 AFTT EIS/OEIS, and the 2012 HSTT EIS/OEIS, so was certainly considered in the development of the present NWTT EIS/OEIS. As noted in response then and presented in the current document, the design of the modeling and input factors has ensured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>communication, foraging, and predator detection) that affect survivability and reproduction.” DEIS at 3.4-74. The Navy’s statements are clearly contradictory; on the one hand the Navy states that a connection between survivability and hearing loss is likely, which must be placed in the context of its prediction of nearly 275,000 instances of temporary hearing loss, while on the other it concludes that no mortality will result from the use of sonar. The Navy’s conclusions are unsupported by its own analysis.</p> <p>Finally, as discussed in detail in Appendix C and the attached critique by Dr. David Bain, the Navy’s assessment of acoustic impacts is also highly problematic and likely underestimates the impacts to marine mammals.</p>	
NRDC-19	<p>A. Acoustic Impacts on Marine Mammals</p> <p>NEPA requires agencies to ensure the “professional integrity, including scientific integrity,” of the discussions and analyses that appear in EISs. 40 C.F.R. § 1502.24. To that end, they must make every attempt to obtain and disclose data necessary to their analysis. See 40 C.F.R. § 1502.22(a). Agencies are further required to identify their methodologies, indicate when necessary information is incomplete or unavailable, acknowledge scientific disagreement and data gaps, and evaluate indeterminate adverse impacts based upon approaches or methods “generally accepted in the scientific community.” 40 C.F.R. §§ 1502.22(2), (4), 1502.24. Such requirements become acutely important in cases where, as here, so much about a program’s impacts depend on newly emerging science.</p> <p>In this case, the Navy’s assessment of impacts is consistently undermined by its failure to meet these fundamental responsibilities of scientific integrity, methodology, investigation, and disclosure. As set forth in greater detail in Appendix C and the attached critique by Dr. Bain, the DEIS disregards a great deal of relevant information adverse to the Navy’s interests, uses approaches and methods that would not be acceptable to the scientific community, and ignores whole categories of impacts. In short, it leaves the public with an analysis of harm—behavioral, auditory, and physiological—that is at odds with established scientific authority and practice. The Navy must revise its acoustic impacts analysis, including its thresholds and risk function, to comply with NEPA.</p>	<p>The marine mammal acoustical analysis is based on the use of the best available science (see Section 3.4, Marine Mammals) as it applies to mid-frequency and high-frequency sources used during training and testing in the NWTT Study Area. The Navy has been thorough in its use of all relevant data and studies available on the marine environment as required by NEPA.</p> <p>The Navy has been very forthcoming in identifying its methodologies and acknowledging data gaps. For example, see Section 3.4.3 (Environmental Consequences) in general and specifically Section 3.4.3.1.2 (Analysis Background and Framework) regarding the current science and 3.4.3.1.14 (Quantitative Analysis) for the methodology used in the analysis of impacts for marine mammals.</p> <p>As noted elsewhere, the critique by Dr. Bain is generally not applicable to the current Proposed Action given it was based on a proposed action in the past at another location using a different acoustic impact model, different thresholds and criteria, and science which has been updated since 2007.</p> <p>The criteria and thresholds for PTS and TTS used in the Navy’s analysis have been recently proposed by NMFS for adoption as NOAA’s Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammals, which are intended to be used by NOAA/NMFS analysts/managers and other relevant user groups/stakeholders, including other federal agencies to better predict a marine mammal’s response to sound exposure.</p>
NRDC-20	<p>B. Other Impacts on Marine Mammals</p> <p>The activities proposed for the NWTT Study Area may have impacts that are not limited to the effects of ocean noise. Unfortunately, the Navy’s analysis of these other impacts is cursory and inadequate.</p> <p>First, the Navy fails to adequately assess the impact of stress on marine mammals, a</p>	<p>Exposure to mid- or high-frequency active sonar will not result in a chronic noise environment in the NWTT Study Area. Sonar pings are brief and intermittent with an animal exposed at most approximately two times a minute for several minutes if the animal is undetected by Navy Lookouts. Given the manner in which sonar is typically used, and</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>serious problem for animals exposed even to moderate levels of sound for extended periods.⁹ DEIS at 3.4-75 to 77. As the Navy has previously observed, stress from ocean noise—alone or in combination with other stressors, such as biotoxins—may weaken a cetacean’s immune system, making it “more vulnerable to parasites and diseases that normally would not be fatal.”¹⁰ Moreover, according to studies on terrestrial mammals, chronic noise can interfere with brain development, increase the risk of myocardial infarctions, depress reproductive rates, and cause malformations and other defects in young—all at moderate levels of exposure.¹¹ Because physiological stress responses are highly conservative across species, it is reasonable to assume that marine mammals would be subject to the same effects and recent research is bearing this out. A study of North Atlantic right whales produced evidence showing that exposures to low- frequency ship noise may be associated with chronic stress in whales.¹² For the Navy, such studies should be particularly relevant when assessing impacts on those marine mammal populations that are subjected to stress inducing impacts from training and testing activities on a regular basis. The Navy cannot simply rely on its characterization of sonar exposure as being “brief and intermittent” to conclude—without scientific support—that it is unlikely that individual animals would be exposed to sonar long enough for stress or injury to occur. The scale of harassment incidence suggests otherwise and belies the claim that impacts are “transitory.” With scientific literature suggesting the opposite, associated stress responses cannot simply be dismissed as short in duration and less than biologically significant. Nonetheless, despite the potential for stress in marine mammals and the significant consequences that can flow from it, the Navy unjustifiably assumes that such effects would be minimal.</p> <p>⁹ See National Research Council, <u>Ocean Noise and Marine Mammals</u>.</p> <p>¹⁰ Navy, Hawaii Range Complex Draft Environmental Impact Statement/ Overseas Environmental Impact Statement at 5-19 to 5-20 (2007). Additional evidence relevant to the problem of stress in marine mammals is summarized in A.J. Wright, N. Aguilar Soto, A.L. Baldwin, M. Bateson, C.M. Beale, C.Clark, T. Deak, E.F. Edwards, A. Fernández, A. Godinho, L. Hatch, A. Kakuschke, D. Lusseau, D. Martineau, L.M. Romero, L. Weilgart, B. Wintle, G. Notarbartolo di Sciara, and V. Martin, <u>Do marine mammals experience stress related to anthropogenic noise?</u>, 20 International Journal of Comparative Psychology, 274-316 (2007); see also T.A. Romano, M.J. Keogh, C. Kelly, P. Feng, L. Berk, C.E. Schlundt, D.A. Carder, and J.J. Finneran, <u>Anthropogenic Sound and Marine Mammal Health: Measures of the Nervous and Immune Systems Before and After Intense Sound Exposure</u>, 61 Canadian Journal of Fisheries and Aquatic Sciences 1124, 1130-31 (2004).</p> <p>¹¹ See, e.g., E.F. Chang and M.M. Merzenich, <u>Environmental Noise Retards Auditory Cortical Development</u>, 300 Science 498 (2003) (rats); S.N. Willich, K. Wegscheider, M. Stallmann, and T. Keil, <u>Noise Burden and the Risk of Myocardial Infarction</u>, European Heart Journal (2005) (Nov. 24, 2005) (humans); F.H. Harrington and A.M. Veitch, <u>Calving Success of Woodland Caribou Exposed to Low- Level Jet Fighter Overflights</u>, 45 Arctic vol. 213 (1992) (caribou).</p> <p>¹² R. M. Rolland, S. E. Parks, K. E. Hunt, M. Castellote, P. J. Corkeron, D. P. Nowacek, S. K. Wasser, and S. D. Krauss. 2012. “Evidence That Ship Noise Increases Stress in Right Whales.” Proceedings of the Royal Society of Biology. 10. 1098/rspb.2011.2429.</p>	<p>the movement of the participants, it is extremely unlikely that individual animals would be exposed to sonar long enough for stress or injury to occur.</p> <p>Studies of odontocetes chased during purse seining of tuna showed stress effects when pursued for long periods (30-40 minutes) but most of those animals recovered (Edwards 2007 International Journal of Comparative Psychology, 20: 217-227). Since the impact from noise exposure and the Navy training and testing events in general should be transitory given the movement of the participants, any stress responses should be short in duration and have less than biologically significant consequences.</p> <p>The Navy reviewed and considered all of the literature and has been thorough in its use of all relevant information. Stress on marine mammals is addressed as part of the behavioral response function (Sections 3.4.3.1.5, Physiological Stress and 3.4.3.1.6, Behavioral Responses). Section 3.4.2.4 (General Threats) discusses biotoxins and ocean noise, the later which is mainly a function of commercial vessel traffic as discussed in Section 3.4.3.2.4 (Impacts from Vessel Noise). As presented in that section, since the impact from noise exposure and the Navy training and testing events in general should be transitory given the movement of the participants, any stress responses should be short in duration and have less than biologically significant consequences. Navy vessels contribute a very small portion of overall vessel broadband noise.</p> <p>As discussed in the EIS/OEIS, the Navy training and testing activities in the NWTT Study Area are not a chronic stressor and are not on par with sources of noise such as from commercial shipping. Please see the discussion of the issue provided by the comment’s footnoted citation in Section 3.4.3.1.6.3 (Behavioral Reactions to Vessels). Navy had considered Roland et al. 2011 in the development of this EIS/OEIS but given that North Atlantic right whales are not present in the NWTT Study Area, similar findings for blue whales from the Pacific (Melcon et al. 2012) were instead cited for mysticetes followed by similar findings for other marine mammals groups with regard to potential chronic stressors.</p>
NRDC-21	<p>Second, in the course of its training activities, the Navy would release a host of toxic chemicals, hazardous materials and waste into the marine environment that could pose</p>	<p>This statement is inaccurate. Chapter 3.1 (Sediments and Water Quality) did not state that 28,000 pounds of potentially toxic metals</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	a threat to marine mammals over the life of the range. For example, under its preferred alternative, the Navy plans to abandon approximately 28,000 pounds of potentially toxic metals in NWT Study Area waters. DEIS at 3.1-50. Nonetheless, the DEIS fails to adequately consider the cumulative impacts of these toxins on marine mammals from past, current, and proposed training exercises. Careful study is needed into the way toxins might disperse and circulate within the area and how they may affect marine wildlife.	would be abandoned; please see the referenced section for details. The chapter concludes that chemical, physical, or biological changes to sediment or water quality would be measurable but below applicable standards, regulations, and guidelines, and would be within existing conditions or designated uses. Neither state nor federal standards or guidelines would be violated.
NRDC-22	The Navy's assumption that expended materials and toxics would dissipate or become buried in sediment leads to a blithe conclusion that releases of hazardous material would have no adverse effects. Given the amount of both hazardous and nonhazardous materials, this discussion is inadequate under NEPA.	<p>The EIS/OEIS document presents a thorough description and analysis in Section 3.1.3 (Environmental Consequences) of amounts and types of specific training materials as well as chemical composition and breakdown processes of expended materials.</p> <p>Based on the best available science, the impact of explosives, explosion byproducts, and metals on sediment and water quality would be both short- and long-term, and localized. Chemical, physical, or biological changes in sediment or water quality would be measurable, but below applicable standards and guidelines, and would be below or within existing conditions or designated uses.</p> <p>The impact of chemicals other than explosives and other materials on sediment and water quality would be both short- and long-term, and localized. Chemical, physical, or biological changes in sediment or water quality would not be detectable, and would be below or within existing conditions or designated uses.</p> <p>Therefore, no water or sediment toxicity would occur, so no adverse effects on marine organisms would be expected.</p>
NRDC-23	In addition, the Navy also plans to abandon cables, wires, and other items that could entangle marine wildlife, including more than 9,500 parachutes. DEIS at 3.3-29; 3.3-32. Acknowledging that entanglement is a serious issue for marine mammals (e.g., "[F]rom 1982 to February 2012 in the California, Oregon, Washington areas inhabited by stocks of large whales there were 279 reported whale entanglements." DEIS at 3.4-249), the DEIS nonetheless dismisses the threat posed by abandoning more than 9,500 parachutes by claiming without support that bottom-feeding is not likely to occur in the deep-water areas where parachutes are deployed. DEIS at 256. Again, this discussion and analysis is inadequate under NEPA.	The studies regarding marine mammal entanglement involve primarily fishing gear, which include items designed to ensnare and result in entanglement. Unlike typical fishing nets and lines, the Navy's equipment is not designed for trapping or entanglement purposes. The Navy deploys equipment designed for military purposes and strives to reduce the risk of accidental entanglement posed by any item it releases into the sea.
NRDC-24	Third, the Navy fails to adequately consider the risk of ship collisions with large cetaceans, as exacerbated by the use of active acoustics. For example, right whales have been shown to engage in dramatic surfacing behavior, increasing their vulnerability to ship strikes, on exposure to mid-frequency alarms above 133 dB re 1 μ Pa (SPL)—a	Ship strikes are discussed in the EIS/OEIS, Section 3.4.3.4.1 (Impact from Vessel Strikes). Results of the research by Nowacek et al (2004) where right whales reacted to an "alert stimuli," used a sound source that was designed to cause a reaction in right whales and has almost

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>level of sound that can occur many tens of miles away from the sonar systems slated for the range.¹³ It should be assumed that other large whales (which, as the DEIS repeatedly notes, are already highly susceptible to vessel collisions) are subject to the same hazard. In addition, the Navy’s own post-model acoustic effects quantification process assumes that animals would move away from the sound source (DEIS 3.4-119 to 127) and its analysis of responses to sonar discusses many cases in which animals have rapidly fled from acoustic sources, including sonar (DEIS at 3.4-79 to 82). Such responses could lead to a greater risk of being struck by other Navy vessels or commercial vessels. As the Navy notes, “[v]essel strikes from commercial, recreational, and Navy vessels are known to affect large whales and have resulted in serious injury and occasional fatalities to cetaceans.” DEIS at 3.4-236. While the Navy discusses the threat of ship strikes generally (DEIS at 3.4-234 to 245), it fails to utilize any probability calculation, let alone the kind of modeling for take that it uses for other impacts (e.g., acoustic sources), which can underestimate the impact from ship strikes.</p> <p>¹³ Nowacek et al., <u>North Atlantic Right Whales</u>, 271 Proceedings of the Royal Society of London, Part B: Biological Sciences at 227.</p>	<p>no correlation to any sound source used by the U.S. Navy. The results of the Nowacek et al (2004) study were not used in the Navy’s ship strike analysis; however, the results were used to develop the risk function from which the quantification of predicted exposures was derived. Please note that if animals leave the vicinity of a vessel, then there will be less likelihood for an impact to occur. Also note there has been no “underestimate” of modeled ship strikes for NWTT since the Navy has instead relied on over 20 years of actual data to make the assessment as opposed to using a mathematical model to predict impacts as the comment suggests. The Navy has been reporting to NMFS every known and likely vessel strike of a marine mammal for approximately 2 decades.</p> <p>As discussed in Section 3.4.3.1, there has never been a vessel strike to a whale during any of the training or testing activities proposed in the Study Area. Use of a dynamic simulation model to estimate strike probability was considered, but the Navy found that use of historical data was more appropriate for the analysis. The strike probability analysis completed in this EIS/OEIS is based upon actual data collected from historical use of vessels. These data account for real world variables over the course of many years, and any model would be expected to be less accurate than the use of actual data. There is no available science regarding the necessary functional parameters for a complex dynamic whale strike simulation model. Therefore, use of historical data from identical activities elsewhere and additional use of a probability analysis remain a more reasonable analytical approach.</p>
NRDC-25	<p>Finally, the Navy’s analysis cannot be limited only to direct effects, i.e., effects that occur at the same time and place as the training exercises that would be authorized. 40 C.F.R. § 1508.8(a). It must also take into account the activity’s indirect effects, which, though reasonably foreseeable (as the DEIS acknowledges), may occur later in time or are further removed. 40 C.F.R. § 1508.8(b). This requirement is particularly critical in the present case given the potential for sonar exercises to cause significant long-term impacts not clearly observable in the short or immediate term (a serious problem, as the National Research Council has observed).¹⁴ Thus, for example, the Navy must not only evaluate the potential for mother-calf separation but also the potential for indirect effects—on survivability—that might arise from that transient change. 40 C.F.R. § 1502.16(b). NEPA is not satisfied when an applicant rests on its alleged laurels. The Navy can no longer simply claim that decades of activities in the Pacific Northwest have not resulted in population-level impacts as research is increasingly suggesting a link between Navy sonar and population-level impacts.¹⁵</p>	<p>The potential for indirect effects on marine mammals has been considered in Section 3.4 (Marine Mammals) in developing the methodology for assessing acoustic impacts, and it is thereby acknowledged that direct acoustic harassment of an individual can lead to other, indirect effects. As depicted in the EIS/OEIS Figure H-1 in Appendix H (Figure G-1 in Appendix G – Biological Resource Methods in the Final EIS/OEIS), the Navy’s analysis considers all potential impacts resulting from exposure to acoustic sources. In Figure H-1 (Figure G-1 in the Final EIS/OEIS), the effects are shown in terms of physiological responses, behavioral responses, potential costs to the animal, recovery, and long-term consequences. The likely existence of such effects is accounted for in the estimation of “take” and they are otherwise not predictable or amenable to quantification.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>Without further consideration of these impacts, and mitigation and alternatives developed to address those impacts, the DEIS does not pass NEPA muster.</p> <p>¹⁴ “Even transient behavioral changes have the potential to separate mother-offspring pairs and lead to death of the young, although it has been difficult to confirm the death of the young.” National Research Council, <u>Ocean Noise and Marine Mammals</u> at 96.</p> <p>¹⁵ D.E. Claridge, <u>Population ecology of Blainville’s beaked whales</u>, dissertation, University of Aberdeen, Scotland (2013); J.A. Goldbogen et al., <u>Blue whales respond to simulated mid-frequency military sonar</u>, Proceedings of the Royal Society B 280: 20130657 (2013).</p>	<p>during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that scientific research has shown that these same activities which have been conducted for many years here and in other Range Complexes have no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>For an analysis of long-term impacts, see the discussion in Section 3.4.3.1.9 (Long-Term Consequences to the Individual and the Population) where the references cited in the comment are discussed. Also see Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) presenting the evidence collected from the intensive monitoring of Navy training and testing at range complexes nationwide since 2006. The scientific authorities presented in the comment are discussed in the NWTT EIS/OEIS, and do not support the contention that there is a link between the use of sonar and any population-level effects. For example, the number of blue whales has been increasing at 3% annual rate in the Southern California waters where the most frequent and intensive sonar use occurs in the Pacific (see reference to Calambokidis et al. [2009a]) Calambokidis, J., J. Barlow, J.K.B. Ford, T.E. Chandler, & A.B. Douglas. (2009a). <i>Insights into the population structure of blue whales in the Eastern North Pacific from recent sightings and photographic identification</i>. <i>Marine Mammal Science</i>, 25, 816-832].</p>
NRDC-26	<p>C. Marine Mammal Descriptions</p> <p>The Navy identifies data deficiencies for several stocks of marine mammals that occur in the action area and will be affected by the proposed action, but it fails to obtain the information necessary for evaluating the environmental impacts of its action. The DEIS states:</p> <p>For the 13 stocks involving nine marine mammal species in the Study Area (killer whale, harbor porpoise, Northern fur seal, Pygmy sperm whales and dwarf sperm whales, Cuvier’s beaked whales and Mesoplodon beaked whales, Gray whales, and Guadalupe fur seals), there is insufficient data for a species or stock-specific density to be derived. Some of these species/stocks were represented in the modeling by a single density. Therefore, as detailed in the following paragraphs, to quantify the likely number of</p>	<p>The analysis of impacts to marine mammals in NWTT uses the best available science and was undertaken with National Marine Fisheries Service (NMFS) in a role as a cooperating agency for the EIS/OEIS. This included review and comment by NMFS staff marine biologists in their role as the federal regulator for the Marine Mammal Protection Act (MMPA). Full and complete information was provided in the EIS/OEIS (see Section 3.4, Marine Mammals) with regard to the present knowledge regarding stocks of marine mammals. This includes coordination with NMFS regional scientists from Southwest Fisheries Science Center and Northwest Fisheries Science Center on the latest emergent data presented in their Pacific Stock Assessment Reports. As discussed in Section 3.4.3.1.14.1 (Marine Species Density</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>effects to these stocks/species, the modeling based on a common species density was prorated to the stocks. In the case of Guadalupe fur seal a surrogate species was assumed to provide an appropriate conservative estimate of effects as described in the subsection below.¹⁶</p> <p>This is insufficient to meet the requirements of 40 C.F.R. § 1502.22(a). As described below, some of these species are extremely sensitive to sound such as Cuvier’s beaked whales. The Navy must correct this problem.</p> <p>¹⁶ DEIS 3.4-113.</p>	<p>Data) and in the NWTT Pacific Navy Marine Species Density Database Technical Report (January 24, 2014 version), Navy used the best available science from NMFS and other scientific literature for marine mammal densities in the development of the NWTT EIS/OEIS; therefore, the Navy’s density determinations for species are not insufficient or deficient. The Marine Mammal Commission also reviewed the Marine Species Density Database Technical Report and pointed out some textual errors that the Navy has subsequently corrected in the May 2015 version, available at NWTTEIS.com. There was no erroneous data used for modeling that needed to be updated in the revised Technical report. Rather, there was simply correction to how the information was presented for clarity. As the Density Technical Report indicates, with sufficient at-sea sightings, a spatial habitat model is the preferred methodology among scientists. This process is fully described in Becker et al. (2012). For some species and seasons along the U.S. West Coast, and with annual Navy contributory funding since 2010, NMFS Southwest Fisheries Science Center was able to generate high resolution spatial habitat models that predict density at 25x25 km² resolution. This represents the current state of art in terms of marine mammal density prediction. For densities within Puget Sound, a combination of published literature, unpublished sighting data, and best professional opinion from NMFS’ Northwest Fisheries Science Center and National Marine Mammal Laboratory as well as Washington State Department of Fish and Wildlife was used. NMFS Southwest Fisheries Science Center conducts standard U.S. West Coast surveys every 5-6 years and cannot logistically support more frequent studies. All of the marine mammal species the commenter referenced have documented scientific limitations to current density protocols. A certain number of sightings are required to generate the quality of data necessary to produce either traditional density estimates or spatial habitat modeled density values. The at-sea identification of some species of specific MMPA designated stocks is not always possible from available field data, nor would additional data collection likely address the identification issue based on low animal occurrence (e.g., Guadalupe fur seal), cryptic behaviors (ex., beaked whales, Pygmy and dwarf sperm whales), and appearance similarities between stocks (e.g., harbor porpoise, killer whales).</p> <p>The numbers and occurrence of Pygmy sperm whales and dwarf sperm whales, Western North Pacific Gray whales and Guadalupe fur seals are not large enough to generate enough sightings during NMFS</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>or other researcher sponsored studies for a species-specific density estimate. Other species, such as the Mesoplodon beaked whales and Cuvier’s beaked whales, are difficult to detect due to their elusive nature, because they are deep divers and do not spend much time on the surface. In the absence of species-specific population survey data for these species, density estimates are derived from different methods and data sources, based on the data acceptability hierarchy in the Navy Marine Species Density Database Technical Report as well as regional NMFS recommendation (Southwest Fisheries Science Center, National Marine Mammal Laboratory). The different methods for each of these species are described in the Density Technical Report (e.g., NMFS developed a habitat based density model for the beaked whale guild [group]; NMFS Southwest Fisheries Science Center provided a density for the pygmy sperm whale and dwarf sperm whale guild along the West Coast; and for northern fur seals the abundance of the stocks was combined and then divided by the geographic area). NMFS’ Southwest Fisheries Science Center, National Marine Mammal Center, and Office of Protected Resources, and Navy have determined that these alternative density estimates are sufficient for determining the impacts of Navy training and testing on these marine mammals under all applicable statutes, and therefore are the best available science.</p>
<p>NRDC-27</p>	<p>1. North Pacific Right Whale</p> <p>The North Pacific right whale is the most endangered whale in the world. Due to their rarity, the DEIS discounts potential impacts of the Navy’s activities.¹⁷ This conclusion is in error because effects on even one whale could threaten the entire population.</p> <p>Behavioral changes that interfere with essential life functions like feeding or breeding could have negative impacts on conservation of the right whale. “[T]he continued anthropogenic threats and other factors . . . demonstrate a high risk of extinction” and “at present, no protective or conservation measures are in place that substantially mitigate the factors affecting the future viability of this species.”¹⁸ New science that shows that at least some baleen whales are susceptible to behavioral disturbance from sonar must be taken into account.¹⁹ Additionally, the proposed action is inconsistent with criteria for the North Pacific right whale recovery plan, including reducing the potential for ship strikes and reducing anthropogenic noise impacts on right whales.²⁰</p> <p>¹⁷ DEIS 3.4-112, 3.4-152.</p> <p>¹⁸ National Marine Fisheries Service, North Pacific Right Whale, 73 Fed. Reg. 12024, 12027-28 (Mar. 6, 2008).</p> <p>¹⁹ Jeremy Goldbogen, et al. Blue whale respond to simulated mid-frequency military sonar, Proceedings of the Royal Society B 280: 20130657 (2013).</p>	<p>Please see Section 3.4.2.6 (North Pacific Right Whale (<i>Eubalaena japonica</i>)). This species is generally found only in the Bering Sea and the Proposed Action and the NWTT Study Area do not include activities in that location. North Pacific right whales should not be present when Navy is conducting training and testing activities. Note that the comment’s referenced right whale recovery plan provides that the anthropogenic noise impacts are “primarily from the use of the Arctic for energy development and commercial maritime traffic” and furthermore state that, based on their estimated hearing ability, right whales are “not likely to hear mid-frequency (1 kHz–10 kHz) sounds” like those produced by the hull mounted mid-frequency sonar discussed in the NWTT EIS/OEIS.</p> <p>Therefore, due to the extremely low likelihood that the North Pacific right whale would occur in this area, and given that training and testing is infrequent and spatially limited, the whale is not likely to be exposed to Navy training or testing activities.</p> <p>Regarding the comment about new science that shows susceptibility of baleen whales to behavioral disturbance from sonar (Goldbogen et</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>²⁰ National Marine Fisheries Service, Recovery Plan for the North Pacific Right Whale III-4&5 (2013).</p>	<p>al. 2013), this has already been taken into account as presented in the EIS/OEIS in Section 3.4.3.1.10 (Thresholds and Criteria for Predicting Acoustic and Explosive Impacts on Marine Mammals). Mysticete (baleen) whale behavioral disturbance is taken into account by the behavioral risk function curve and acoustic impact modeling used by the Navy assesses the potential for adverse effects pursuant to the Endangered Species Act and the Marine Mammal Protection Act at a sound pressure levels as low as 120 dB re 1 µPa.</p>
<p>NRDC-28</p>	<p>2. Humpback Whales</p> <p>The DEIS should take into account how important vocalization is for key behavior and communication of humpback whales, and recent science demonstrates that baleen whales are susceptible to behavioral disturbance from sonar.²¹</p> <p>The DEIS' conclusion that rapid recovery from a threshold shift and avoidance means that the proposed action will not have any long-term consequences for individual animals or the population is flawed. First, recovery time lengths often exceed 24 hours,²² and permanent injuries including nerve damage can occur at sound levels only inducing temporary threshold shift.²³ Second, the assumption that behavioral responses will not amount to those that affect feeding, reproduction or other activities that could have individual or population effects is flawed.</p> <p>²¹ See generally, Goldbogen (2013).</p> <p>²² National Marine Fisheries Service, Draft Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammals (2013).</p> <p>²³ Kujawa, S.G., and Liberman, M.C. (2009). Adding insult to injury: Cochlear nerve degeneration after "temporary" noise-induced hearing loss. <i>Journal of Neuroscience</i> 29:14077-14085; Lin, H.W., Furman, A.C., Kujawa, S.G., and Liberman, M.C. (2011). Primary neural degeneration in the guinea pig cochlea after reversible noise-induced threshold shift. <i>Journal of the Association for Research in Otolaryngology</i> 12: 605-616.</p>	<p>Please see Section 3.4.3.1.4 (Auditory Masking) regarding the discussion of vocalization and the potential masking of communication for marine mammals. Please see Section 3.4.3.1.6.2 (Behavioral Reactions to Sonar and Other Active Acoustic Sources) which discusses the reference (Goldbogen et al. 2013) cited in the comment as well as Melcon et al. (2012) which deals with the same research. The potential for behavioral disturbance from sonar and other active acoustic sources is taken into account as presented in Section 3.4.3.1.6.2 (Behavioral Reactions to Sonar and Other Active Acoustic Sources).</p> <p>Please see Section 3.4.3.1.9 (Long-Term Consequences to the Individual and the Population). Also see Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) presenting the evidence collected from the intensive monitoring of Navy training and testing at range complexes nationwide since 2006 with regard to population-level effects.</p> <p>The Navy disagrees with the comment that recovery times "often exceed 24 hours." The NMFS reference cited in the comment does NOT suggest that recovery times are 24 hours. As presented in Section 3.4.3.1.3 (Hearing Loss), while it is possible for threshold shifts to last for hours, recovery may occur within minutes to hours. The recovery time is related to the exposure duration, sound exposure level, and the magnitude of the threshold shift, with larger threshold shifts and longer exposure durations requiring longer recovery time. The conservative 24-hour metric (as provided in the comment citation) proposed for use in assessing acoustic impacts is what Navy has used but that a conservative metric overestimating recovery time and not indicative of a the average (often occurring) recovery time.</p> <p>As described in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) evidence collected from the</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		intensive monitoring of Navy training and testing at range complexes nationwide since 2006 has not provided any indication there are population-level effects. Research has confirmed that the overall humpback whale population in the North Pacific has continued to increase and is now greater than some prior estimates of pre-whaling abundance (Barlow et al. 2011).
NRDC-29	<p>Additionally, humpbacks have already lost communication space, which means that the proposed action's impacts are layered over unfavorable background acoustic conditions. Humpback whales are losing up to 52 percent and 94 percent, respectively, of their communication space in the busiest areas of the ocean off the British Columbia coast, according to a new study.²⁴ A study of humpback whales found that they reduced their vocalizations in the presence of wind and background noise and shifted instead to using surface-generated sounds such as breaching to communicate.²⁵ While this shift shows behavior modification to address changes in the acoustic environment, it also reduces the information contained with the communication.²⁶</p> <p>²⁴ Williams, R., Clark, C. W., Ponirakis, D. and Ashe, E. (2013), Acoustic quality of critical habitats for three threatened whale populations. <i>Animal Conservation</i>. doi: 10.1111/acv.12076</p> <p>²⁵ Dunlop, R. a, Cato, D.H. & Noad, M.J., 2010. Your attention please: increasing ambient noise levels elicits a change in communication behaviour in humpback whales (<i>Megaptera novaeangliae</i>). <i>Proceedings. Biological sciences / The Royal Society</i>, 277(1693), pp.2521–9.</p> <p>²⁶ Id.</p>	<p>The reference cited (Williams et al. 2013) does not demonstrate that humpbacks have already lost communication space in general as stated. First of all, the findings are in relation to chronic noise resulting from commercial shipping in 12 sample locations for which the majority are commercial ports and in shipping channels in restricted bodies of water; not “the ocean”. The percentage loss of space was based on calculated median “noisy” and “noisiest” conditions in these acoustically restricted bodies of water, but assuming the communication space was circular and unrestricted by land. Finally, the impacts from chronic noise from commercial vessels and the resulting loss of communication space by marine mammals in the 17 Hz to 708 Hz low frequency range does not correspond to (is not “layered over”) any part of the Navy's Proposed Action.</p> <p>Dunlop et al. (2010) merely speculates that communication during breaching is inferior to underwater communications. Thus, there is insufficient evidence for Navy to conclude that increased ambient noise significantly disrupts humpback communications.</p>
NRDC-30	<p>Humpback whales should also be reclassified as sensitive to mid-frequency sounds. Humpback whales are the notable exception within the mysticetes, with some calls exceeding 10 kHz.²⁷ Sensitivities to sonar are among the key habitat concerns for humpback whales.²⁸</p> <p>Humpbacks will be impacted by the Navy training and testing activities both in the project area and from the Hawaii Southern California Training and Testing ranges. The North Pacific stock migrates between Hawaii and Alaska. For Navy testing and training activities from 2014-2019 in the Southern California and Hawaii Training Ranges, the Fisheries Service anticipates more than 50,000 Level B takes of humpback whales with an average of 10,000 per year.²⁹</p> <p>²⁷ DEIS 3.4-15</p> <p>²⁸ National Marine Fisheries Service, Stock Assessment Report Humpback Whale 189 (2011).</p> <p>²⁹ 78 Fed. Reg. 78106 (Dec. 24, 2013).</p>	<p>Please see Section 3.4.2.3 (Vocalization and Hearing of Marine Mammals) and Table 3.4-2 making it clear that Navy has assumed low-frequency cetaceans have a Functional Hearing Ability Frequency Range as high as 22 kHz. Please see the referenced Finneran and Jenkins (2012) regarding the reason for and development of the weighting functions which appropriately account for the sensitivity of low frequency cetaceans such as humpback whales. It would be inaccurate to reclassify humpback whales as mid-frequency cetaceans.</p> <p>As presented in the NWTT EIS/OEIS in Section 3.4.2.7 (Humpback Whale [<i>Megaptera novaeangliae</i>]), the population of humpback whales in Hawaii has continued to increase and is now greater than some pre-whaling abundance estimates. There is no evidence of long-term impacts to the North Pacific stock of humpback whales as a result of Navy training and testing in the Pacific.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
<p>NRDC-31</p>	<p>3. Blue Whales</p> <p>There are only about 2,000 blue whales in the affected population. Notably, unlike other baleen whale populations, the endangered blue whale populations have not shown signs of recovery off the western coast of North America in the last 20 years.³⁰ Alternative 1 anticipates two TTS and three behavioral reactions annually. Contrary to the conclusion in the DEIS, this could be a significant impact on the population. The Fisheries Service estimates that the removal of more than 3 blue whales would impede its conservation, and the takes anticipated by this action in addition to vessel strikes and other impacts threaten to exceed this level.</p> <p>³⁰ Jeremy A. Goldbogen et al., <i>Blue Whales Respond to Simulated Mid-Frequency Military Sonar</i>, PROCEEDINGS OF THE ROYAL SOCIETY 280: 20130657 1, 6 (2013).</p>	<p>Please see the EIS/OEIS in Section 3.4.2.8 Blue Whale (<i>Balaenoptera musculus</i>) for complete and up to date information regarding blue whales. The citation in the comment to Goldbogen et al. (2013) is a secondary reference regarding the population trend for blue whales in the area (the Eastern North Pacific Stock) and is in reference to survey data now approximately 10 years out of date. Furthermore, Goldbogen et al. (2013) misrepresent the information provided in the work they cite to (Barlow and Forney 2007; “Abundance and population density of cetaceans in the California Current ecosystem”, Fish. Bull. 105, 509–526) when stating that blue whales, “have not shown signs of recovery off the western coast of North America in the last 20 years”. This statement by Goldbogen et al. (2013) is not supported by the citation given that Barlow and Forney (2007), in fact, says nothing regarding the recovery of this blue whale population (found in waters off Central America to the Gulf of Alaska) and only deals with the abundance estimates in the California Current Ecosystem (CCE). The 2005 CCE survey reported on by Barlow and Forney (2007) only covered a small portion of the range area for the species. As provided in detail in the EIS/OEIS Section 3.4.2.8, numerous references indicate the blue whale population has, over time, shifted to the north and south of the CCE (outside the survey area). Therefore, trends in abundance for the CCE are not necessarily representative of trends for the Eastern North Pacific population as a whole given they are present from Central America to the Gulf of Alaska.</p> <p>The two TTS exposures and three other behavioral reactions estimated will by no means result in “the removal” of any individuals from the population. See the NWTT EIS/OEIS Section 3.4.3.1.3 (Hearing Loss) for a discussion of the threshold shifts and 3.4.3.1.6.2 (Behavioral Reactions to Sonar and Other Active Acoustic Sources) for a discussion of behavioral reactions. Additionally, as presented in Section 3.4.3.1 (Impacts from Vessel Strikes), a vessel strike to a blue whale is not expected.</p>
<p>NRDC-32</p>	<p>The endangered blue whale is adversely affected by military sonar and other mid-frequency and low-frequency anthropogenic noise. The Goldbogen et al. study is extremely concerning because of the potential impacts of sonar on the essential life functions of blue whales. It found that mid-frequency sonar can disrupt feeding and displace blue whales from high-quality prey patches, significantly impacting their foraging ecology, individual fitness and population health.³¹ Even fairly low-received levels can have an adverse impact.³² Mid-frequency sonar has been associated with several cases of blue whale stranding events.³³ Additionally, low-frequency anthropogenic noise can</p>	<p>As presented in the EIS/OEIS in Table 3.4-31, while the adverse effect determination is a technically correct Endangered Species Act finding since the effect of the Proposed Action is not demonstrably beneficial, it is incorrect to assume any adverse effect would have long-term consequences for individuals or the population. See Section 3.4.4.3 (Summary of Monitoring and Observations During Navy Activities) and citation to Calambokidis et al. (2009b). Also see Section 3.4.2.8 (Blue Whale [<i>Balaenoptera musculus</i>]) regarding blue whales and data</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>mask calling behavior, reduce communication range, and damage hearing.³⁴ These impacts from sonar on blue whales suggest that the action’s impacts would have long-term impacts on the blue whale population.</p> <p>³¹ Id. at 6. ³² Id. at 1,6. ³³ Id. at 2. ³⁴ Id. at 1.</p>	<p>provided by Monnahan et al. (2014) that indicate that population may have recovered near to its estimated pre-whaling size. Calambokidis and Barlow (2013), based on mark-recapture estimates, “indicated a significant upward trend in abundance of blue whales” at a rate of increase just under 3 percent per year for the portion of the blue whale population in the Pacific that includes Southern California as part of its range.</p> <p>Note that Goldbogen et al. (2013) did not involve use of “military sonar” but instead used a “custom-built, hand-deployable, 15-element vertical line array of active transducers”. This mid-frequency source projected “mid-frequency experimental signals” and pseudo-random noise. As Goldbogen et al. (2013) noted, some of the most pronounced responses occurred near the onset of exposure but other higher level exposures provoked no response, which may simply indicate they startled the whales when they began the experiment. The presentation of the sound source on an approaching vessel using an experimental signal being ramped-up to increasingly higher output levels is not how Navy mid-frequency is used. This context of the sound source presentation is especially important as noted by Goldbogen et al. (2013) in concluding that the variability observed in their study supports previous work demonstrating the complexity of behavioral responses to acoustic signals and its dependence on contextual and sound exposure variables. Finally, Goldbogen et al. (2013) did not demonstrate the conclusions presented in the comment, but only suggested that if a number of assumptions were met then mid-frequency anthropogenic sounds may pose significant risks to blue whale recovery rates. As noted in Section 3.4.4.3 (Summary of Monitoring and Observations During Navy Activities) and citation to Calambokidis et al. (2009b); see also Calambokidis and Barlow (2013) and the recent Monnahan (2013); Monnahan, C, (2013), Population Trends of the Eastern North Pacific Blue Whale, MS thesis submitted to University of Washington, pp. 64.) and Monnahan et al (2014; Monnahan, C. C., Branch, T.A., Stafford, K. M., Ivashchenko, Y. V., Oleson, E. M, (2014), Estimating Historical Eastern North Pacific Blue Whale Catches Using Spatial Calling Patterns, PLoS ONE 9(6): e98974. doi:10.1371/journal.pone.0098974) there is evidence suggesting that the Eastern North Pacific blue whale population may have recovered to its pre-whaling size.</p> <p>As presented in the EIS/OEIS in Section 3.4.3.1.10 (Thresholds and Criteria for Predicting Acoustic and Explosive Impacts on Marine</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>Mammals), the behavioral risk function curve and acoustic impact modeling used by the Navy assesses the potential for adverse effects pursuant to the Endangered Species Act at a sound pressure levels as low as 120 dB re 1 μPa.</p> <p>Footnote 33 is a secondary reference and the references cited in Goldbogen et al. (2013) regarding strandings contain no mention of blue whale stranding events or their association with mid-frequency sonar use. The Navy is not aware of any blue whale stranding events anywhere in the world that have been associated with the use of mid-frequency sonar.</p> <p>Footnote 34 is a secondary reference to information presented in Goldbogen et al. (2013) and misrepresents the presentation in Goldbogen et al. (2013). Intense levels of sound can damage hearing, but Goldbogen et al. (2013) do not tie that to any type of sound. Additionally the primary reference cited in Goldbogen et al. (2013) regarding “hearing damage” is Nowacek et al. (2007), which does not contain any mention of low-frequency anthropogenic noise damaging hearing. As discussed in the EIS/OEIS Section 3.4.3.1.6.3 (Behavioral Reactions to Vessels), low frequency anthropogenic noise results from commercial vessels and has no relation to the use of mid-frequency sonar during Navy training and testing. As presented in the EIS/OEIS in Section 3.4.4.3 (Summary of Monitoring and Observations During Navy Activities) and citation to Calambokidis et al. (2009b; see also Calambokidis and Barlow 2013), mark-recapture estimates “indicated a significant upward trend in abundance of blue whales” at a rate of increase just under 3 percent per year for the portion of the blue whale population in the Pacific, which includes the Southern California Range Complex. There is no evidence that Navy training and testing activities have any long-term impacts on populations of blue whales in locations where Navy activities are much more frequent and intense than in the NWTT Study Area.</p>
NRDC-33	<p>The DEIS should also consider that blue whales may have a greater tendency to be injured or killed by ship strikes. From 2004-2008 five blue whales were killed by ship strikes.³⁵ The four deaths that occurred in 2007 marked the highest number recorded for any year and prompted a mitigation plan and ship strike response plan.³⁶ Additionally, several blue whales have been sited with large wounds that appear to have been caused by ship strikes.³⁷</p> <p>³⁵ National Marine Fisheries Service, Blue Whale: Eastern North Pacific Stock Assessment Report 177, 180 (2010).</p>	<p>The EIS/OEIS consideration of vessel strikes to blue whales in Section 3.4.3.1 (Impacts from Vessel Strikes) and statistics for the environment around including the study area are presented in Section 3.4.2 (General Threats). Please note that the strikes to blue whales noted in the comment occurred in Southern California as a result of commercial vessel traffic and therefore are irrelevant to the NWTT Study Area and have no bearing on the potential for vessel strikes by Navy’s proposed activities.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	³⁶ Id. ³⁷ Id.	
NRDC-34	<p>Finally, the blue whales affected by this action are also subject to sonar exposure from the Southern California training and testing activities. The Navy must take a hard look at cumulative impacts of both of these Navy actions on this migratory species.</p>	<p>As presented in the EIS/OEIS in Section 3.4.4.3 (Summary of Monitoring and Observations During Navy Activities) and citation to Calambokidis et al. (2009b; see also Calambokidis and Barlow 2013), mark-recapture estimates “indicated a significant upward trend in abundance of blue whales” at a rate of increase just under 3 percent per year for the portion of the blue whale population in the Pacific which includes the Southern California Range Complex. There is no evidence of any population-level effects or effects to the stock indicative of long-term consequences in areas where Navy has been training and testing for decades.</p>
NRDC-35	<p>4. Fin Whales</p> <p>Fin whales are sensitive to noise. In response to a seismic survey, 250 fin whales stopped singing for several weeks to months.³⁸ And, as noted by the DEIS, “vocalizing fin whales in the Mediterranean left the area where a seismic survey was being conducted and that their displacement persisted beyond the completion of the survey.”³⁹ Similar disturbance can be expected from the proposed action.⁴⁰ While the DEIS anticipates both TTS and behavioral reactions, it appears that these instances are underestimates. Fin whales were the most commonly detected baleen whale in surveys from 2004-2013, and they were present in 90 percent of the days in surveys from October through February.⁴¹ Thus, the DEIS needs to better quantify the anticipated impacts to fin whales of its activities or it must provide a better rationale. Fin whales are also subject to vessel strikes. As noted in the DEIS nine known fin whales having stranded in Washington after being struck by vessels in the last decade.⁴² In 2010, a fin whale was struck by a ship at Ocean Beach, San Francisco and another arrived on a ship bow at Port of Oakland.⁴³ Their vulnerability to vessel collisions must be taken into account when determining the impact of Navy vessel movements and cumulative impacts.</p> <p>³⁸ Weilgart, <i>The impacts of anthropogenic ocean noise on cetaceans and implications for management</i>, Can. J. Zool. Vol. 85: 1091 (2007).</p> <p>³⁹ DEIS 3.4-75.</p> <p>⁴⁰ See e.g., Goldbogen (2013).</p> <p>⁴¹ DEIS 3.4-28.</p> <p>⁴² DEIS 3.4-237.</p> <p>⁴³ National Marine Fisheries Service. Southwest Regional Office, California Marine Mammal Stranding Network Database (2010); Kuruvila, Matthai. 2010. Dead whale on bow of ship docking in Oakland. <i>San Francisco Chronicle</i> (September 17, 2010).</p>	<p>As presented in the NWTT EIS/OEIS Section 2 (Description of Proposed Action and Alternatives) there is no seismic surveying or use of air guns proposed so there will not be “similar disturbances” resulting from the Navy’s training and testing activities in the NWTT Study Area. Please see Appendix F (Acoustic and Explosives Primer) in the Final EIS/OEIS and note the difference between seismic sources of impulsive sound (see for example Figure F-4).</p> <p>Regarding the claim that the EIS/OEIS underestimates both TTS and behavioral reactions, the opposite is the case for the reasons presented in the EIS/OEIS in Section 3.4.3.1.14 (Quantitative Analysis) given the conservative assumptions used.</p> <p>As presented in the analysis in Section 3.4.3.4.1 (Impacts from Vessel Strikes) in the EIS/OEIS, there has never been a vessel strike to a whale during any of the training or testing activities proposed in the Study Area. To clarify, the number of strikes has been provided and is zero for fin whales. The rationale for that determination is that there has never been a vessel strike to any whale (fin whale or otherwise) during any of the training or testing activities proposed in the Study Area. Commercial vessel strikes and strikes in other locations have no bearing on Navy’s proposed activities in the NWTT Study Area. Please note that the strikes to fin whales noted in the comment and as presented in the EIS/OEIS were as a result of the commercial vessel traffic in the area; commercial vessel strikes to whales have no relation to Navy training or testing activities.</p>
NRDC-36	5. Sei whales	See Section 3.4.3 (Environmental Consequences) regarding impacts

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>There are approximately 126, with a minimum population of 83, sei whales in the eastern North Pacific stock, and the anthropogenic removal of even one animal could interfere with the sei whale's ability to maintain a sustainable population. There is missing information about the status and trends of this population, and shipstrikes are a known threat but are likely underestimated because of the lack of reporting.</p>	<p>to sei whales from the proposed training and testing activities. There are no expected impacts resulting in the "removal" of any sei whales from the population. The NWTT EIS/OEIS contains the current best available science with regard to what is known concerning sei whales in the Study Area.</p> <p>See the EIS/OEIS Section 3.4.2.10.1 (Status and Management) regarding the status of sei whales. The Navy has used the best available science in the analysis presented in the NWTT EIS/OEIS.</p> <p>See Section 3.4.3.4.1 (Impacts from Vessel Strikes) for a discussion of this topic; it is not correct to assume there is a lack of reporting with regard to Navy activities, since all Navy vessel strikes to marine mammals are reported to NMFS; therefore, impacts from Navy vessel strikes have not been underestimated. As described in the EIS/OEIS in Section 3.4.3.4.1 (Impacts from Vessel Strikes), a number of features of U.S. Navy ships improves their ability to detect and avoid collisions with marine mammals, when compared to commercial vessels. These include ship design, crew size, and crew training.</p>
NRDC-37	<p>6. Minke whales</p> <p>The DEIS acknowledges that there will be 17 instances of TTS and 1 behavioral effect from Alternative 1. This is likely an underestimate. Minke whales are commonly present in the action area and will be impacted. In the Bahamas in 2000, minke whales stranded in response to mid-frequency active sonar.⁴⁴ The DEIS jumps to the conclusion that there will be no long term effects on individuals or the population based on the same flawed rationale used for humpback whales.</p> <p>⁴⁴ Weilgart (2007).</p>	<p>As presented in the EIS/OEIS Section 3.4.3.1.14.4 (Model Assumptions and Limitations), the model presents a conservative overestimate of the predicted impacts. Also note that Environmental conditions in the NWTT Study Area and the types of activities proposed in the EIS/OEIS have no relationship to those present in the Bahamas incident fourteen years ago in warm tropical waters.</p>
NRDC-38	<p>7. Gray whales</p> <p>The DEIS acknowledges that there may be a discrete Pacific Coast Feeding Group of gray whales. "[T]he PCFG is relatively small in number and utilizes a largely different ecosystem from that of the main ENP stock."⁴⁵ A smaller stock could mean that the proposed action is more likely to have population level impacts on this smaller stock of gray whales. While the DEIS concludes that Eastern North Pacific gray whales could be exposed to sound that would exceed the current impact thresholds, it should also evaluate the potential impact to the Pacific Coast Feeding Group. Impacts on this group would be expected to be more severe because of its smaller population. Moreover, gray whales are susceptible to ship strikes and are reportedly difficult to spot, there was a confirmed juvenile struck in Southern California 2009.⁴⁶</p> <p>⁴⁵ Weller, D.W., Bettridge, S., Brownell, R.L., Jr., Laake, J.L., Moore, J.E., Rosel, P.E., Taylor, Wade, P.R. 2013. Report of the National Marine Fisheries Service gray whale stock identification workshop. U.S. Dep. Commer.,</p>	<p>As presented in the Section 3.4.3 (Environmental Consequences) regarding impacts to gray whales from the proposed training and testing activities, the EIS/OEIS has used the best available science to analyze impacts to gray whales and the populations currently recognized. The majority of the activities proposed do not generally take place in the nearshore areas where gray whales should be located. See Section 3.4.3.4.1 (Impacts from Vessel Strikes) for a discussion of vessel strikes, and note that there has never been a vessel strike to any whale during any of the training or testing activities proposed in the Study Area.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	NOAA Tech. Memo. NMFS-SWFSC-507 ⁴⁶ National Marine Fisheries Service. Southwest Regional Office, California Marine Mammal Stranding Network Database (2010).	
NRDC-39	<p>8. Sperm Whales</p> <p>Sperm whales use echolocation to hunt for prey. The Fisheries Service's stock assessment report also notes anthropogenic sound as a habitat concern for sperm whales that feed in the ocean's "sound channel."⁴⁷ They are deep diving and difficult to observe, thus mitigation using observers will be insufficient to avoid impacts of sonar to sperm whales. The DEIS' conclusion that sonar will only result in sperm whales alerting, ignoring the stimulus, changing their behaviors or vocalizations, or avoiding the area by swimming away or diving fails to account for the fact that ensonification of the sperm whale habitat can interfere with hunting.</p> <p>The DEIS must consider that sperm whales migrate up and down the coast, and will be subjected to Navy activities in the Southern California training range including more than 2,000 level B instances of harassment annually.⁴⁸ This population is also under pressure from entanglement in fishing gear. In December 2010, two endangered sperm whales were observed entangled in a net. One whale died and the other whale was seriously injured and released with trailing gear. These two were among 16 sperm whales that NMFS estimated were taken by the California drift gillnet fishery in 2010. Sperm whales have been observed entangled 10 times in observed drift gillnet sets since 1990 with average estimate of 3.8 sperm whale deaths per year.⁴⁹</p> <p>⁴⁷ Carretta et al. 2013. ⁴⁸ 78 Fed. Reg. 78106, 78143 (December 24, 2013). ⁴⁹ Carretta et al. 2013.</p>	<p>Sperm whales "changing their behavior" has been addressed and analyzed in the EIS/OEIS since as presented in Section 3.4.3.1 (Acoustic Stressors) this includes masking of sound as resulting in a change in behavior and effects to habitat.</p> <p>The EIS/OEIS has considered that some sperm whales may migrate as presented in Section 3.4.3.2.13 (Sperm Whale (<i>Physeter macrocephalus</i>)). Navy has applied for an authorization pursuant to the Marine Mammal Protection Act and is in consultation pursuant to the Endangered Species Act with National Marine Fisheries Service. The analysis prepared by the NMFS as the regulator accounts for all impacts to the population of sperm whales from other actions (fishing, research, ship strikes, etc.) taking place elsewhere.</p>
NRDC-40	<p>9. Pygmy Sperm Whale & Dwarf Sperm Whale</p> <p>The DEIS should explain its rationale for estimating pygmy and dwarf sperm whale interactions while concurrently noting a lack of data about dwarf sperm whales. It must explain whether the model is only anticipating impacts for pygmy sperm whales based on the estimates of that population or whether it also has added the effects on dwarf sperm whales. The Navy has a duty to obtain that information or use scientifically accepted methods to nonetheless evaluate those impacts.⁵⁰</p> <p>⁵⁰ 40 C.F.R. § 1502.22(a).</p>	<p>The Navy has used the best available science to develop the analysis presented in the EIS/OEIS. See Section 3.4.2.14 (Pygmy Sperm Whale (<i>Kogia breviceps</i>) and Dwarf Sperm Whale (<i>Kogia sima</i>) regarding the data available regarding these species. See Section 3.4.3.1.14.1 (Marine Species Density Data; subsection – "Pygmy sperm whales and dwarf sperm whales") regarding how the model used the data. Finally see for example Section 3.4.3.2.1.4 (No Action Alternative; subsection – "Pygmy and Dwarf Sperm Whales (<i>Kogia</i> spp.)") where it is explained that the impacts are based on the group "Kogia (spp.)" and consistent with how it appears in the series of exposure tables.</p>
NRDC-41	<p>10. Killer Whales</p> <p>The analysis of the proposed action's impacts on southern resident killer whales is inadequate. There are only about 80 individual animals remaining in this population, and</p>	<p>The Navy disagrees and recommends review of Section 3.4.3.2.14 (Killer Whale (<i>Orcinus orca</i>)) and discussions regarding the various stressors as they apply to killer whales presented in Section 3.4.3</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>therefore effects on even one animal’s essential behavior can result in population level impacts. The DEIS’ conclusion that the range of responses of killer whales to sonar includes only ignoring, alerting, altering movement, and avoidance is without basis. Killer whales depend on their acoustic sensory system for communications, navigating, and locating prey.⁵¹ Southern resident killer whales use echolocation to detect salmon in the water column, and even vessel noise can reduce the range of which they can effectively locate prey.⁵² The Navy has not taken a hard look at the direct, indirect or cumulative impacts to the southern resident killer whale.</p> <p>⁵¹ National Marine Fisheries Service. Southern Resident Killer Whale Recovery Plan (2008). ⁵² Id.</p>	<p>(Environmental Consequences). See the discussion in Section 3.4.3.1 (Acoustic Stressors) providing the basis for the conclusions regarding ignoring, alerting, altering movement, and avoidance of sound sources as well as discussion of other potential impacts such as the masking communications (in Section 3.4.3.1.4 (Auditory Masking)). See Section 3.4.3.7 (Impacts from Secondary Stressors), Section 3.4.4 (Summary of Impacts (Combined Impacts of all Stressors) on Marine Mammals), and Chapter 4 (Cumulative Impacts) regarding the analysis in this regard.</p>
NRDC-42	<p>Background conditions for the southern resident killer whale are unfavorable, which must be considered when evaluating the impact of the proposed action on this small population. The 80-animal southern resident killer whale population may actually be declining. Scientists have recommended that, in evaluating southern resident killer whale population trends, only years 1987-2011 should be evaluated and in this timeframe the southern resident killer whale population may be declining by 0.91 each year.⁵³</p> <p>Limited prey availability is already threatening the survival of these killer whales. Southern Resident killer whales are dietary specialists, who depend on adequate populations of Chinook salmon for their survival, social cohesion and reproductive success.⁵⁴ During the past century and a half, human activities, including overfishing, artificial propagation and habitat degradation, have profoundly reduced the regional abundance of these prey species, thereby contributing to Southern Resident population declines.⁵⁵ In the northeastern Pacific region, most Chinook salmon stocks are at a fraction of their historical levels.⁵⁶</p> <p>⁵³ Velez-Espino. ⁵⁴ Ayres et al., <i>supra</i> note 40, at *2. See also <i>Recovery Plan, supra</i> note 41, at II-75 (“Reductions in prey availability may force whales to spend more time foraging and might lead to reduced reproductive rates and higher mortality.”). ⁵⁵ Nat’l Marine Fisheries Serv., <i>Recovery Plan for Southern Resident Killer Whales (Orcinus orca)</i> II-1-2, at II-86 (2008); see also Nat’l Marine Fisheries Serv., <i>Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation: F/NWR/2010/06051</i> 143 (2011) [hereinafter, <i>Biological Opinion</i>] (finding that decreased Chinook abundance resulting from proposed fishing operations would “reduce the whale population by -0.5 to -1.3 whales”). ⁵⁶ Katherine L. Ayres et al., <i>Distinguishing the Impacts of Inadequate Prey and Vessel Traffic on an Endangered Killer Whale (Orcinus orca) Population</i>, 7 PLOS ONE e36842 (2012).</p>	<p>See Section 3.4.3.2.14 (Killer Whale (<i>Orcinus orca</i>)) regarding the background conditions. Note that the availability of salmon, their artificial propagation, and the other issues raised here (e.g., overfishing) are not part of the Navy’s Proposed Action nor do Navy’s proposed activities affect these stressors.</p>
NRDC-43	<p>Additionally, the DEIS must better reflect and analyze the proposed action’s impacts on the use of offshore areas by southern resident killer whales. Areas off the coast of Washington, Oregon, and California provide essential habitat for southern resident killer whales. A team of scientists recently tracked a group of southern residents from late December 2012 to March 2013, collecting nearly daily location data as the whales</p>	<p>See Section 3.4.3.2.14 (Killer Whale (<i>Orcinus orca</i>)); the extent of the range for Southern Resident killer whales is not new information. As presented in the EIS/OEIS, Southern Resident killer whales are known to travel as far south as Monterey off central California (Black 2011), therefore, note that the comment leaves off a significant portion of their</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>traveled through more than 23,580 square kilometers of marine habitat between Point Reyes, California, and Cape Flattery, Washington.⁵⁷ Acoustic recordings further demonstrate that the population consistently occurs in this region between January and June.⁵⁸ Researchers have also observed whales engaging in foraging-like behavior at the mouth of the Columbia River in late March, coincident with the arrival of Chinook salmon,⁵⁹ and determined that portions of the population exhibit contaminant concentrations consistent with the consumption of Columbia River and California Chinook.⁶⁰ A petition to revise the southern resident killer whale's critical habitat to include offshore areas is pending with the National Marine Fisheries Service.</p> <p>[Figure 1. Area proposed for protection in petition to revise southern resident killer whale critical habitat]</p> <p>⁵⁷ Bradley M. Hanson et al., Abstract, <i>Informing Southern Resident Killer Whales Critical Habitat Designation in Their Winter Range along the U.S. West Coast</i> (forthcoming).</p> <p>⁵⁸ M. Bradley Hanson, et al., Assessing the Coastal Occurrence of Endangered Killer Whales Using Autonomous Passive Acoustic Recorders, 134 J. OF THE ACOUSTICAL SOC'Y OF AMERICA 3486, 3486 (2013) (explaining that "on average the whales occur in inland waters less than half of the days each year"); see also Christopher Dunagan, Researchers launch winter tracking of killer whales, Kitsap Sun's Watching Our Water Ways, February 22, 2012 at http://pugetsoundblogs.com/waterways/2012/02/22/researchers-launch-winter-tracking-of-killer-whales/#axzz2yzvaCfaj.</p> <p>⁵⁹ Jeannette E. Zamon et al., <i>Winter Observations of Southern Resident Killer Whales (Orcinus orca) Near the Columbia River Plume during 2005 Spring Chinook Salmon (Oncorhynchus tshawtscha) Spawning Migration</i>, 88 NW. NATURALIST 193, 196 (2007).</p> <p>⁶⁰ Margaret M. Krahn et al., <i>Persistent Organic Pollutants and Stable Isotopes in Biopsy Samples (2004/2006) from Southern Resident Killer Whales</i>, 54 MARINE POLLUTION BULLETIN 1903, 1909 (2007) [hereinafter <i>Persistent Organic Pollutants</i>]; see also Margaret M. Krahn et al., <i>Effects of Age, Sex and Reproductive Status on Persistent Organic Pollutant Concentrations in "Southern Resident" Killer Whales</i>, 58 MARINE POLLUTION BULLETIN 1522, 1527 (2009) [hereinafter <i>Age, Sex and Reproductive Status</i>] (concluding, on the basis of blubber biopsy samples, that certain Southern Resident killer whales "travel to California to forage, where high levels of DDT are found in prey," and noting that "[t]hese results have been substantiated by multiple sightings of [Southern Residents] in waters off the coast of central California").</p>	<p>southern range already recognized by the Navy. Also note that the majority of proposed activities occurring within the offshore area would take place beyond 12 nm from shore and therefore beyond the normal areas in Washington, Oregon, and California used by Southern Resident killer whales.</p>
NRDC-44	<p>Each of these circumstances must be considered to make an informed decision as to the true extent of the impacts on the southern resident killer whale from the Navy's proposed action.</p>	<p>As presented in the EIS/OEIS, the distribution of marine mammals including Southern Resident killer whales has already been taken into account. Note that the majority of Navy training activities in the offshore portion of the Study Area take place beyond 50 miles from the coast, which is beyond the proposed expanded critical habitat and none of the Study Area extends as far south as the new proposed critical habitat area.</p>
NRDC-45	<p>11. Harbor Porpoises</p> <p>The DEIS should consider that the takes for harbor porpoises may be higher than estimated.⁶¹ Harbor porpoises are acutely sensitive to a range of anthropogenic sounds. They have engaged in avoidance responses 50 miles from a seismic airgun array, a consistent result with other studies showing harbor porpoises abandoning habitat when</p>	<p>As presented in the EIS/OEIS Section 3.4.3.1.14.4 (Model Assumptions and Limitations), the model presents a conservative overestimate of the predicted impacts.</p> <p>As presented in Section 3.4.3.1.12.1 (Sonar and Other Active Acoustic Sources, Subsection "Harbor Porpoises"), Navy is aware of this and</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>exposed to pulsed sounds at received levels well below 120 dB.⁶² Another study using seismic sounds finds that a harbor porpoise experienced temporary threshold shift (TTS) when exposed to airgun noise at 164 dB.⁶³ Further, harbor porpoise are vulnerable to physical modification of nearshore habitats and activities because they are found in shallow waters and near-shore areas, bays, tidal areas, and river mouths.⁶⁴ Additionally, it is unknown whether the kill rate is insignificant because there is no reliable estimate of the mortality rate due to commercial fisheries because there are no observer placements in Southeast Alaska fisheries.⁶⁵ In light of these vulnerabilities, harbor porpoises are likely to suffer more casualties than the Navy estimated.</p> <p>⁶¹ In NWTT-TR, the model-estimated takes harbor porpoises for TTS was 768.59, and 5920.38 for behavior for exposed to non-impulsive sources during training events under Alternative 1.</p> <p>⁶² Bain, D.E. and R. Williams, Long-range Effects of Airgun Noise on Marine Mammals: Responses as a Function of Received Sound Level and Distance (2006) (IWC Sci. Comm. Doc. IWC/SC/58/E35).</p> <p>⁶³ Lucke, K., Siebert, U., Lepper, P.A. & Blanchet, M.-A. 2009. Temporary Shift in Masked Hearing Thresholds in a Harbour Porpoise (<i>Phocoena phocoena</i>) After Exposure to Seismic Airgun Stimuli. The Journal of the Acoustical Society of America 125:4060-4070.</p> <p>⁶⁴ National Marine Fisheries Service, Harbor Porpoise: Alaska Stock Assessment Report 136, 139 (2012).</p> <p>⁶⁵ National Marine Fisheries Service, Harbor Porpoise: Southeast Alaska Stock Assessment Report 131, 133 (2012).</p>	<p>has established a sound pressure level of 120 dB re 1 μPa as a threshold for predicting behavioral responses in harbor porpoises.</p> <p>There is no proposed use of seismic air guns in the Proposed Action. These sound from these sources are fundamentally different than those presented in the Proposed Action.</p> <p>Navy is not proposing any actions in this EIS/OEIS that will result in the physical modification of nearshore habitats.</p> <p>As presented in the EIS/OEIS, there are no mortalities predicted by the analysis of Navy’s Proposed Action. The reference to a “kill rate” is unclear and the potential impacts from commercial fisheries is not part of the Proposed Action, but National Marine Fisheries Service is responsible for considering all impacts to marine mammals as part of the MMPA authorization process. Again, to be clear, there are no mortalities (zero) predicted by the analysis so the comment’s reference to “more casualties than Navy estimated” is incorrect.</p>
<p>NRDC-46</p>	<p>We also ask the Navy to explain the discrepancy in the estimated annual training effects for sonar and other active acoustic sources between the No Action Alternative and Alternative 1 and 2 for harbor porpoise, as reflected in Table 3.4-17 of the DEIS.⁶⁶ The modeling shows an increase in take for every population affected by sonar and other active acoustic sources, except behavioral impacts to harbor porpoises. Given the sensitivity of harbor porpoise to sonar—the behavioral impact threshold is set at any received sound level above 120 db—and the increase in surface ship sonar activity, we would expect the take of harbor porpoises to increase from the No Action Alternative to Alternatives 1 and 2. While the discrepancy could be attributed in part to moving activities away from harbor porpoise habitat, that is something the Navy professed previously that it was unable to do while also maintaining fidelity to training needs.</p> <p>⁶⁶ DEIS 3.4-151.</p>	<p>There was no discrepancy. The decrease in estimated harbor porpoise exposures from the No Action Alternative to Alternatives 1 & 2 in the EIS/OEIS is mostly attributable to adjustments to certain activities, specifically the number and type of sonobuoys used in each alternative. Table 2.8-1 in the EIS/OEIS provided a summary of the training activities which are analyzed under each alternative. For the activity - Tracking Exercise: Maritime Patrol (Extended Echo Ranging Sonobuoys) in the EIS/OEIS, the number of sonobuoys under the NAA was 150 sonobuoys of either IEER or SSQ-125. The IEER sonobuoy is impulsive (using a series of small, broad-spectrum [mixed sound frequency] sound signals for a short period of time), whereas the SSQ-125 is a non-impulsive sonobuoy (using a series of single frequency of sound “pings” for a longer period of time). For Alternatives 1 & 2, the Proposed Action in the EIS/OEIS was to use 150 IEER sonobuoys and 20 SSQ-125 sonobuoys. While overall, there was a slight increase in sonobuoy use between the NAA and Alternatives 1 & 2 (from 150 to 170) the type of sonobuoy usage is different amongst the alternatives. Since SSQ-125 sonobuoys are non-impulsive and because of the longer cycle of emitted sound when used, have a larger total energy emitted. The result is that SSQ-125 sonobuoys have a lower threshold for behavioral effects than for IEER buoys and a larger distance to</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>effects for Level B harassment. As a result, they can result in more Level B exposures, depending on the species and its overlap with the activity. Since the Navy modeled the No Action Alternative in the EIS/OEIS as 150 SSQ-125 sonobuoys and modeled Alternative 1 & 2 with only 20 SSQ-125 sonobuoys, there was a substantial decrease in Level B takes as a result of the 87 percent reduction in SSQ-125 sonobuoy usage between the NAA and Alternatives 1 & 2 in the EIS/OEIS. Corresponding impact to other species is not apparent as a result of lack of overlap of some species and the activities, or because increases in other sonar systems between the NAA and Alternative 1 & 2 offset any reductions from the change in sonobuoy usage. Please note, however, that the supplement to the EIS/OEIS contains a change in the proposed number of both types of these sonobuoys under Alternatives 1 and 2, and the resulting predicted effects from the use of these sonobuoys has therefore also changed. See the supplement to the EIS/OEIS Section 3.4 (Marine Mammals) for details in this regard.</p>
<p>NRDC-47</p>	<p>12. Cuvier's Beaked Whale (<i>ziphius cavirostris</i>) As noted in the DEIS, Cuvier's beaked whales are the most common beaked whale off the west coast. Beaked whales are extremely sensitive to sound, as evidenced by the recent mass stranding of up to 11 Cuvier's beaked whales (at least four animals have died) in Crete, Greece, from April 1 to 6 while naval operations took place off shore.⁶⁷ Despite this known concern, the DEIS has failed to obtain sufficient data on Cuvier's beaked whales for its analysis.⁶⁸ It instead estimates from Mesoplodon beaked whales. The DEIS should further consider that the majority of strandings coincident with naval sonar exercises have involved Cuvier's beaked whales.⁶⁹ This is especially important, because as the DEIS observes, the abundance along the U.S. west coast, including in the California Current, ⁷⁰ is declining.⁷¹ A recent study found that the beaked whales respond to sonar by vigorously swimming.⁷² Rapid, directed swimming can increase stranding risks.⁷³ Notably, the study points out that current U.S. management practices usually do not consider that such significant behavior disruption occurs at exposure levels as low as used in the study.⁷⁴ In addition to increasing strandings, sonar also reduces individual fitness because it causes beaked whales to cease echolocation-based foraging, experience orientation changes, and demonstrate strong and sustained avoidance even beyond the end of the exposure.⁷⁵ Accordingly, impacts on Cuvier's beaked whales could include interference with essential behaviors that will have more than a negligible impact on this species.</p> <p>⁶⁷ Giuseppe Notarbartolo di Sciarra's Marine Conservation Blog and Website, Wave Action, http://www.disciara.net/?p=1010. ⁶⁸ DEIS 3.4-114.</p>	<p>As presented in the EIS/OEIS in Section 3.4.3.1.12.1 (Sonar and Other Active Acoustic Sources), the Navy is aware of the concern over beaked whales' sensitivity to sound, which is why the Navy adopted a 140 dB re 1 μPa sound pressure level threshold for behavioral effects for all beaked whales. Also as presented in that section and based on science involving behavioral response studies of beaked whales, it is a mistake to assume that strandings co-occurring with a multi-national major exercise involving many ships at sea in Greece are comparable to the proposed U.S. Navy activities in the Pacific Northwest as presented in the EIS/OEIS.</p> <p>While it is the case that abundance for the entire west coast is declining, as presented in the EIS/OEIS in various locations such as Section 3.4.3.1.7 (Repeated Exposures), in the small portion of the Pacific coast overlapping the Navy's Southern California Range Complex, long-term residency by individual Cuvier's beaked whales and documented higher densities of beaked whales provide indications that the proposed decline in numbers elsewhere along the Pacific coast is not apparent where the Navy has been intensively training and testing with sonar and other systems for decades.</p> <p>As noted in the EIS/OEIS, Navy has already taken into account best available science including the Navy funded behavioral response study cited in the comment. As presented in the EIS/OEIS in Section 3.4.3.1.12.1 (Sonar and Other Active Acoustic Sources), Navy</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>⁶⁹ Stacy L. DeRuiter et al., First Direct Measurements of Behavioural Responses by Cuvier's Beaked Whales to Mid-Frequency Active Sonar BIOLOGY LETTERS 9: 20130223 1 (2013).</p> <p>⁷⁰ Jeffrey E. Moore & Jay P. Barlow, Declining Abundance of Beaked Whales (Family Ziphiidae) in the California Current Large Marine Ecosystem 8 PLOS ONE e52779 8 (Jan. 2013).</p> <p>⁷¹ DEIS 3.4-50.</p> <p>⁷² DeRuiter et al. 2013.</p> <p>⁷³ Id.</p> <p>⁷⁴ Id.</p> <p>⁷⁵ Id.</p>	<p>adopted a 140 dB re 1 µPa sound pressure level threshold for behavioral effects for beaked whales.</p>
NRDC-48	<p>13. Steller sea lion</p> <p>The status of Steller sea lion populations in California and Washington is of particular cause for concern. In California, the present size of the statewide population is about one-fifth to one-third of that recorded the first half of the 20th century, and declines may be even more severe since the population is thought to have been larger yet in the 19th century.⁷⁶ Non-pup numbers have not increased during the past 13 to 19 years (1996-2009 and 1990-2009 datasets for 4 rookeries). The San Miguel Island and Seal Rocks rookeries remain abandoned; the Farallon Islands and Año Nuevo Island rookeries, once the largest and most important in California, declined in abundance by ~80% since the early-to-mid 1900s; and during the past 19 years (1990-2009) pup numbers have continued to decline at Año Nuevo and have remained at very low levels at the Farallones.⁷⁷ In Washington, current Steller sea lion abundance remains well-below historic population levels of several thousand animals, and there are no active rookeries, creating a large gap of more than 600 miles between rookeries in British Columbia and Oregon.⁷⁸ These concerning population trends in Washington and California should be taken into account in the DEIS.</p> <p>⁷⁶ Carretta et al. 2013; NMFS 2008. National Marine Fisheries Service. 2008. Recovery Plan for the Steller Sea Lion (<i>Eumetopias jubatus</i>). Revision. National Marine Fisheries Service, Silver Spring, MD.</p> <p>⁷⁷ NMML. 2012. Memo on Regional and Overall Trends and Trend Analysis of the Eastern Regional Distinct Population Segment (DPS) of Steller Sea Lion. 10 April 2012</p> <p>⁷⁸ Carretta et al. 2013.</p>	<p>Note that as presented in the EIS/OEIS (Section 3.4.2.28, Steller Sea Lion (<i>Eumetopias jubatus</i>)), due to their recovery the population of Steller sea lions in the NWTT Study Area consisting of the eastern distinct population segment (the eastern U.S. stock) was recently removed from the List of Endangered and Threatened Wildlife. The latest information is that the eastern U.S. stock is increasing throughout the northern portion of its range and is stable or increasing slowly in the central portion (Oregon to central California).</p> <p>Population trends in Washington and California are taken into account. See the latest trend information and best available science presented in the EIS/OEIS Section 3.4.2.28 (Abundance).</p>
NRDC-49	<p>14. California sea lion</p> <p>In 2013, there was an unusual mortality event for California sea lions with more than 1,000 reported strandings of emaciated sea lions in Southern California. The cause of the strandings has not yet been reported.⁷⁹ These sea lions are also impacted by the Southern California testing and training activities that occur near their rookeries.</p> <p>⁷⁹ National Marine Fisheries Service. http://www.nmfs.noaa.gov/pr/health/mmume/californiasealions2013.htm</p>	<p>The action area analyzed in this document does not include Southern California waters. On the website referenced in the comment (noted as being "Updated: May 6, 2014"), NMFS indicated the following cause for this event as follows: "our findings to date indicate that a likely contributor to the large number of stranded, malnourished pups was a change in the availability of sea lion prey, especially sardines, a high value food source for nursing mothers,"</p>
NRDC-50	<p>15. Northern sea otter</p> <p>The DEIS discounts impacts on the northern sea otter because of a lack of data. This is</p>	<p>As provided in the citation to the EIS/OEIS (Page 3.4-113), the potential impact to sea otters from Navy training and testing involving</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>improper under NEPA.⁸⁰ The DEIS concludes that:</p> <p>There is no density data available for sea otters in the Study Area. In addition, sea otters inhabit an acoustically complex shallow water environment that is beyond the predictive capability of current acoustic modeling programs. Therefore, even if there were density data for sea otters in the Study Area, attempting to acoustically model underwater sound propagation and sound levels would not be justified.⁸¹</p> <p>Sea otters in Washington occupy only a small portion of the pre-exploitation range, and they are limited in a way that makes them vulnerable to a stochastic event, such as an oil spill. The Navy must obtain more information on northern sea otters and describe the impacts of the proposed action on the stocks of sea otters that occur in the action area.</p> <p>⁸⁰ 40 C.F.R. § 1502.22(a). ⁸¹ DEIS 3.4-113.</p>	<p>underwater acoustic sources was not quantitatively modeled for the reasons provided in the document. Also as presented in the applicable sections of 3.4.3 (Environmental Consequences), in general, sea otters are not present where the overwhelming majority of the proposed activities will occur. The potential for impacts are discountable since the activities and sea otters are extremely unlikely to co-occur. Additionally, as presented in Section 3.4.2.7 (Mustelidae (Sea Otters)) and by recent findings added to the Final EIS/OEIS, sea otter are not especially well adapted for hearing underwater. Also see Section 3.4.3.1.6.4 (Subsection “Sea Otters”) wherein it is noted that USFWS has found no evidence that years of defense-related activities at San Nicolas Island or in Southern California have had any adverse effects on the well-monitored experimental population of southern sea otters within that Range Complex.</p> <p>The Navy consulted with regional experts in the development of this EIS/OEIS and the information presented in Section 3.4.2.34 (Northern Sea Otter (<i>Enhydra lutris kenyoni</i>)) includes the best available science.</p>
NRDC-51	<p>III. Other Impacts on Wildlife</p> <p>The same concerns that apply to marine mammals – such as injury or death from mid-frequency active sonar, collisions with ships, bioaccumulation of toxins, and stress – apply to sea turtles, birds and other biota as well. The Navy must adequately evaluate impacts and propose mitigation for each category of harm. 40 C.F.R. §§ 1502.14, 1502.16.</p>	<p>See Section 3.5 regarding the analysis of impacts to sea turtles, Section 3.6 regarding the analysis of impacts to birds, Section 3.7 regarding the analysis of impacts to marine vegetation, Section 3.8 regarding the analysis of impacts to marine invertebrates, and Section 3.9 regarding the analysis of impacts to fish. See Section 5.3 (Mitigation Assessment) for a discussion of the proposed mitigation measures.</p>
NRDC-52	<p>The Navy limits its analysis of the effects of mid-frequency active sonar on sea turtles on the grounds that their best hearing range appears to occur below 1 kHz. DEIS at 3.5- 4 to 5; 3.5-27. Given the endangered status of sea turtles, there is little room for error in assessing impacts. While acknowledging a lack of density data for the species in open ocean conditions and a lack of data on Washington and Oregon densities, the Navy nonetheless concludes that “potential impacts are not expected to result in substantial changes to behavior, growth, survival, annual reproductive success, lifetime reproductive success (fitness), or species recruitment, and are not expected to result in population-level impacts.” DEIS at 3.5-28. Given the paucity of research looking at sonar impacts on sea turtles and the lack of density data, the Navy’s conclusions are hardly supported by sufficient evidence. Speculation must be supported by rigorous analysis and wholes in data must be filled prior to concluding that no population-level impacts are expected.</p>	<p>The Navy conducted a rigorous analysis of the potential impacts from sonar activities (Section 3.5.3.1, Acoustic Stressors) and repeated exposures to individual sea turtles are addressed in Section 3.5.3.1.2.6 (Repeated Exposures). As presented in Section 3.5.3.1.7 (Impacts from Sonar and Other Active Acoustic Sources), current best available science and all available indications are that sea turtles are not likely able to hear mid-frequency sonar. The approach to analysis (Section 3.0.5.4, Resource-Specific Impacts Analysis for Individual Stressors) states the analysis begins with individual organisms and their habitats, and then addresses populations, species, communities, and representative ecosystem characteristics, as appropriate. The conclusions reached in the EIS/OEIS are fully supported by the science and the analysis, which has been refined through the ESA consultation with NMFS.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC-53	<p>Nor is the Navy's reasoning with regard to seabirds any more sound. Although the Navy acknowledges that "[t]here is little published literature on the hearing abilities of birds underwater...[and] no measurements of the underwater hearing ability of any diving birds" (DEIS at 3.6-17), it then inexplicably concludes that "any sound exposures would be minimal and are unlikely to have a long-term impact on an individual or a population." DEIS at 3.6-35. Such reasoning does not bear up to any serious scrutiny. See, e.g., the entirely unsupported assertion that "[s]eabirds would avoid any additional exposures during a foraging dive when they surface." DEIS at 3.6-35. Nor is it consistent with its determination that sonar and other active acoustic sources, explosive detonations, and weapons firing, launch, and impact noise is likely to adversely affect the ESA-listed marbled murrelet. DEIS at 3.6-78. Seabirds occur in the NWTT Study Area, dive underwater (in some cases to depths of hundreds of feet), and are sensitive to the frequencies used by the Navy's acoustic sources. They must receive further analysis in the DEIS, both for the direct impacts they may suffer on exposure to the Navy's acoustic sources and for the impacts they may incur indirectly through depletion of prey species and hard bottom habitat. 40 C.F.R. § 1502.16(a), (b).</p> <p>Without further consideration of these species, the Navy's review is incomplete.</p>	<p>In the absence of scientific studies, reliance on professional judgment is required. Statements on the behavior of animals contained in the EIS/OEIS are based on the best available science. The Navy is in ongoing consultation with the U.S. Fish and Wildlife Service as appropriate.</p>
NRDC-54	<p>IV. The Navy Failed to Analyze the Impacts on Fish and Fisheries</p> <p>The NWTT Study Area is a highly productive region for fish and invertebrate populations. It supports some of the most productive and commercially important fisheries in the United States (including flounder, tuna, anchovy, mackerel, and salmon). The NWTT Study Area supports hundreds of other species, many with federally designated essential fish habitat in the Study Area.</p> <p>In its DEIS, the Navy discusses many of the unknowns regarding impacts from training and testing on fish (e.g., "While statistically significant losses were documented in the two groups impacted, the researchers only tested that particular sound level once, so it is not known if this increased mortality was due to the level of the test signal or to other unknown factors." DEIS at 3.9-61), while also acknowledging that "potential impacts on fish from acoustic and explosive stressors can range from no impact, brief acoustic effects, tactile perception, and physical discomfort; to slight injury to internal organs and the auditory system; do death of the animal." DEIS at 3.9-87. Nonetheless, the DEIS concludes that its training activities—including both the use of mid-frequency active sonar and underwater detonations—would have no significant impact on fish, fisheries, and essential fish habitat. The Navy's conclusion not only contradicts the available scientific literature on noise but also ignores the valid concerns of fishermen. For example, fisherman concerned with declining catch rates wrote letters opposing the Navy's proposal to build an Undersea Warfare Training Range off the coast of North Carolina in 2005. Those fishermen reported sharp declines in catch rates in the vicinity of Navy exercises.</p>	<p>While the EIS/OEIS concludes there will be impacts from the Proposed Action to fish, those impacts do not translate into impacts on socioeconomic resources. Impacts analyzed in the EIS/OEIS consider the individual and the population. Impacts on single individuals do not translate to impacts on the entire population or the resource as a whole. The conclusions presented in the EIS/OEIS are fully supported in the analysis.</p> <p>Concerns of Atlantic commercial fisherman in 2005 were addressed in the Navy's Atlantic Fleet Training and Testing EIS/OEIS (Section 3.11.3, Environmental Consequences – Socioeconomic Resources). It recognized that favored fishing areas change over time with fluctuations in fish populations and communities, preferred target species, or fishing modes and styles and that declines in fishing rates can be attributed to several factors both natural and anthropogenic.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC-55	<p>A. Decline in Catch Rates</p> <p>For years, fisheries in various parts of the world have complained about declines in their catch after intense acoustic activities (including naval exercises) moved into the area, suggesting that noise is seriously altering the behavior of some commercial species.⁸² A group of Norwegian scientists attempted to document these declines in a Barents Sea fishery and found that catch rates of haddock and cod (the latter known for its particular sensitivity to low-frequency sound) plummeted in the vicinity of an airgun survey across a 1600-square-mile area. In another experiment, catch rates of rockfish were similarly shown to decline.⁸³ Drops in catch rates in these experiments range from 40 to 80 percent.⁸⁴ A variety of other species, herring, zebrafish, pink snapper, and juvenile Atlantic salmon, have been observed to react to various noise sources with acute alarm.⁸⁵</p> <p>In their comments on the Navy's Draft Environmental Impact Statement for the proposed Undersea Warfare Training Range off the coast of North Carolina, several fishermen and groups of fishermen independently reported witnessing sharp declines in catch rates of various species when in the vicinity of Navy exercises.⁸⁶ These reports are also indicative of behavioral changes—such as a spatial redistribution of fish within the water column—that could similarly affect the fisheries in the NWTT Study Area.</p> <p>⁸² See "'Noisy' Royal Navy Sonar Blamed for Falling Catches," <u>Western Morning News</u>, Apr. 22, 2002 (sonar off the U.K.); Percy J. Hayne, President of Gulf Nova Scotia Fleet Planning Board, "Coexistence of the Fishery & Petroleum Industries," www.elements.nb.ca/theme/fuels/percy/hayne.htm (accessed July 10, 2012) (airguns off Cape Breton); R.D. McCauley, J. Fewtrell, A.J. Duncan, C. Jenner, M.-N. Jenner, J.D. Penrose, R.I.T. Prince, A. Adhitya, J. Murdoch, and K. McCabe, <u>Marine Seismic Surveys: Analysis and Propagation of Air-Gun Signals, and Effects of Air-Gun Exposure on Humpback Whales, Sea Turtles, Fishes, and Squid</u> 185 (2000) (airguns in general).</p> <p>⁸³ A. Engås, S. Løkkeborg, E. Ona, and A.V. Soldal, <u>Effects of Seismic Shooting on Local Abundance and Catch Rates of Cod (<i>Gadus morhua</i>) and Haddock (<i>Melanogrammus aeglefinus</i>)</u>, 53 <u>Canadian Journal of Fisheries and Aquatic Sciences</u> 2238-49 (1996); J.R. Skalski, W.H. Pearson, and C.I. Malme, <u>Effects of Sound from a Geophysical Survey Device on Catch-Per-Unit-Effort in a Hook- and-Line Fishery for Rockfish (<i>Sebastes</i> spp.)</u>, 49 <u>Canadian Journal of Fisheries and Aquatic Sciences</u> 1357-65 (1992). See also S. Løkkeborg and A.V. Soldal, <u>The Influence of Seismic Exploration with Airguns on Cod (<i>Gadus morhua</i>) Behaviour and Catch Rates</u>, 196 <u>ICES Marine Science Symposium</u> 62- 67 (1993).</p> <p>⁸⁴ Id.</p> <p>⁸⁵ See J.H.S. Blaxter and R.S. Batty, <u>The Development of Startle Responses in Herring Larvae</u>, 65 <u>Journal of the Marine Biological Association of the U.K.</u> 737-50 (1985); F.R. Knudsen, P.S. Enger, and O. Sand, <u>Awareness Reactions and Avoidance Responses to Sound in Juvenile Atlantic Salmon, <i>Salmo salar</i> L.</u>, 40 <u>Journal of Fish Biology</u> 523-34 (1992); McCauley et al., <u>Marine Seismic Surveys</u> at 126-61.</p> <p>⁸⁶ See comments compiled by the Navy and posted on the Undersea Warfare Training Range EIS site, <i>available at</i> http://www.projects.earthtech.com/USWTR (e.g., comments of S. Draughon, S. Fromer, L. and F. Gromadzki, D. Pendergrast, and North Carolina Watermen United).</p>	<p>Navy has been training and testing in the NWTT Study Area for decades and has received no such correspondence (complaints about declining catch) from fishermen. Additionally, the Proposed Action does not include air gun seismic survey activities such as those noted in the comment. Potential declines in fisheries in other parts of the world as a result of air gun use are outside the scope of this analysis.</p> <p>Concerns of Atlantic commercial fisherman in 2005 were addressed in the Navy's Atlantic Fleet Training and Testing EIS/OEIS Section 3.11.3, Environmental Consequences – Socioeconomic Resources. It was recognized that favored fishing areas change over time with fluctuations in fish populations and communities, preferred target species, or fishing modes and styles and that declines in fishing rates can be attributed to several factors both natural and anthropogenic. For the NWTT Study Area, discussion of potential impacts to fishermen in the Pacific Northwest and Alaska portions of the NWTT Study Area were presented in Section 3.12.2.2 (Commercial and Recreational Fishing) and Section 3.12.3 (Environmental Consequences).</p>
NRDC-56	<p>B. Permanent Injury and Mortality</p> <p>The Navy's conclusion that underwater noise "is unlikely to impact fish species" ignores</p>	<p>The approach to analysis (Section 3.0.5.4, Resource-Specific Impacts Analysis for Individual Stressors) states the analysis begins with individual organisms and their habitats, and then addresses</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>the scientific literature. A number of studies, including one on non-impulsive noise, show that intense sound can kill eggs, larvae, and fry outright or retard their growth in ways that may hinder their survival later.⁸⁷ Significant mortality for fish eggs has been shown to occur at distances of 5 meters from an airgun source; mortality rates approaching 50 percent affected yolk sac larvae at distances of 2 to 3 meters.⁸⁸ With respect to mid-frequency sonar, the Navy itself has noted that “some sonar levels have been shown [in Norwegian studies] to be powerful enough to cause injury to particular size classes of juvenile herring from the water’s surface to the seafloor.”⁸⁹ Also, larvae in at least some species are known to use sound in selecting and orienting toward settlement sites.⁹⁰ Acoustic disruption at that stage of development could have significant consequences.⁹¹ Although the Navy acknowledges studies showing that eggs and larvae are more susceptible to sound, it tries to distinguish them by stating that they “were laboratory studies, however, and have not been verified in the field.” DEIS at 3.9-63. Federal law does not allow the Navy to ignore the valid scientific studies that have already been conducted simply because they are contrary to its interest.</p> <p>⁸⁷ See, e.g., C. Booman, J. Dalen, H. Leivestad, A. Levsen, T. van der Meeren, and K. Toklum, Effector av luftkanonskyting på egg, larver og yngel (Effects from Airgun Shooting on Eggs, Larvae, and Fry), 3 Fisken og Havet 1-83 (1996) (Norwegian with English summary); J. Dalen and G.M. Knutsen, Scaring Effects on Fish and Harmful Effects on Eggs, Larvae and Fry by Offshore Seismic Explorations, in H.M. Merklinger, Progress in Underwater Acoustics 93-102 (1987); A. Banner and M. Hyatt, Effects of Noise on Eggs and Larvae of Two Estuarine Fishes, 1 Transactions of the American Fisheries Society 134-36 (1973); L.P. Kostyuchenko, Effect of Elastic Waves Generated in Marine Seismic Prospecting on Fish Eggs on the Black Sea, 9 Hydrobiology Journal 45-48 (1973).</p> <p>⁸⁸ Booman et al., Effector av luftkanonskyting på egg, larver og yngel at 1-83.</p> <p>⁸⁹ Navy, Draft Environmental Impact Statement/ Overseas Environmental Impact Statement for the Southern California Range Complex 3.7-66 to 3.7-67 (2008). In the NWTT Study Area, the Navy would operate sonar at higher levels than those used in the Norwegian studies.</p> <p>⁹⁰ S.D. Simpson, M. Meekan, J. Montgomery, R. McCauley, R., and A. Jeffs, Homeward Sound, 308 Science 221 (2005).</p> <p>⁹¹ Popper, Effects of Anthropogenic Sounds at 27.</p>	<p>populations, species, communities, and representative ecosystem characteristics, as appropriate. Impacts on a resource, not listed as a federally protected species, are not based on impacts on individuals, but rather to the entire population. Section 3.9.3.1.2 (Impacts from Sonar and Other Non-Impulsive Acoustic Sources) and Section 3.9.3.1.3 (Impacts from Explosives and Other Impulsive Acoustic Sources) address potential impacts from all acoustic sources on fish, including non-impulsive noise. The conclusions reached in the EIS/OEIS are based on the best available science and are fully supported by the science and the analysis.</p> <p>Air guns are not proposed for use in this EIS/OEIS.</p> <p>This section of the comment is not in reference to the NWTT EIS/OEIS but to an older Navy analysis and another location. Additionally, this comment references and improperly combines findings on impacts from explosives, seismic sources, and non-impulsive sources which are not comparable given the differences in the sound/energy each produces. The NWTT EIS/OEIS (specifically Section 3.9.3.1.1.1, Direct Injury) reflects most up to date presentation and understanding of the best available science involving impacts to larvae. The approach to analysis (Section 3.0.5.4, Resource-Specific Impacts Analysis for Individual Stressors) states the analysis begins with individual organisms and their habitats, and then addresses populations, species, communities, and representative ecosystem characteristics, as appropriate. Impacts on a resource are not based on impacts on individuals, but rather to the entire population. Furthermore, Section 3.9.3.1.2 (Impacts from Sonar and Other Non-Impulsive Acoustic Sources) and Section 3.9.3.1.3 (Impacts from Explosives and Other Impulsive Acoustic Sources) address potential impacts from all Navy acoustic sources on fish. The conclusions reached in the EIS/OEIS are based on the best available science and are fully supported by the science and the analysis.</p>
NRDC-57	<p>As the Navy is aware after recently completing consultation with both NMFS (for salmon) and the U.S. Fish and Wildlife Service (for bull trout) over its Explosive Ordnance Disposal (“EOD”) training exercises in Puget Sound, underwater explosions are responsible for high direct mortality to fish species present in the area. Indeed, the underwater detonation of just five pounds of plastic explosives has been observed to kill over 5,000 fish with swim bladders, with more accurate estimates ranging as high as 20,000 fish. There are a variety of exercises, some of which involve underwater explosions that will take place in the NWTT Study Area. Given the variety of fish and fisheries inhabiting these waters, the Navy’s failure to analyze these effects in significant</p>	<p>These potential effects have been analyzed for each of the three alternatives. See for example Section 3.9.3.1.3.1 (No Action Alternative) in the NWTT EIS/OEIS.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	detail is stunning.	
NRDC-58	<p>C. Hearing Loss</p> <p>One series of recent studies showed that passing airguns can severely damage the hair cells of fish (the organs at the root of audition) either by literally ripping them from their base in the ear or by causing them to “explode.”⁹² Fish, unlike mammals, are thought to regenerate hair cells, but the pink snapper in these studies did not appear to recover within approximately two months after exposure, leading researchers to conclude that the damage was permanent.⁹³ It is not clear which elements of the sound wave contributed to the injury, or whether repetitive exposures at low amplitudes or a few exposures at higher pressures, or both, were responsible.⁹⁴ The Navy contradicts this study by claiming that “permanent hearing loss has not been demonstrated in fish as they have been shown to regenerate lost sensory hair cells.” DEIS at 3.9-70. As with marine mammals, sound has also been shown to induce temporary hearing loss in fish. Even at fairly moderate levels, noise from outboard motor engines is capable of temporarily deafening some species of fish, and other sounds have been shown to affect the short-term hearing of a number of other species, including sunfish and tilapia.⁹⁵ For any fish that is dependent on sound for predator avoidance and other key functions, even a temporary loss of hearing (let alone the virtually permanent damage seen in snapper) will substantially diminish its chance of survival.⁹⁶ The Navy’s conclusion “that exposure of fish to transient, non-impulse sources is unlikely to result in any hearing loss” (DEIS at 3.9-70) is simply unsupported, even by its own discussion of the research, which documents temporary hearing loss in goldfish, catfish, rainbow trout, and channel catfish (DEIS at 3.9-63 to 65). Again, federal law does not allow the Navy to ignore the valid scientific studies that have already been conducted simply because they are contrary to its interest.</p> <p>⁹² R. McCauley, J. Fewtrell, and A.N. Popper, High Intensity Anthropogenic Sound Damages Fish Ears, 113 Journal of the Acoustical Society of America 640 (2003).</p> <p>⁹³ Id. at 641 (some fish in the experimental group sacrificed and examined 58 days after exposure).</p> <p>⁹⁴ Id.</p> <p>⁹⁵ A.R. Scholik and H.Y. Yan, Effects of Boat Engine Noise on the Auditory Sensitivity of the Fathead Minnow, <i>Pimephales promelas</i>, 63 Environmental Biology of Fishes 203-09 (2002); A.R. Scholik and H.Y. Yan, The Effects of Noise on the Auditory Sensitivity of the Bluegill Sunfish, <i>Lepomis macrochirus</i>, 133 Comparative Biochemistry and Physiology Part A at 43-52 (2002); M.E. Smith, A.S. Kane, & A.N. Popper, Noise-Induced Stress Response and Hearing Loss in Goldfish (<i>Carassius auratus</i>), 207 Journal of Experimental Biology 427-35 (2003); Popper, Effects of Anthropogenic Sounds at 28.</p> <p>⁹⁶ See Popper, Effects of Anthropogenic Sounds at 29; McCauley et al., High Intensity Anthropogenic Sound Damages Fish Ears, at 641.</p>	<p>As presented in the EIS/OEIS, use of air guns is not part of the Proposed Action. The statement in the EIS/OEIS at the cited page is in reference to the analysis of sonar and other active acoustic sources (Section 3.9.3.1.2 (Impacts from Sonar and Other Active Acoustic Sources) and is correct in that context since the discussion does not include “airguns” or the unique sound energy they produce. To be clear, use of air guns is not part of the Proposed Action.</p> <p>The analysis presented in the NWTT EIS/OEIS must be read in its entirety and cannot be understood by taking information out of context and as it applies to the Proposed Action. The EIS/OEIS has taken a hard look at impacts on fish in Section 3.9.3 (Environmental Consequences – Fish) which was based on the best available science. Impacts on a resource are not based on impacts on individuals, but rather to the entire population. Section 3.9.3.1.1.1 (Direct Injury) contains a detailed discussion of potential direct injury that may result from non-impulsive acoustic sources, as well as explosions and other impulsive acoustic sources. Furthermore, Section 3.9.3.1.2 (Impacts from Sonar and Other Non-Impulsive Acoustic Sources) and Section 3.9.3.1.3 (Impacts from Explosives and Other Impulsive Acoustic Sources) address potential impacts from all Navy acoustic sources on fish.</p>
NRDC-59	<p>D. Breeding Behavior</p> <p>NMFS has observed that the use of mid-frequency sonar could affect the breeding behavior of certain species, causing them, for example, to cease their spawning</p>	<p>Concerns of Atlantic commercial fisherman in 2005 were addressed in the Navy’s Atlantic Fleet Training and Testing EIS/OEIS. Regarding those 2005 concerns, it was recognized that favored fishing areas change over time with fluctuations in fish populations and</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>choruses, much as certain echolocation signals do.⁹⁷ The repetitive use of sonar and other active acoustics could thus have significant adverse behavioral effects on some species of fish and those who depend on them.</p> <p>In sum, the Navy arbitrarily dismisses the potential for adverse impacts on fish. The Navy also capriciously dismisses the notion that fisheries in the area would suffer economic loss, even though—judging by the comments from North Carolina fishermen in 2005—its training activities appear to have disrupted fishing in the past. Just like the training proposed in North Carolina, the available evidence here underscores the need for a more serious and informed analysis than the Navy currently provides. To comply with the requirements of NEPA, the Navy should rigorously analyze the potential for behavioral, auditory, and physiological impacts on fish, including the potential for population-level effects, using models of fish distribution and population structure and conservatively estimating areas of impact from the available literature. 40 C.F.R. § 1502.22. The Navy must also meaningfully assess the economic consequences of reduced catch rates on commercial and recreational fisheries (as well as on marine mammal foraging) in the NWTT Study Area. It should also consider avoiding essential fish habitat, spawning grounds and other areas of important habitat for fish species, especially hearing specialists. Notably, as with marine mammals, the Navy does not consider exclusion of important fish habitat or fisheries in the NWTT Study Area.</p> <p>⁹⁷ Letter from Miles M. Croom, NMFS Southeast Regional Office, to Keith Jenkins, Navy (Jan. 31, 2006); see also J.J. Luczkovich, “Potential Impacts of the U.S. Navy’s Proposed Undersea Warfare Training Range on Fishes” (2006) (presentation to Navy).</p>	<p>communities, preferred target species, or fishing modes and styles and that declines in fishing rates can be attributed to several factors both natural and anthropogenic. Note that the issues, species, types of fishing, and the concerns of fishermen in the Pacific Northwest and Alaska are different than those voiced by some fishermen in the Atlantic approximately 9 years ago. For the NWTT Study Area, discussion of potential impacts to fishermen were presented in Section 3.12.2.2 (Commercial and Recreational Fishing) and Section 3.12.3 (Environmental Consequences). See Section 3.9.3.1.2 (Impacts from Sonar and Other Non-Impulsive Acoustic Sources) and Section 3.9.3.1.3 (Impacts from Explosives and Other Impulsive Acoustic Sources) address potential impacts from all Navy acoustic sources on fish. See the presentation in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) for a discussion regarding the consideration of area exclusions and the measures adopted to protect fish.</p>
NRDC-60	<p>V. The Navy’s Proposed Mitigation Measures Fail to Protect Marine Wildlife</p> <p>To comply with NEPA, an agency must discuss measures designed to mitigate its project’s impact on the environment. See 40 C.F.R. § 1502.14(f). There is a large and growing set of options for the mitigation of noise impacts to marine mammals and other marine life, some of which have been imposed by foreign navies⁹⁸—and by the Navy itself, in other contexts—to limit harm from high-intensity sonar exercises. Yet here the Navy does little more than set forth an abbreviated set of measures, dismissing effective measures out of hand.</p> <p>All of the mitigation that the Navy has proposed for sonar impacts boils down to the following: a very small safety zone around the sonar source, maintained primarily with visual monitoring by personnel with other responsibilities, with aid from shipboard passive monitoring when personnel are already using such technology. Under the proposed scheme, operators would power-down the system if a marine mammal is detected within 1,000 yards and shut-down the system if a marine mammal or sea turtle is detected within 200 yards. DEIS at 5-28.</p> <p>⁹⁸ See S.J. Dolman, C.R. Weir, and M. Jasny, <u>Comparative Review of Marine Mammal Guidance Implemented during Naval Exercises</u>, Marine Pollution Bulletin (Dec. 12, 2008).</p>	<p>Each nation has its own training and testing needs based on that nation’s forces, capabilities and missions. For the U.S. Navy, the ability to conduct anti-submarine warfare around varying underwater topography is critically necessary in order to fight the growing submarine threat.</p> <p>The Navy, in coordination with NMFS, has comprehensively evaluated mitigation measures used by other navies to determine the benefits of implementing similar measures. Based on its assessment, the Navy found that most other navies do not possess an integrated strike group or have other integrated training requirements like the United States. As integrated strike groups, U.S. Navy requirements frequently include operating within defined distances to suitable landing fields for aircraft safety, thereby geographically constraining the entire strike group.</p> <p>In coordination with NMFS, Navy’s proposed mitigation measures were carefully customized for effectiveness in reducing potential impacts on an affected resource and to ensure, from a military perspective, that the mitigations are practicable and executable, and</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>that safety and operational readiness can be maintained.</p> <p>As described in more detail to specific comments that follow, several measures were eliminated because they were determined to be unfeasible, present a safety risk, provide no known or scientifically-based protective benefits, or have an unacceptable impact on training fidelity.</p> <p>Through careful exploration of all mitigation measures to determine which were the most effective, the Navy has chosen the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train and test for real world conditions. Specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas) addresses important habitat areas.</p> <p>The decrease in mitigation zone size will allow for a more focused survey effort over a smaller area, and will consequently increase the likelihood of avoidance of injury and larger threshold shifts that would result in recovery (i.e., TTS) to marine mammals.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>This issue is thoroughly discussed in the NWTT EIS/OEIS in Section 5.3.1.4.16 (Adopting Mitigation Measures of Foreign Navies). As presented in that section, the U.S. Navy's recommended mitigation measures have been carefully designed in coordination with NMFS to reduce potential impacts on marine species while not causing an unacceptable impact on readiness.</p> <p>Please see Section 5.3.1.1.2 (High-Frequency and Non-Hull-Mounted Mid-Frequency Active Sonar) and note that the mitigation zone</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>beginning at 1,000 yards and the shutdown at 200 yards is almost four times the maximum range to any threshold shift effect for even the most sensitive species from a single ping. It is therefore incorrect to conclude the zone is “very small” given the zone is much larger than the area of effect. Please also see Section 3.4.2.1.1 (Range to Effects) for a detailed explanation of the range to effects for sonar and other active acoustic sources.</p>
<p>NRDC-61</p>	<p>This mitigation scheme disregards the best available science on the significant limits of visual monitoring. Visual detection rates for marine mammals generally approach only 5 percent. Moreover, the species perhaps most vulnerable to sonar-related injuries, beaked whales, are among the most difficult to detect because of their small size and diving behavior. It has been estimated that in anything stronger than a light breeze, only one in fifty beaked whales surfacing in the direct track line of a ship would be sighted; as the distance approaches 1 kilometer, that number drops to zero.⁹⁹ Many other whales are also hard to detect, especially depending on seasonality, geography, and behaviors. For example, the visual and acoustic detection rates of blue whales, which are susceptible to ship strikes in the Pacific Northwest, differ seasonally and geographically, suggesting that a single detection mode (e.g., visual) may be insufficient to detect blue whales in all seasons and regions.¹⁰⁰ The Navy’s own assessment of detection probabilities fails to adequately account for gaps in accurate perception and availability bias information, leading to an overestimation of assessment probability. Further, while purportedly basing its assessment on the “best available science,” the Navy admittedly refused to incorporate data from the proof of concept phase of the lookout effectiveness study it initiated in 2010. While the data may be preliminary or incomplete, the Navy may not ignore it if it is the best available information on the effectiveness of its lookout regime. The Navy’s reliance on visual observation as the mainstay of its mitigation plan is therefore profoundly misplaced.</p> <p>The Navy’s ineffective mitigation measures are all the more remarkable given its adoption of more protective measures during previous training. For example, the Atlantic Fleet has repeatedly sited exercises beyond the continental shelf and Gulf Stream, relocated exercises out of important habitat and to avoid certain species, and used a technique called “simulated geography” to avoid canyons and near-shore areas on at least three of its major ranges. It has also restricted sonar use at night when marine mammals are harder to detect, as well as minimized the use of sonar from multiple sources at the same time.¹⁰¹</p> <p>In this light, the Navy’s claims that it cannot implement more protective mitigation measures ring false. DEIS at 5-49 to 60. Although the Navy goes to some pain to describe “mitigation measures considered but eliminated” —primarily because of “unacceptable impacts on readiness”—its previous adoption of the same measures belies its argument. Clearly the Navy has done more to mitigate the harmful effects of</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird’s beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, “generally approach only 5” is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide “a crude estimate” of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, “(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching.” When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>sonar in previous exercises than what it proposes for the NWTT activities. It can, and must, do more to mitigate the harm on marine wildlife.</p> <p>⁹⁹ J. Barlow and R. Gisiner, <u>Mitigating, Monitoring, and Assessing the Effects of Anthropogenic Noise on Beaked Whales</u>, 7 Journal of Cetacean Research and Management 239-249 (2006).</p> <p>¹⁰⁰ E.M. Oleson, J. Calambokidis, J. Barlow and J.A. Hildebrand, Blue Whale Visual and Acoustic Encounter Rates in the Southern California Bight, 23(3) Marine Mammal Science 574-597 (2007).</p> <p>¹⁰¹ Final Comprehensive Overseas Environmental Assessment for Major Atlantic Fleet Training Exercises February 2006, Prepared for United States Fleet Forces Command in accordance with Chief of Naval Operations Instruction 5090.1B pursuant to Executive Order 12114; See also Atlantic Fleet Exercises Using Mid-Frequency Sonar Mitigation Chart.</p>	<p>surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the eight years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.</p> <p>Please see the discussion of the science as has been presented in the EIS/OEIS in Section 3.4.3.1.16 (Implementing Mitigation to Reduce Sound Exposures) since all these issues were discussed. As noted in that section, there are significant differences between the way a line-transect survey is conducted and the way Navy training and testing activities take place. As presented, these differences suggest it is likely the use of g(0) as a measure of detectability in reducing some of the modeling predicted exposures results in an underestimate of the protection afforded by the implementation of mitigation.</p> <p>An updated summary of the current status of the Navy's Lookout effectiveness study is presented in Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) of the Final EIS/OEIS. The Navy believes consideration of marine mammal sightability and activity-specific mitigation effectiveness in its quantitative analysis is appropriate in order to provide decision makers a reasonable assessment of potential impacts under each alternative. Data collection is ongoing, and analysis will be conducted when the data set is large enough to</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>produce statistically significant results. The preliminary data collected to date does not constitute the best available science until the methodology has been refined to adequately answer the intended research questions, the data collected, and the results then finalized.</p> <p>Please see the discussion in the EIS/OEIS Section 5.3.4.2 (Previously Accepted but Now Eliminated) presenting determination that some of the suggested measures would likely be ineffective at reducing environmental impacts, have an unacceptable operational impact based on the effectiveness assessment, or would be incompatible with the approach to mitigation in Section 5.2.2 (Overview of Mitigation Approach). Also as presented in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) there have been 80+ reports provided to NMFS over the last 8 years providing clear evidence that the mitigation measures have been effective at reducing impacts. These reports are publically available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
NRDC-62	<p>A. Protection Zones</p> <p>As discussed above, there is scientific consensus that geographic mitigation represents the most effective means currently available to reduce the impacts of mid-frequency sonar on marine mammals.¹⁰² It was with that understanding that NOAA launched a multi-year effort to improve the tools available to agencies, including the Navy, for evaluating and mitigating the impacts of anthropogenic noise on marine mammals. One of NOAA’s Working Groups, CetMap, is identifying marine mammal “hot spots” along our coasts—important habitat for marine mammals as evidenced by high density of animals, by information on specific habitat use such as foraging or calving, or by association of areas with range-limited populations. CetMap’s identification of these areas should form a basis for creating protection zones where training activities could be barred or limited. For the Pacific Northwest, CetMap has produced density and distribution maps for marine mammal populations occurring in the region, many of which overlap with the Study Area.</p> <p>The Navy should have identified important areas utilizing these maps, designing and discussing mitigation for these and similar areas. By failing to do so, the Navy failed to comply with NEPA. See 40 C.F.R. § 1502.14(f). The Navy must revise and reissue its DEIS after fully analyzing the information produced by CetMap and identifying reasonable mitigation that the public can review and submit comments on.</p> <p>¹⁰² Supra, note 3.</p>	<p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
NRDC-63	<p>B. Mitigation of Navy Debris and Expended Material</p> <p>The DEIS fails to set forth any mitigation measures concerning the massive amount of discarded debris and expended materials associated with its proposed activities in the NWTT Study Area. The Navy claims that ocean currents will rapidly disperse the expended materials and thus no mitigation is required. "In NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' is an understanding that the EIS will discuss the extent to which adverse effects can be avoided." Robertson, 490 U.S. at 352-53. The Navy's "all-or-nothing approach" is not a sufficient discussion of how the adverse impacts of expended material can be avoided. By failing to explore mitigation measures for expended materials, the Navy does not even attempt to avoid,</p>	<p>The Navy conducted a full analysis of the potential impacts of military expended materials on marine resources and has proposed several mitigation measures to help avoid or reduce those impacts. The analysis is contained throughout Chapter 3 (Affected Environment and Environmental Consequences) of the Draft and Final EIS/OEIS (e.g., Section 3.4.3.4.3, Impacts from Military Expended Materials discusses marine mammals). The Navy has standard operation procedures in place to reduce the amount of military expended materials (e.g., Section 5.1.5.2, Weapons Firing Range Clearance), including recovering targets and associated parachutes to the maximum extent practical.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	minimize, rectify, reduce, or compensate for its dumping of debris – all of which are options included in the CEQ regulation's definition of "mitigation." 40 C.F.R. § 1508.20.	Note there is no "dumping of debris" involved in any of the proposed activities. The use of expendable devices and other items as they were designed does not in any way constitute the act of "dumping".
NRDC-64	<p>C. Other Mitigation Measures</p> <p>In addition to considering protection zones and mitigation for expended materials, the Navy should adopt the following measures:</p> <p>1) Seasonal avoidance of marine mammal feeding grounds, calving grounds, and migration corridors;</p>	<p>In cooperation with NMFS, the Navy has developed a suite of mitigation measures that provide protection for marine species, are practicable to implement, and allow training and testing activities to meet their readiness requirements.</p> <p>The balance between procedural measures and mitigation area measures provide a way for the Navy to mitigate potential impacts while maintaining its military readiness objectives. Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas) discusses seasonal restrictions and why avoidance is not warranted. However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas.</p>
NRDC-65	2) Avoidance of, or extra protections in, marine protected areas;	As described in Section 5.3.4.2.1.12 (Avoiding Marine Protected Areas), avoiding all marine protected areas for the purpose of mitigation would result in an unacceptable impact on readiness; increase safety risks to personnel; be impractical with regard to implementation; and would not be warranted based on the Chapter 3 (Affected Environment and Environmental Consequences) environmental analyses for biological resources, and Section 6.1.2 (Marine Protected Areas) discussions. Section 6.1.2 (Marine Protected Areas) discusses the marine protected areas contained within the Study Area, and which activities may occur within each area.
NRDC-66	3) Avoidance of bathymetry likely to be associated with high-value habitat for species of particular concern, including submarine canyons and large seamounts, or bathymetry whose use poses higher risk to marine species;	Section 5.3.4.1.7 (Avoiding Locations Based on Bathymetry and Environmental Conditions) discusses habitat avoidance. As discussed throughout Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), Lookouts will be employed to visually observe for marine mammals in all area regardless of the bathymetry or environmental conditions.
NRDC-67	<p>4) Avoidance of fronts and other major oceanographic features, such as areas with marked differentials in sea surface temperatures, which have the potential to attract offshore concentration of animals, including beaked whales;¹⁰³</p> <p>¹⁰³ See, e.g., Carretta et al., U.S. Pacific Marine Mammal Stock Assessments: 2007 at 142 (reporting that "Baird's beaked whales have been seen primarily along the continental slope from late spring to early fall.").</p>	Section 5.3.4.1.7 (Avoiding Locations Based on Bathymetry and Environmental Conditions) and Section 5.3.4.1.9 (Avoiding or Reducing Active Sonar during Strong Surface Ducts) discusses avoidance of these environmental conditions. As discussed throughout Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), Lookouts will be employed to visually observe for marine

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		mammals in all area regardless of the bathymetry or environmental conditions.
NRDC-68	5) Avoidance of areas with higher modeled takes or with high-value habitat for particular species;	Section 5.3.4.1.6 (Limiting Access to Training and Testing Locations) and Section 5.3.4.1.11 (Avoiding Marine Species Habitats) discusses mitigation for areas particular marine species habitats. Additionally, the dynamic nature of the ocean environment, the best available science, and the most accurate modeling does not allow for accurate prediction of areas of higher or lower areas of take.
NRDC-69	6) Concentration of exercises to the maximum extent practicable in abyssal waters and in surveyed offshore habitat of low value to species;	Section 5.3.4.1.6 (Limiting Activities to Training and Testing Locations) discusses limiting activities to abyssal waters and offshore habitats.
NRDC-70	7) Use of sonar and other active acoustic systems at the lowest practicable source level, with clear standards and reporting requirements for different testing and training scenarios;	This already occurs as presented in Section 5.3.4.1.3 (Reducing Sonar Source Levels and Total Number of Hours). The Navy uses active sonar at the lowest practicable source level consistent with mission requirements.
NRDC-71	8) Expansion of the marine species “safety zone” to a 4km shutdown, reflecting international best practice, or 2 km, reflecting the standard prescribed by the California Coastal Commission for similar activities in Southern California; ¹⁰⁴	Section 5.3.4.1.13 (Increasing the Size of Observed Mitigation Zones) discusses mitigation zone expansion. There is no internationally recognized best practice with regard to mitigation zone distance. The mitigation zones discussed throughout the Draft and Final EIS/OEIS were developed using the latest best available science, are consistent with regulatory requirements and criteria, and are tailored to the Proposed Action; therefore, adopting other mitigation zones would neither be a practical nor effective mitigation scheme for the Proposed Action. See also Section 5.3.4.1.16 (Adopting Mitigation Measures of Foreign Navies).
NRDC-72	9) Suspension of relocation of exercises when beaked whales or significant aggregations of other species are detected by any means within the orbit circle of an aerial monitor or near the vicinity of an exercise;	Mitigation will be implemented within the mitigation zone for all marine mammals regardless of species. Passive acoustic monitoring will be used to inform visual observations because resources are not available for the Navy to locate vocalizing animals through passive acoustics during training and testing activities. Mitigation specific to beaked whales and “significant aggregations” are not necessary because the mitigation will be implemented for all species and any number of animals observed.
NRDC-73	10) Use of simulated geography (and other work-arounds) to reduce or eliminate chokepoint exercises in near-coastal environments, particularly within canyons and channels, and use of other important habitat;	Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities) discusses simulated activities.
NRDC-74	11) Avoidance or reduction of training during months with historically significant	Section 5.3.4.1.9 (Avoiding or Reducing Active Sonar during Strong

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	surface ducting conditions, and use of power-downs during significant surface ducting conditions at other times;	Surface Ducts) discusses surface ducts.
NRDC-75	12) Use of additional power-downs when significant surface ducting conditions coincide with other conditions that elevate risk, such as during exercises involving the use of multiple systems or in beaked whale habitat;	Section 5.3.4.1.3 (Reducing Sonar Source Levels and Total Number of Hours) discusses sonar levels and hours, and Section 5.3.4.1.9 (Avoiding or Reducing Active Sonar During Strong Surface Ducts) discusses surface ducts. Mitigation measures are implemented equally in all locations where the activity occurs. Chapter 3.4 (Marine Mammals) and the Navy Marine Species Density Database technical report provide information on beaked whale habitat within the Study Area. Beaked whales inhabit all portions of the Study Area except the inland waters in Washington. Otherwise limiting active sonar activities or implementing additional power-downs throughout the remainder of the Study Area would cause an unacceptable impact on readiness.
NRDC-76	13) Planning of ship tracks to avoid embayments and provide escape routes for marine animals;	Section 5.3.4.1.6 (Limiting Activities to a Few Specific Locations) discusses limiting the location of activities. The majority of Navy training activities in the Proposed Action involving "ship tracks" would occur in the offshore portion of the Study Area and therefore not involve "embayments."
NRDC-77	14) Suspension or postponement of chokepoint exercises during surface ducting conditions and scheduling of such exercises during daylight hours;	Section 5.3.4.1.8 (Avoiding or Reducing Active Sonar at Night and During Periods of Low Visibility) and Section 5.3.4.1.9 (Avoiding or Reducing Active Sonar During Strong Surface Ducts) discuss activities conducted during varying environmental conditions. Additionally there are no "chokepoint" exercises in the NWTT Study Area as described for other locations (Hawaii for RIMPAC 2006) and having the same environmental conditions as are present in the Alenuihaha Channel (Hawaii) for example.
NRDC-78	15) Use of dedicated aerial monitors during chokepoint exercises, major exercises, and near-coastal exercises;	As described throughout Chapter 5, visual observation (aerial and vessel-based) would be conducted in association with Navy activities. There are no chokepoints or Major Exercises in the NWTT EIS/OEIS Study Area and Proposed Action. Refer to Chapter 2 (Description of Proposed Action and Alternatives) regarding the Proposed Action.
NRDC-79	16) Use of dedicated passive acoustic monitoring to detect vocalizing species, through established and portable range instrumentation and the use of hydrophone arrays off instrumented ranges;	As presented in Section 5, use of available passive acoustic sensors already occurs (e.g., Section 5.3.2.1.2.1, Improved Extended Echo Ranging Sonobuoys). Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations) also discusses use of passive sensors. For additional information on the Navy's marine mammal monitoring efforts, see http://www.navy.marin-species-monitoring.us/ .

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC-80	17) Modification of sonobuoys for passive acoustic detection of vocalizing species;	Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations) also discusses use of passive sensors. Note that researchers routinely use existing surplus Navy sonobuoys for passive acoustic detection of marine mammals and their modification is unnecessary.
NRDC-81	18) Suspension or reduction of exercises outside daylight hours and during periods of low visibility;	Section 5.3.4.1.8 (Avoiding or Reducing Active Sonar at Night and During Periods of Low Visibility) discusses activities conducted during varying environmental conditions.
NRDC-82	19) Use of aerial surveys and ship-based surveys before, during, and after major exercises;	There are no Major Exercises in the Proposed Action or presented in the NWTT EIS/OEIS. See Chapter 2 for a discussion of the Proposed Action.
NRDC-83	20) Use of all available range assets for marine mammal monitoring;	As described throughout Chapter 5, visual observation (aerial and vessel-based) would be conducted in association with Navy activities. Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations) discusses visual observations. For additional information on the Navy's marine mammal monitoring efforts, see http://www.navymarinespeciesmonitoring.us/ .
NRDC-84	21) Use of third-party monitors for marine mammal detection;	Section 5.3.4.1.15 (Conducting Observations Using Third-Party Observers) discusses third-party observers.
NRDC-85	22) Application of mitigation prescribed by state regulators, by the courts, by other navies or research centers, or by the U.S. Navy in the past or in other contexts;	Section 5.3.4.1.16 (Adopting Mitigation Measures of Foreign Navies) discusses foreign navies. Mitigation is developed in cooperation with NMFS and was refined through the MMPA and ESA consultation processes. Evaluation of past and present Navy mitigation measures is included throughout Chapter 5; most measures originated through past environmental analyses and associated consultations with regulators.
NRDC-86	23) Avoidance of fish spawning grounds and of important habitat for fish species potentially vulnerable to significant behavioral change, such as wide-scale displacement within the water column or changes in breeding behavior;	Section 5.3.4.1.11 (Avoiding Marine Species Habitats) discusses habitat avoidance. Section 3.9 (Fish) provides the effects determinations on fish in the Final EIS/OEIS.
NRDC-87	24) Evaluating before each major exercise whether reductions in sonar use are possible, given the readiness status of the units involved;	There are no Major Exercises in the Proposed Action or presented in the NWTT EIS/OEIS. See Chapter 2 for a discussion of the Proposed Action.
NRDC-88	25) Dedicated research and development of technology to reduce impacts of active acoustic sources on marine mammals;	The Navy provides a significant amount of funding and support to marine research. Navy scientists work cooperatively with other government researchers and scientists, universities, industry, and nongovernmental conservation organizations in collecting, evaluating,

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		and modeling information on marine resources. Details on the Navy's involvement with future research will be worked out through the Navy and NMFS adaptive management process, which regularly considers and evaluates the development and use of new science and technologies for Navy applications. For additional information on the Navy's marine mammal monitoring efforts, see http://www.navy.marin-species-monitoring.us/ .
NRDC-89	26) Establishment of a plan and a timetable for maximizing synthetic training in order to reduce the use of active sonar training;	Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities) discusses simulated activities.
NRDC-90	27) Prescription of specific mitigation requirements for individual classes (or subclasses) of testing and training activities, in order to maximize mitigation given varying sets of operational needs; and	The Navy has already developed mitigation by activity type to reduce potential impacts from the Proposed Action while not causing an unacceptable impact on readiness. Chapter 5 discusses these measures.
NRDC-91	28) Timely, regular reporting to NOAA, state coastal management authorities, and the public to describe and verify use of mitigation measures during testing and training activities. While the Navy considers, and summarily dismisses, many of these measures in its DEIS, it fails to do so in a manner permitted by NEPA and we note that similar or additional measures may be required under the Marine Mammal Protection Act, Endangered Species Act, and other statutes.	See Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) providing the results from regular public reporting that has been occurring since 2006. These reports are publically available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). Navy reporting requirements, including exercise and monitoring reporting, are described in Section 5.5, Monitoring and Reporting. Section 5.3.4.1.17 (Increasing Reporting Requirements) provides additional discussion. Navy disagrees that it "summarily dismisses" mitigation measures. As evident from the responses to the comments above, all of these mitigations (except those in reference to Major Exercises that are not part of the Proposed Action) were addressed. The Navy is working cooperatively with National Marine Fisheries Service and U.S. Fish and Wildlife Service to finalize mitigation measures through the permitting and consultation processes for MMPA, ESA, and Essential Fish Habitat. The final mitigation measures are those determined to both minimize impacts and allow the Navy to meet its military readiness requirements. The mitigation measures mentioned by the commenter do not provide any additional protection for species beyond what is currently implemented.
NRDC-92	VI. The Navy Fails to Properly Analyze Cumulative Impacts In order to satisfy NEPA, an EIS must include a "full and fair discussion of significant	The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis (Chapter 4, Cumulative

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>environmental impacts.” 40 C.F.R. § 1502.1. It is not enough, for purposes of this discussion, to consider the proposed action in isolation, divorced from other public and private activities that impinge on the same resource; rather, it is incumbent on the Navy to assess cumulative impacts as well, including the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future significant actions.” Id. § 1508.7. A meaningful cumulative impact analysis must identify (1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions—past, present, proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate. <i>Grand Canyon Trust v. FAA</i>, 290 F.3d 339, 345 (D.C. Cir. 2002) (quotation and citation omitted). The Navy “cannot treat the identified environmental concern in a vacuum.” <i>TOMAC v. Norton</i>, 433 F.3d 852, 863 (D.C. Cir. 2006) (quoting <i>Grand Canyon Trust</i>, 290 F.3d at 345).</p> <p>The Navy has failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the DEIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Furthermore, the overall cumulative impact analysis omitted stressors or activities found to have a negligible impact on an individual marine mammal species. The Navy’s omission is contrary to the purpose of a cumulative impact assessment. CEQ’s regulations for implementing the National Environmental Policy Act point out that “[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”¹⁰⁵</p> <p>¹⁰⁵ 40 CFR § 1508.7.</p>	<p>Impacts). As required under NEPA, the level and scope of the analysis are commensurate with the potential impacts of the action as reflected in the resource-specific discussions in Chapter 3 (Affected Environment and Environmental Consequences). The EIS/OEIS considered its activities alongside those of other activities in the region whose impacts are truly meaningful to the analysis.</p> <p>Ocean acidification and noise were addressed in Section 3.4.2.4 (General Threats).</p>
NRDC-93	<p>A. Ocean acidification</p> <p>The DEIS should consider the cumulative impacts of its action in light of ocean acidification in the Pacific Northwest. Ocean acidification results from the ocean’s absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further.¹⁰⁶ Already sound travels 10-15 percent further with only a change of 0.1 pH that has occurred on average in the global oceans due to anthropogenic carbon dioxide.¹⁰⁷</p> <p>Ocean acidification is especially pronounced in the Pacific Northwest because of the upwelling in the California Current system. Adding carbon dioxide to the region’s upwelling waters, in which carbon-dioxide-rich waters from the deep ocean are drawn up to the surface, results in a sort of hyper-acidification.¹⁰⁸ Surveys of coastal waters show carbon dioxide levels that were not expected until the end of the century.¹⁰⁹</p>	<p>Ocean acidification was addressed in Section 3.4.2.4 (General Threats).</p> <p>For the frequencies, ranges, and sound sources proposed for use in the NWTT EIS/OEIS, the potential influence of ocean acidification on impacts to marine mammals from Navy activities is too small to be meaningfully analyzed. A decrease in sound absorption due to ocean acidification is a factor for low frequency sound that otherwise travels long distances. See U.S. Department of the Navy (2012), “Final Supplemental Environmental Impact Statement/Supplemental Overseas Environmental Impact Statement for the Surveillance Towed Array Sensor System Low Frequency Active ((SURTASS LFA) Sonar”, page 3-4, for a discussion of acidification as it relates to low-frequency sound.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>¹⁰⁶ Keith C. Hester et al., Unanticipated Consequences of Ocean Acidification: A Noisier Ocean at Lower pH 35 GEOPHYSICAL RES. LETTERS L19601, L19604 (Oct. 2008).</p> <p>¹⁰⁷ Id.</p> <p>¹⁰⁸ Feely, Richard A., Christopher L Sabine, J Martin Hernandez-Ayon, Debby Ianson, and Burke Hales. 2008. Evidence for Upwelling of Corrosive ‘Acidified’ Water onto the Continental Shelf. Science 320: 1490–2 (2008).</p> <p>¹⁰⁹ Id.</p>	
NRDC-94	<p>Accordingly, noise pollution in the action area is increasing in intensity and range due to ocean acidification. Ocean acidification and its effect of decreasing sound absorption within frequency ranges, thus increasing ambient noise levels, are well established phenomena.¹¹⁰ In addition, rising global temperatures contribute to decreased sound absorption in the lower frequency range, amplifying the effects of increased acidification.¹¹¹ A recent study shows that ocean acidification and reduced ventilation will significantly decrease sound absorption in the ocean for frequencies lower than about 10 kHz.¹¹² Changes in the low frequency range have already exceeded ten percent and even greater changes in the future are inevitable.¹¹³ Shallow waters are of particular concern because they are the first area affected by atmospheric changes and greatly impact marine mammals.¹¹⁴</p> <p>Ocean acidification increases the distance the noise travels. Specifically, increasingly acidic seawater reduces the occurrence of certain charged molecules, such as borate ions, which absorb energy from passing sound waves.¹¹⁵ Thus, as pH levels decrease, ocean noise encounters fewer impediments and, ultimately, travels farther.¹¹⁶ The change is significant. Researchers predict that ocean acidification will reduce the intrinsic ability of surface seawater to absorb sound at frequencies important to marine mammals by 40 percent before 2050.¹¹⁷ These levels of ocean acidification predicted for 2050, however, have already been surpassed in the action area. The pCO₂ values in the upwelled waters off the Washington coast range from 850 to 950 μatm (microatmospheres) near the continental shelf, with higher CO₂ closer to shore.¹¹⁸ This corresponds with about 850-950 ppm at surface, which is nearly double the 560 ppm CO₂ predicted for mid-century. Thus, the problem of ocean acidification amplifying the ensonification of the environment is already present in the action area and not merely a future concern.</p> <p>¹¹⁰ Keith C. Hester et al., Unanticipated Consequences of Ocean Acidification: A Noisier Ocean at Lower pH 35 GEOPHYSICAL RES. LETTERS L19601, L19604 (Oct. 2008).</p> <p>¹¹¹ Id.</p> <p>¹¹² Id.</p> <p>¹¹³ Id.</p> <p>¹¹⁴ Id.</p> <p>¹¹⁵ Peter G. Brewer & Keith Hester, Ocean Acidification and the Increasing Transparency of the Ocean to Low-Frequency Sound, 22 OCEANOGRAPHY 86, 87 (Dec. 2009).</p> <p>¹¹⁶ Id.</p>	<p>Ocean acidification does not increase the “intensity” of sound, but reduces the absorption of sound.</p> <p>While true that ambient noise levels are increasing, see Section 3.4.2.4 (General Threats) where a discussion is provided of the science showing the majority of the increase in ambient noise levels resulting from the increase in commercial vessel traffic.</p> <p>See U.S. Department of the Navy (2012), “Final Supplemental Environmental Impact Statement/Supplemental Overseas Environmental Impact Statement for the Surveillance Towed Array Sensor System Low Frequency Active ((SURTASS LFA) Sonar,” page 3-4, for a discussion of acidification as it relates to low-frequency sound. Ocean acidification is not a significant factor in the analysis of sound from the sources proposed for use in the NWTT EIS/OEIS.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>¹¹⁷ Id. ¹¹⁸ Richard A. Feely, et al. Scientific Summary of Ocean Acidification in Washington State (2012).</p>	
NRDC-95	<p>Marine mammals are significantly impacted by increases noise pollution resulting from ocean acidification. The significant increase in ambient noise in the ocean is within the auditory range critical to marine life. ¹¹⁹ Most marine mammals depend primary on their sense of hearing to interact with their environment, including detecting signals from prey and predators. ¹²⁰ Anthropogenic noise introduced into the ocean can interfere with these important interactions and also harm the animals' auditory systems. ¹²¹ Concerns from the increased noise pollution from a variety of maritime activities are well established. ¹²² For example, one study found that severe (.70–90 dB loss) to profound (.90 dB loss) hearing loss was found in fifty seven percent of stranded bottlenose dolphins and thirty six percent of rough-toothed dolphins tested in the study. ¹²³ The study attributed some of the hearing loss to chronic noise from boating and shipping activities. ¹²⁴</p> <p>The EIS must discuss ocean acidification and take a hard look at the impacts of sonar in light of noise travelling greater distances due to acidification, which is accelerating as carbon dioxide emissions continue unabated.</p> <p>¹¹⁹ Id. ¹²⁰ John Andrew Wright, How Harbour Porpoises Utilise Their Natural Environment and Respond to Noise, Ph.D. Thesis. Aarhus University, Dep't of Bioscience, Denmark at 176 (2013). ¹²¹ Id. ¹²² Keith C. Hester et al., Unanticipated Consequences of Ocean Acidification: A Noisier Ocean at Lower pH 35 GEOPHYSICAL RES. LETTERS L19601, L19602 (Oct. 2008). ¹²³ David Mann et al., Hearing Loss in Stranded Odontocete Dolphins and Whales 5 PLOS ONE 1 (Nov. 2010). ¹²⁴ Id.</p>	<p>See the discussion in Section 3.4.2.4 (General Threats) of the increase in ambient noise levels, which is related to the increase in commercial vessel traffic.</p> <p>Ocean acidification was addressed in Marine Mammals (Section 3.4.2.4, General Threats) and Marine Invertebrates (Section 3.8).</p>
NRDC-96	<p>B. Cumulative Noise Pollution</p> <p>The Navy must consider the cumulative impacts of its action combined with other noise pollution in the action area. The Navy erred in concluding that there are no harmful additive impacts from the co-occurrence of its activities and other ocean noise. This must be corrected.</p> <p>The Puget Sound and Georgia Basin are among the busiest waterways in the world. Recent studies of the Puget Sound demonstrate that the waters are chronically noisy. At least 90 percent of the time at least one extremely noisy vessel is traveling through the shipping lanes in the Puget Sound. ¹²⁵ The study found that all vessels (cargo vessels, passenger ferries and tugs, recreational watercrafts) generate noise at frequencies relevant to all marine mammal functional hearing groups. ¹²⁶ The researchers found that noise in the area from these vessels averaged about 120 decibels, and regularly exceed 120 dB, the current acoustic criterion for behavioral harassment of marine mammals for continuous sound types in the United States. ¹²⁷</p> <p>[Figures a and b. (a) Cumulative sound exposure level from vessel traffic from Jan to</p>	<p>See Section 4 (Cumulative Impacts) for a discussion of cumulative impacts in general and see each resource section (e.g., Marine Mammals, Section 3.4.3, Environmental Consequences) for discussions of this topic for resource area. See Section 3.4.3.2.4 (Impacts from Vessel Noise) for a discussion of vessel noise and Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) demonstrating that there are no known population-level impacts from the co-occurrence of its activities and other ocean noise as investigated in areas such as Southern California where there is much greater Navy activity.</p> <p>The material in this comment was discussed in the EIS/OEIS Section 3.4.3.1.6.3 (Behavioral Reactions to Vessels) and Section 3.4.3.2.4 (Impacts from Vessel Noise).</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>Dec 2008. (b) Areas where the estimated annual average sound pressure level (SPLrms) exceeded the EU Marine Strategy Framework Directive of 100 dB (SPLrms) in 1/3-octave bands centered on 63 or 125 Hz. Source: Erbe 2012]</p> <p>Erbe et al. modeled vessel traffic noise in the Pacific Northwest and developed useful maps to identify the sound exposure levels.¹²⁸ Notably, the model shows that the annual average shipping noise in the region already exceeds thresholds recommended for acoustically sensitive species.¹²⁹</p> <p>If acoustic thresholds for marine mammals are already being exceeded in the action area, then the additive impact of sonar, vessel noise, explosions are all contributing further to the exceedences. Moreover, this also undermines the Navy’s reliance on avoidance behavior to mitigate the impact of its activities on marine mammals. Animals may be displaced into other areas that already exceed acoustic thresholds.</p> <p>The EIS must quantify and evaluate the impacts that its action contributes to the overall noise pollution in the action area, which most importantly includes ensonification of the marine environment from vessel traffic.</p> <p>¹²⁵ Christopher Bassett et al., A Vessel Noise Budget for Admiralty Inlet, Puget Sound, Washington (USA) 132 J. ACOUSTICAL SOC. OF AM. 3706 (Dec. 2012).</p> <p>¹²⁶ Id.</p> <p>¹²⁷ Id.</p> <p>¹²⁸ Erbe, C., MacGillivray, A., and Williams, R. 2012. Mapping cumulative noise from shipping to inform marine spatial planning. J. Acoust. Soc. Am. 132 (5), November 2012. 423-428.</p> <p>¹²⁹ Id.</p>	
NRDC-97	<p>C. Cumulative Impacts on Migratory Species</p> <p>NEPA requires a cumulative impacts analysis to: (1) catalogue past and present projects in the area; (2) assess the cumulative environmental impacts of those projects with the proposed project; and (3) analyze the additive cumulative impact of all reasonably foreseeable Federal and non-Federal actions, whether or not they have actually been proposed. See <i>City of Carmel-By-The-Sea v. United States Dep’t of Transp.</i>, 123 F.3d 1142, 1160 (9th Cir. 1997) (rejecting cumulative impacts analysis that referred generally to other past “development projects” and did not discuss the additive impacts of foreseeable future projects); <i>Fritiofson v. Alexander</i>, 772 F.2d 1225, 1243 (5th Cir. 1985) (agency must consider reasonably foreseeable actions regardless of whether they have yet formally been proposed). A cumulative impacts analysis must provide “some quantified or detailed information” because “[w]ithout such information, neither courts nor the public . . . can be assured that . . . [an agency] provided the hard look that it is required to provide.” <i>Cuddy Mountain</i>, 137 F.3d at 1379; <i>Carmel-By-The-Sea</i>, 123 F.3d at 1160 (faulting EIS for describing other projects in inadequate detail to permit review of their cumulative impacts).</p> <p>Although the Navy states that it considers “activities outside the study area that might</p>	<p>As stated in Section 4.2.2 (Identify Appropriate Level of Analysis for Each Resource), in accordance with Council on Environmental Quality guidance, the cumulative impacts analysis focused on impacts that are “truly meaningful.” This was accomplished by reviewing the direct and indirect impacts that could occur on each resource under each alternative. Key factors considered were the current status and sensitivity of the resource and the intensity, duration, and spatial extent of the impacts of each potential stressor. In general, long-term rather than short-term impacts and widespread rather than localized impacts were considered more likely to contribute to cumulative impacts. Those impacts to a resource that were considered to be negligible were not considered further in the analysis. The level of analysis for each resource was commensurate with the intensity of the impacts identified in Chapter 3 (Affected Environment and Environmental Consequences). As presented in the EIS/OEIS Section 3.4.3 (Environmental Consequences), there are no expected mortalities or vessel strikes to marine mammals from the proposed</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>impact migratory marine mammals and sea turtles,” DEIS at 4-2, its analysis falls far short of this statement and the requirements of NEPA. Rather, the DEIS’s discussion of cumulative impacts does not consider in any appropriate detail the host of other past, present, and reasonably foreseeable future impacts that will interact with – and affect many of the same populations of marine species – as the Navy’s training exercises. For example, the DEIS’s discussion of cumulative impacts to marine mammals from fishing is limited to the mere recognition that whales can become entangled in nets or be caught as bycatch. There is no attempt to quantify these impacts, or to evaluate what they might mean in tandem with other impacts such as vessel strikes, pollution, habitat disturbance, or the Navy’s activities proposed in the DEIS. Indeed, the conclusion of this truncated discussion of cumulative impacts is simply to recognize that cumulative impacts are significant overall, but the Navy’s additions to those impacts would be small by comparison to the harm already occurring, and so can be dismissed. DEIS at 4-35 to 4-36, 4-48. This misses the entire point of analyzing cumulative impacts – to evaluate alternatives and mitigation that would reduce the cumulative impacts from the activity when it occurs alongside other harmful impacts.</p>	<p>activities and no population-level effects. See also the discussion in Section 3.4.3.7 (Impacts from Secondary Stressors) and Section 3.4.4 (Summary of Impacts (Combined Impacts of all Stressors) on Marine Mammals).</p>
<p>NRDC-98</p>	<p>While the DEIS is deficient in this regard overall, the most significant omission is any mention of the cumulative impacts to migratory marine mammals from the Navy’s activities in other training ranges. There can be no dispute that many of the marine mammals purportedly considered in this DEIS are the same populations and individuals impacted by the Navy’s training in other ranges, including the Gulf of Alaska, Southern California, and Hawai’i. But, while acknowledging that actions outside the study area can have cumulative effects on these migratory species, the Navy’s discussion of these impacts is limited to the effects of maritime traffic and commercial fishing. DEIS at 4- 2, 4-19 to 4-20. The DEIS omits any discussion of the Navy’s impacts to these same species outside the Northwest.¹³⁰ The cumulative effects analysis must acknowledge, quantify, and evaluate the significance of past, present, and reasonably foreseeable future takes and other harm to these same populations and individuals from the Navy’s own activities outside this specific training range.</p> <p>The Navy’s training in these other ranges will result in hundreds of thousands of instances of take and other harm to marine mammals over at least the next five years under permits that the Navy recently received. For example, the Eastern North Pacific population of gray whales will be subject to more than 3,000 incidences of take by harassment and more the 6,000 instances of temporary hearing loss from the Navy’s sonar and acoustic training activities in Southern California every year. See HSTT at 3.4-167. Many of other species, including blue, humpback, fin, sperm, and sei whales migrate north-to-south along the coastline and from Hawai’i to the Northwest coast (in the case of humpback whales). See HSTT EIS at 3.4-167 and DEIS at 3.4-150 (the same California/Oregon/Washington population of fin whales subjected to more than 629 annual instances of behavioral harassments and 898 annual instances of temporary</p>	<p>This discussion is presented in a summary in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) and the range for each species is presented in Section 3.4.2 (Affected Environment).</p> <p>Temporary threshold shift, which is what is analyzed, is not “hearing loss” and an understanding of that fundamental difference may assist the comment author to better understand the impacts.</p> <p>See the discussion presented in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) regarding long-term consequence from ongoing Navy training and testing. Note that the population of Eastern North Pacific gray whale (as presented in Section 3.4.2.12) has recovered and there is no evidence that decades of ongoing Navy training and testing in the NWTT Study Area and Southern California have had any impact on that recovery. As also presented in Section 3.4.2.7 (Humpback Whale (<i>Megaptera novaeangliae</i>)), the same is true for humpback whales in Hawaii. Discussions of trends for blue whales (Section 3.4.2.8), fin whales (Section 3.4.2.9), sperm whales (Section 3.4.2.13), and sei whales (Section 3.4.2.10) are also presented in the EIS/OEIS.</p> <p>Actions in other locations also involve extremely different numbers of activities, environmental conditions, marine mammal species, and different marine mammal densities. Activities outside the Proposed Action NWTT EIS/OEIS and in other waters than the Study Area were</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>hearing loss in Southern California and then another 14 annual instances of behavioral harassment and 10 instances of temporary hearing loss in the Northwest). The DEIS does not mention the large numbers of takes and harm occurring to these species in other training ranges, nor does it quantify, or even attempt to analyze the combined or cumulative effects from training exercises throughout the migratory range of these species. These impacts range from physical injury to harassment and other stressors that affect feeding, breeding, and migration. While the DEIS attempts to dismiss many of these impacts as temporary, they can and do accumulate over time both in terms of repeated stress and injury to individual animals. Moreover, repeated and prolonged exposure to stressors such as sound can cause habitat avoidance and other harms.</p> <p>¹³⁰ As just one example, the Navy goes so far as to ignore known past impacts of its own training exercises on these species in other training ranges: While it emphasizes that “[t]here has never been a Navy vessel strike to a marine mammal in the Study Area,” DEIS at 4-32, a Navy vessel struck and killed a fin whale in Southern California in 2009 and, in the twenty year period from 1991 to 2010, Navy ships struck at least 16 whales (with 7 of these being fatal) in Southern California. See HSTT EIS at 3.4-268. Most of these strikes and fatalities were to the same populations that also migrate through the NWTT Study Area.</p>	<p>analyzed in a completely separate document since they involved completely separate proposed activities and locations.</p>
<p>NRDC-99</p>	<p>VII. The Navy Fails to Properly Analyze Reasonable Alternatives</p> <p>To comply with NEPA, an EIS must “inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1. The regulation itself describes the requirement as “the heart of the environmental impact statement.” Id. at § 1502.14. Courts similarly portray the alternatives requirement as the “linchpin” of the EIS. <i>Monroe County Conservation Council v. Volpe</i>, 472 F.2d 693 (2d Cir. 1972). The agency must therefore “[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.” 40 C.F.R. § 1502.14(a). The agency must also state how the alternatives considered in the DEIS and decisions based on the DEIS will or will not achieve the requirements of sections 101 and 102(1) of NEPA and other environmental laws and policies. See 40 C.F.R. § 1502.2(d).</p> <p>Consideration of alternatives is required by (and must conform to the independent terms of) both sections 102(2)(C) and 102(2)(E) of NEPA. Here, the Navy’s alternatives analysis misses the mark.</p> <p>Three alternatives are given in the DEIS: a No Action Alternative (maintaining baseline training and testing activities that historically occur in the Study Area), the preferred Alternative 1 (increasing training and testing activities, expanding activities to new areas, and force structure changes), and Alternative 2 (Alternative 1 with more training and testing activities). These alternatives do not provide decision makers with a range of genuine choices. While the purpose of the alternatives analysis is to “consider the likely environmental impacts of the preferred course of action as well as reasonable alternatives,” which “facilitates informed decisionmaking by agencies and allows the</p>	<p>See Chapter 2 (Description of Proposed Action and Alternatives) describing how the alternatives were developed.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	political process to check those decisions,” New Mexico ex rel. Richardson v. BLM, 565 F.3d 683, 703-704 (10th Cir. 2009), the DEIS falls short of this goal. The Navy’s alternatives amount to a presentation of only one true course of action: potential training and testing in all areas at all times.	
NRDC-100	<p>A. Failure to Identify Environmental Impact-Based Alternatives</p> <p>The Navy claims it prepared the DEIS to “assess the potential environmental impacts” and to execute its responsibilities under federal law, including NEPA. DEIS at 1-1. But the Navy’s alternatives were not selected to “inform decision-makers and the public” of how the Navy could “avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1. Instead, as discussed in the DEIS and below, the Navy chose alternatives based on factors unrelated to the proposed action’s environmental impacts.</p> <p>At no point in the DEIS does the Navy discuss how the alternatives pose different environmental choices for the public and decisionmakers. The DEIS fails entirely to comply with NEPA’s regulations, requiring the Navy to “present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14. The Navy fails to sharply define the environmental issues applicable to each alternative and include these differences in a comparison of alternatives. There is simply no comparison of the risks and benefits of each alternative showing what is and is not known and what species and habitats would be most at risk from each alternative.</p>	<p>See the Environmental Consequences section of each resource area for a discussion of environmental impact from each of the three alternatives.</p> <p>The Navy disagrees with the assertion that the EIS/OEIS fails to define the environmental issues applicable to each alternative and notes for example in Marine Mammals (Section 3.4), that there was a conclusion summary provided for each stressor and alternative in Environmental Consequences (Section 3.4.3) and summary tables of predicted effects for each species, by alternative.</p>
NRDC-101	The two alternatives that purportedly meet the Navy’s purpose and needs present no options for a decisionmaker wishing to reduce harms to the environment or for the public to hold decisionmakers accountable for their choices based on environmental impacts. For example, a decisionmaker wishing to choose the alternative that does less harm to marine mammals from training with sonar has nowhere to turn; both of the Navy’s alternatives result in the exact same impact to marine mammals from training with sonar—nearly 25,000 takes per year. Violating NEPA’s regulations, there is no presentation of an alternative that details a way forward that “avoid[s] or minimize[s] adverse impacts or enhance[s] the quality of the human environment.” <i>Id.</i>	While it is true that the subset of takes from the Proposed Action is numerically similar it is not identical. Although the subtotal comes out to be a similar number overall, the takes are from different actions, and more importantly, the Proposed Action is not just this numerical subset of Navy training but also includes testing activities as well in each alternative. There are clear numerical differences in the total number of estimated exposures across the three alternatives analyzed in the NWT T EIS/OEIS.
NRDC-102	<p>B. The Navy Improperly Dismissed Alternatives Necessary to Provide a Well Reasoned Choice of Alternatives</p> <p>Several alternatives were recommended to the Navy during the scoping process that addressed this absence of environmental impact-based alternatives. However, the DEIS improperly dismisses all of these suggestions. “While NEPA ‘does not require agencies to analyze the environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or impractical or ineffective,’ it does require the development</p>	Navy disagrees and notes that all scoping comments were addressed. See the EIS/OEIS Section 2.5 describing how the alternatives were developed including those eliminated from further consideration.

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	of "information sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned." New Mexico ex rel. Richardson v. BLM, 565 F.3d 683, 708-709 (10th Cir. 2009) quoting Colorado Env'tl. Coalition v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999).	
NRDC-103	Dismissing the suggestions, the Navy fails to show how any of the alternatives are "too remote, speculative, or impractical or ineffective." For instance, while proximity to home ports and complexes might prove to be more convenient and even more cost effective, neither expense nor ease equates to the level of being too remote, speculative, or impractical or ineffective. See DEIS § 2.5.1.1 at 2-42. These factors alone cannot dictate an agency's choice of alternatives to evaluate in an EIS.	These were not the only considerations and included evaluation of the reason given for the alternative suggested in the first place. Moving activities farther offshore has been considered as presented in the EIS/OEIS Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines).
NRDC-104	<p>"The primary purpose of the impact statement is to compel federal agencies to give serious weight to environmental factors in making discretionary choices." I-291 Why? Ass'n v. Burns, 372 F.Supp. 233, 247 (D. Conn. 1974). If an agency is permitted to consider and compare the environmental impacts of its proposed action with only equally convenient alternatives—and permitted to omit from such analysis any alternatives that are less convenient, no matter that they might result in significant environmental benefits—this purpose would be thwarted and the alternatives analysis loses its purpose entirely.</p> <p>An agency must discuss all reasonable alternatives—those that will accomplish the purpose and need of the agency and are practical and feasible—not simply those it finds most expedient. 40 C.F.R. § 1502.14. By improperly disregarding many alternatives, the Navy has failed to discuss all reasonable alternatives.</p>	See the discussion presented in the EIS/OEIS Section 5.3.4.1 (Previously Considered but Eliminated) providing an analysis showing why many "alternative" based suggestions to stop the continuation of training and testing where it has been occurring for decades were not carried forward. These suggestions have been demonstrated to likely be ineffective at reducing environmental impacts, have an unacceptable operational impact based on the effectiveness assessment, or be incompatible with Section 5.2.2 (Overview of Mitigation Approach).
NRDC-105	<p>C. The Navy Must Identify Alternative Sites and Seasonal Restrictions</p> <p>The Navy's analysis is devoid of geographic alternatives and even minor seasonal restrictions. This omission is inappropriate in light of the strong consensus—at NOAA and in the scientific community—that spatial-temporal avoidance of high-value habitat represents the best available means to reduce the impacts of mid-frequency active sonar and certain other types of ocean noise on marine life.¹³¹</p> <p>¹³¹ Supra, note 3.</p>	As presented in the NWTT EIS/OEIS, the Navy has been doing relatively the same training and testing in the same area of the NWTT Study Area for decades. There is no evidence of long-term population-level impacts from Navy activities to any marine mammals in the NWTT Study Area. As detailed in Section 5, protection to marine mammals is afforded them no matter where they are encountered. Given the dynamic nature of the ocean environment, variable seasons, variable migration timing and locations, and highly mobile marine mammals, area and seasonal restrictions as alternatives are not effective; See the EIS/OEIS Section 5.3.4 (Mitigation Measures Considered but Eliminated) for a detailed discussion of area or seasonal restrictions.
NRDC-106	Protected areas should ordinarily be identified during the planning stage based on biological and oceanographic factors, rather than merely on the confirmed presence of marine animals in real time; and, indeed, the Naval Facilities Engineering Command, Atlantic undertook just such an analysis in the Navy's EIS for Atlantic Fleet Active Sonar	As detailed in the NWTT EIS/OEIS, there are no Major Exercises like RIMPAC, JTFEXs, COMPTUEXs, and USWEXs in the NWTT Study Area. As presented in the EIS/OEIS Section 5.3.4 (Mitigation Measures Considered but Eliminated), consideration of area or

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>Training covering the period 2009-2013. The Navy's detailed planning for certain training and testing exercises, particularly major exercises, such as RIMPAC, JTFEXs, COMPTUEXs, and USWEXs, provide an ideal opportunity to develop reasonable alternatives for the timing and siting of such activities based on biological and oceanographic factors.</p> <p>Further spatial-temporal alternatives do not require large shifts in location, but rather can be very effective by simply carving out small areas of known biological importance. For instance, the Navy has conceded in other analyses the importance designating "cautionary areas" that requires higher administrative approval for activities in the areas See, e.g., the cautionary area for humpback whales in the Final EIS for Hawaii- Southern California Training and Testing. Despite these recognitions, the Navy fails here to identify areas and develop an alternative based on avoiding a handful of biologically important areas. Instead, all of the alternatives propose year-round, unrestricted use without regard to seasonal variations in marine mammal and fish abundance. This is true despite the well-documented seasonal migrations of numerous endangered species and the identification of biologically important areas. In fact, moving in the wrong direction on these matters, the Navy has proposed withdrawing spatial-temporal protections for the ESA-listed marbled murrelet.</p>	<p>seasonal restrictions was analyzed. Specifically, in the Final EIS/OEIS, Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas), the Navy acknowledges the identification of areas where certain marine mammal species tend to be found concentrated at particular times of the year while engaging in important behavioral activities. The areas currently identified are not intended to provide a complete list of areas of biological importance, are not equivalent to habitat or range, and likely represent only a fraction of a species' overall range. Additionally, the delineation of a mapped boundary does not reflect the day-to-day dynamic nature of marine mammal distributions or of the ocean environment, both of which are subject to perturbation along with other key variables such as prey availability and other environmental factors (e.g., sea surface temperature). Therefore, recognizing limitations of the currently identified important areas and the dynamic nature of the ocean environment, the Navy has chosen to implement the mitigation measures whenever a marine mammal has been detected no matter where that marine mammal may be located. Additionally, it would not be operationally practical or realistic to attempt to implement mitigation specific to a location given the overlapping identified areas and the multiple seasons under which each area must be considered (e.g., the entrance to the Strait of Juan de Fuca). Prior to Maritime Homeland Defense/ Security Mine Countermeasure Integrated Exercises and Small Boat Attack training, the Navy will conduct pre-event planning and training to ensure environmental awareness of all exercise participants.</p> <p>The Navy is retaining all measures that are effective at mitigating impacts to marbled murrelets. Regarding the measure the Navy proposes to eliminate, as stated in Section 5.3.3 (Mitigation Areas), there is no evidence to support that marbled murrelet hearing is within the frequency ranges of the sound sources where the mitigation measures were being applied. The Navy is in ongoing consultations with USFWS regarding mitigation measures to be applied during these and other activities.</p>
NRDC-107	<p>Carefully siting the activities proposed to occur in the range to avoid concentrations of vulnerable and endangered species and high abundances of marine life is the most critical step the Navy can take in reducing the environmental impacts of this project. However, because the Navy has failed to undertake an alternatives analysis that allows it to make an informed siting choice, the DEIS is inadequate and must be revised.</p>	<p>In the EIS/OEIS Section 5.3.4 (Mitigation Measures Considered but Eliminated) the Navy has undertaken an analysis of potential area and or seasonal restrictions. As presented in the NWTT EIS/OEIS, the Navy has been doing relatively the same training and testing in the same area of the NWTT Study Area for decades. There is no evidence of long-term population-level impacts from Navy activities to any marine mammals in the NWTT Study Area.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC-108	<p>D. Other Reasonable Alternatives</p> <p>The DEIS should also consider other reasonable alternatives which could fulfill the Navy's purpose while reducing harm to marine life and coastal resources. For example:</p> <p>(1) The DEIS fails to include a range of mitigation measures among its alternatives. Many such measures have been employed by the U.S. Navy in other contexts, as discussed in Section IV; and there are many others that should be considered. Such measures are reasonable means of reducing harm to marine life and other resources on the proposed range, and their omission from the alternatives analysis renders that discussion inadequate. For instance, while safety zones are no substitute for geographic mitigation (which, as noted above, is the most effective means of reducing impacts on marine mammals), they do provide a form of last-recourse protection for any animals that are spotted near the array. The Navy must analyze safety zone enhancements outside critical points of its training and consider modifications in the safety zone provisions.</p> <p>We have noted several reasons in the past why expanding the safety zone would reduce the risk of near-array exposures: for example, (1) marine mammal groups are often spread out over a wide area, and animals may go undetected within the safety zone even if group members are only spotted outside; and (2) uncertainty remains over the thresholds and distances needed to cause hearing loss in some species. Given the Navy's de facto use of a wider safety zone in past exercises, it should consider how to provide for safety zone enhancements outside critical points of its training. In addition, the Marine Mammal Commission has repeatedly called for modifications in the safety zone provisions to allow sufficient time for animals to move out of the sound field.¹³²</p> <p>¹³² MMC, Letter from Rebecca Lent, Executive Director, Marine Mammal Commission, to Kimberly Kler, NWTT EIS/OEIS Project Manager, Naval Facilities Engineering Command Northwest. Formal comments on draft EIS, submitted Feb. 20, 2014 (2014).</p>	<p>See Section 5 of the EIS/OEIS providing a discussion of the mitigations measures considered.</p> <p>Section 5.3.4.1.14 (Increasing the Size of Observed Mitigation Zones) discusses mitigation zone expansion. The mitigation zones discussed throughout the Draft and Final EIS/OEIS were developed using the latest best available science, are consistent with regulatory requirements and criteria, and are tailored to the Proposed Action. As described throughout Chapter 2 (Description of Proposed Action and Alternatives), geographic and seasonal flexibility is required to support evolving Navy training and testing requirements, which are linked to real-world events. By not including ties to specific alternatives, the Navy has greater flexibility for what can be considered for implementation. The Navy proposes mitigation measures on a case-by-case basis that would apply to all locations where the activity occurs. The proposed mitigation measures were developed in coordination with NMFS to avoid or reduce potential impact on a particular resource. Visual observations remain a NMFS- and U.S. Fish and Wildlife Service-approved method for mitigating potential impacts from the Proposed Action</p>
NRDC-109	<p>(2) While we appreciate the Navy's plan to use range sensors and other passive acoustic platforms in limited instances, such efforts must be expanded. The Navy has failed to set forth an action plan and timeline in its EIS to bring these sensors and platforms on line for purposes of more meaningful mitigation. Passive acoustic monitoring is one of the most effective available means of monitoring marine mammals in the vicinity of MFA sonar exercises and other sources of undersea noise.¹³³ Under the right conditions, it can significantly improve detectability of certain cryptic or deep-diving species. For example, while beaked whales are theoretically sightable only during the 8% of time that they are on the surface (and even then are unlikely to be spotted visually), some species vocalize over roughly 25% of their deep foraging dives.¹³⁴ NMFS, in its rulemakings, has repeatedly noted the mitigation potential of passive acoustic monitoring and the commitment of the Navy to technological development in support of this measure. 74 Fed. Reg. 3895.</p>	<p>The technology does not currently exist to use passive acoustics in an expanded role to conduct effective mitigation. The Navy is actively pursuing advancement of this technology and is evaluating the ability to implement the technology and application of science effectively. Given the uncertainties involved with technological development, a timeline is not available at this time. If that technology becomes available, the Navy would re-examine this option.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>¹³³ ECS Working Group: S. Dolman et al., Technical report on effective mitigation for active sonar and beaked whales, Working group convened by European Cetacean Society, 10pp. (2009); E.A. Falcone, Sighting characteristics and photo-identification of Cuvier's beaked whales (<i>Ziphius cavirostris</i>) near San Clemente Island, California: a key area for beaked whales and the military?, <i>Marine Biology</i> 156: 2631-2640 (2009); L. Hatch et al., Characterizing the relative contributions of large vessels to total ocean noise fields: a case study using the Gerry E. Studds Stellwagen Bank National Marine Sanctuary, <i>Environmental Management</i> 42: 735-752 (2008).</p> <p>¹³⁴ N. Aguilar Soto, Acoustic and foraging behavior of short-finned pilot whales (<i>Globicephala macrorhynchus</i>) and Blainville's beaked whales (<i>Mesoplodon densirostris</i>) in the Canary Islands; implications on the effects of man-made noise and boat collisions, Ph.D. dissertation, La Laguna University, Canary Islands, Spain (2006); ECS Working Group (2009).</p>	
NRDC-110	<p>(3) The Navy's statement of purpose and need contains no language that would justify the limited set of alternatives that the Navy considers (or the alternative it ultimately prefers). Yet it is a fundamental requirement of NEPA that agencies preparing an EIS specify their project's "purpose and need" in terms that do not exclude full consideration of reasonable alternatives. 40 C.F.R. § 1502.13; <i>City of Carmel-by-the-Sea v. United States Dep't of Transp.</i>, 123 F.3d 1142, 1155 (9th Cir. 1997) (citing <i>Citizens Against Burlington, Inc. v. Busey</i>, 938 F.2d 190, 196 (D.C. Cir. 1991)). "The existence of a viable but unexamined alternative renders an environmental impact statement inadequate," <i>Idaho Conservation League v. Mumma</i>, 956 F.2d 1508, 1519 (9th Cir. 1992), and an EIS errs when it accepts "as a given" parameters that it should have studied and weighed. <i>Simmons v. U.S. Army Corps of Eng'rs</i>, 120 F.3d 664, 667 (7th Cir. 1997).</p> <p>In sum, the DEIS shortchanges or omits from its analysis reasonable alternatives that might achieve the Navy's core aim of testing and training while minimizing environmental harm. For these reasons, we urge the Navy to revise its DEIS to adequately inform the public of all reasonable alternatives that would reduce adverse impacts to whales, fish, and other resources. 40 C.F.R. § 1502.1.</p>	<p>The Navy has determined that alternatives based on varied mitigations would not provide the decisionmaker meaningful alternatives. Not limiting mitigation measures to a single alternative allows the protections to be applied to any selective alternative and it allows consideration of options of training levels that also includes mitigation measures. Also, under the MMPA, the Navy must adopt mitigations that are practicable, so each alternative must apply practicable mitigation measures. To provide varied mitigation or an alternative lacking mitigation would provide the decisionmaker an infeasible and unreasonable alternative.</p>
NRDC-111	<p>VIII. The Navy Fails to Analyze the Impacts on Wildlife Viewing Interests and Recreation</p> <p>Just as it fails to consider the direct, indirect, and cumulative impacts of increased training in the NWTT Study Area on the region's marine mammals and other fish and wildlife, the DEIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The DEIS makes no mention of the value lost from the harm to marine mammals that attract a number of our organizational members and members of the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly those areas centered on observing whales and other marine mammals in their natural habitats.</p> <p>One of NEPA's explicit purposes is to "assure esthetically and culturally pleasing</p>	<p>See the EIS/OEIS Section 3.4.3 (Environmental Consequences) for direct impacts resulting from each stressor, See Section 3.4.3.7 (Impacts from Secondary Stressors) for indirect effects, see Section 3.4.4 (Summary of Impacts (Combined Impacts of all Stressors) on Marine Mammals), and Chapter 4 (Cumulative Impacts) for a discussion of cumulative impacts.</p> <p>See Section 3.12 (Socioeconomic Resources) for a discussion of tourism, whale watching, etc. Also note that there are no expected impacts that would result in "value lost from harm" to marine mammals given there are no population-level effects resulting.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	surroundings,” 42 U.S.C. 4331(b)(2), and courts have made clear that an agency must adequately consider such recreational impacts in its NEPA analysis. See, e.g., Lujan v. NWF, 497 U.S. 871, 887 (1990) (“no doubt that recreational use and aesthetic enjoyment are among the sorts of interests NEPA [was] specifically designed to protect”); LaFlamme v. FERC, 852 F.2d 389, 401 (1988) (because “there were substantial questions raised regarding whether the project may significantly affect recreational use in the project area, and that FERC failed to explain or discuss” these impacts, the court found that “this record reflects a decision which is neither ‘fully informed or well-considered,’” and therefore concluded the agency’s decision not to prepare an EIS was unreasonable).	
NRDC-112	<p>IX. Project Description and Meaningful Public Disclosure</p> <p>Disclosure of the specific activities contemplated by the Navy is essential if the NEPA process is to be a meaningful one. See, e.g., LaFlamme v. F.E.R.C., 852 F.2d 389, 398 (9th Cir. 1988) (noting that NEPA’s goal is to facilitate “widespread discussion and consideration of the environmental risks and remedies associated with [a proposed action]”).</p> <p>For meaningful public input, the Navy must describe source levels, frequency ranges, duty cycles, and other technical parameters relevant to determining potential impacts on marine life. The DEIS provides some of this information, but it fails to disclose sufficient information about active sonobuoys, acoustic device countermeasures, training targets, or range sources that would be used during the exercises. And the DEIS gives no indication of platform speed, pulse length, repetition rate, beam widths, or operating depths—that is, most of the data that the Navy used in modeling acoustic impacts.</p>	Much of this information is classified to protect national security. The EIS/OEIS provides all source levels, frequency ranges, duty cycles, and other technical parameters relevant to determining potential impact on marine life unless this information was classified; See Chapter 2 (Description of Proposed Action and Alternatives).
NRDC-113	The Navy—despite repeated requests—has not released or offered to release CASS/GRAB or any of the other modeling systems or functions it used to develop the biological risk function or calculate acoustic harassment and injury.	The CASS/GRAB program is classified and not available for public release; however, approximate results can be obtained using other mathematical models commonly available to those with the technical expertise to utilize those tools. See the Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis technical report and the Determination of Acoustic Effects on Marine Mammals and Sea Turtles technical report which can be found at www.NWTTEIS.com , for details on the development of the Navy Acoustic Effects Model and Criteria.
NRDC-114	In addition, the Navy has also ignored repeated Freedom of Information Act requests regarding information and reports cited in the DEIS (see, e.g., the Navy’s failure to produce documents in response to case file number 200600587. NRDC renewed the request on January 28, 2009).	After conducting a review of Freedom of Information Act records, the Navy identified six Freedom of Information Act requests from National Resources Defense Council that may have potentially included requests about CASS/GRAB or other modeling systems based on the Freedom of Information Act subject names and the year the Freedom of Information Act request letter was submitted. Five of the six

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		Freedom of Information Act requests were granted in full and the remaining request received a Freedom of Information Act determination type of “other reasons.”
NRDC-115	These models, reports, and requests for information must be made available to the public, including the independent scientific community, for public comment to be meaningful under NEPA and the Administrative Procedure Act. 40 C.F.R. §§ 1502.9(a), 1503.1(a) (NEPA); 5 U.S.C. § 706(2)(D) (APA). In addition, guidelines adopted under the Data (or Information) Quality Act also require their disclosure. The Office of Management and Budget’s guidelines require agencies to provide a “high degree of transparency” precisely “to facilitate reproducibility of such information by qualified third parties” (67 Fed. Reg. 8452, 8460 (Feb. 22, 2002)); and the Defense Department’s own data quality guidelines mandate that “influential” scientific material be made reproducible as well. We encourage the Navy to contact us immediately to discuss how to make this critical information available.	This information has been evolving in response to new data and will be subject to independent peer review for conferences or journal submissions. The EIS/OEIS provides all source levels, frequency ranges, duty cycles, and other technical parameters relevant to determining potential impact on marine life unless this information was classified (Table 2.3-2 in Chapter 2, Description of Proposed Action and Alternatives). Supporting technical reports have been provided to the public via the project web site (www.NWTTEIS.com).
NRDC-116	<p>X. Compliance With Other Applicable Laws</p> <p>A number of other statutes and conventions are implicated by the proposed activities. Among those that must be disclosed and addressed during the NEPA process are the following:</p> <p>(1) The Marine Mammal Protection Act (“MMPA”), 16 U.S.C. § 1361 et seq., which requires the Navy to obtain a permit or other authorization from NMFS or the U.S. Fish and Wildlife Service prior to any “take” of marine mammals. Prejudging the results of this NEPA process, the Navy has already applied for an incidental take permit. As we explained in comments on that permit application (which we incorporate by reference), the Navy’s pursuit of an MMPA permit tiered to an as-yet-unfinished NEPA process demonstrates that the Navy has predetermined the result of its NEPA process. NMFS and the Navy should abandon any intent to undertake any activities tiered to the EIS until after the NEPA process has been completed. Nonetheless, we will submit comments on NMFS’ rulemaking for the Navy’s activities at the appropriate time.</p> <p>(2) The Endangered Species Act, 16 U.S.C. § 1531 et seq., which requires the Navy to enter into formal consultation with NMFS or the U.S. Fish and Wildlife Service, and receive a legally valid Incidental Take Permit, prior to its “take” of any endangered or threatened marine mammals or other species, including fish, sea turtles, and birds, or its “adverse modification” of critical habitat. See, e.g., 1536(a)(2); <i>Romero-Barcelo v. Brown</i>, 643 F.2d 835 (1st Cir. 1981), rev’d on other grounds, <i>Weinberger v. Romero-Carcelo</i>, 456 U.S. 304, 313 (1982). Given the scope and significance of the actions and effects it proposes, the Navy must engage in formal consultation with NMFS and the U.S. Fish and Wildlife Service over the numerous endangered and threatened species that will be harmed from its activities.</p>	<p>The Navy has addressed all of these statutes and conventions. Please see Section 3.0.1 (Regulatory Framework) for a complete list of Federal Statutes and Executive Orders addressed in Chapter 3 (Affected Environment and Environmental Consequences) and Chapter 6 (Additional Regulatory Considerations). The Clean Water Act was addressed in Section 3.1 (Sediments and Water Quality) and the Clean Air Act was addressed in Section 3.2 (Air Quality). As part of this process, the Navy has consulted under the Marine Mammal Protection Act, Endangered Species Act, and Magnuson-Stevens Fishery Conservation and Management Act.</p> <p>The Navy has submitted consistency determinations to three states in compliance with the Coastal Zone Management Act.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>(3) The Coastal Zone Management Act, and in particular its federal consistency requirements, 16 U.S.C. § 1456(c)(1)(A), which mandate that activities that affect the natural resources of the coastal zone—whether they are located “within or outside the coastal zone”—be carried out “in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs.” The Navy must fulfill its CZMA commitments along the Alaska, California, Oregon, and Washington coasts.</p> <p>(4) The Magnuson-Stevens Fisheries Conservation and Management Act, 16 U.S.C. § 1801 et seq. (“MSA”), which requires federal agencies to “consult with the Secretary [of Commerce] with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken” that “may adversely affect any essential fish habitat” identified under that Act. 16 U.S.C. § 1855 (b)(2). In turn, the MSA defines essential fish habitat as “those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.” 16 U.S.C. § 1802 (10). The NWTT Study Area contains such habitat. As discussed at length above, anti-submarine warfare exercises alone have the significant potential to adversely affect at least the waters, and possibly the substrate, on which fish in these areas depend. Under the MSA, a thorough consultation is required.</p>	
NRDC-117	<p>(5) The Marine Protection, Research and Sanctuaries Act, 33 U.S.C. § 1401 et seq., which requires federal agencies to consult with the Secretary of Commerce if their actions are “likely to destroy, cause the loss of, or injure any sanctuary resource.” 16 U.S.C. § 1434(d)(1). Since the Navy’s exercises would cause injury and mortality of species, consultation is clearly required if sonar use takes place either within or in the vicinity of the sanctuary or otherwise affects its resources. Since sonar may impact sanctuary resources even when operated outside its bounds, the Navy should indicate how close it presently operates, or foreseeably plans to operate, to such sanctuary and consult with the Secretary of Commerce as required.</p> <p>In addition, the Sanctuaries Act is intended to “prevent or strictly limit the dumping into ocean waters of any material that would adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities” (33 U.S.C. § 1401(b)), and prohibits all persons, including Federal agencies, from dumping materials into ocean waters, except as authorized by the Environmental Protection Agency. 33 U.S.C. §§ 1411, 1412(a). The Navy has not indicated its intent to seek a permit under the statute.</p>	<p>The U.S. Navy has conducted active sonar training and testing activities for decades in the seaspace depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary.
NRDC-118	(6) The Migratory Bird Treaty Act, 16 U.S.C. § 703 et seq. (“MBTA”), which makes it illegal for any person, including any agency of the Federal government, “by any means or in any manner, to pursue, hunt, take, capture, [or] kill” any migratory birds except as permitted by regulation. 16 U.S.C. § 703. After the District Court for the D.C. Circuit held that naval training exercises that incidentally take migratory birds without a permit violate the MBTA, (see Center for Biological Diversity v. Pirie, 191 F. Supp. 2d 161 (D.D.C. 2002) (later vacated as moot)), Congress exempted some military readiness activities from the MBTA but also placed a duty on the Defense Department to minimize harms to seabirds. Under the new law, the Secretary of Defense, “shall, in consultation with the Secretary of the Interior, identify measures-- (1) to minimize and mitigate, to the extent practicable, any adverse impacts of authorized military readiness activities on affected species of migratory birds; and (2) to monitor the impacts of such military readiness activities on affected species of migratory birds.” Pub.L. 107-314, § 315 (Dec. 2, 2002). As the Navy acknowledges, many migratory birds occur within the NWTT Study Area. The Navy must therefore consult with the Secretary of the Interior regarding measures to minimize and monitor the effects of the proposed range on migratory birds, as required.	See the presentation in Table 6-1.1 and Section 3.6.3.8 (Migratory Bird Treaty Act Determinations) regarding the Migratory Bird Treaty Act. As concluded by the information presented, the Proposed Action did not warrant further consultation the Migratory Bird Treaty Act because activities will not have a significant adverse effect on a population of a migratory bird species.
NRDC-119	(7) Executive Order 13158, which sets forth protections for marine protected areas (“MPAs”) nationwide. The Executive Order defines MPAs broadly to include “any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein.” E.O. 13158 (May 26, 2000). It then requires that “[e]ach Federal agency whose actions affect the natural or cultural resources that are protected by an MPA shall identify such actions,” and that, “[t]o the extent permitted by law and to the maximum extent practicable, each Federal agency, in taking such actions, shall avoid harm to the natural and cultural resources that are protected by an MPA.” Id. The Navy must therefore consider and, to the maximum extent practicable, must avoid harm to the resources of all federally- and state-designated marine protected areas. The proposed activities also implicate the Clean Air Act and Clean Water Act as well as other statutes protecting the public health. The Navy must comply with these and other laws.	Chapter 6 (Additional Regulatory Considerations) has thoroughly addressed Marine Protected Areas (Section 6.1.2) under Executive Order 13158. See Section 3.2 (Air Quality) regarding the Clean Air Act, and Section 3.1 (Sediments and Water Quality) regarding the Clean Water Act.
NRDC-120	XI. Conflicts with Federal, State and Local Land-Use Planning NEPA requires agencies to assess possible conflicts that their projects might have with the objectives of federal, regional, state, and local land-use plans, policies, and controls.	The Navy has submitted a consistency determination to the State of Washington, and negative determinations to Oregon and California in compliance with the Coastal Zone Management Act. The Proposed Action did not include any impacts to land-use plans, policies or

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>40 C.F.R. § 1502.16(c). The Navy’s training and testing activities may affect resources in the coastal zone and within other state and local jurisdictions, in conflict with the purpose and intent of those areas. The consistency of Navy operations with these land- use policies must receive more thorough consideration.</p>	<p>controls.</p>
<p>NRDC-121</p>	<p>IMPACTS OF SONAR Strandings and Mortalities Associated with Sonar</p> <p>Scientists agree, and the publicly available scientific literature confirms, that the intense sound generated by active sonar can induce a range of adverse effects in whales and other species, from significant behavioral changes to stranding and death. By far the most widely-reported and dramatic of these effects are the mass strandings of beaked whales and other marine mammals that have been associated with military sonar use.</p> <p>Over the last decade, the association between military active sonar and whale mortalities has become a subject of considerable scientific interest and concern. That interest is reflected in the publication of numerous papers in peer-reviewed journals, in reports by inter-governmental bodies such as the IWC’s Scientific Committee, and in evidence compiled from a growing number of mortalities associated with sonar. Yet the DEIS only glosses over these stranding incidents.</p> <p>In March 2000, for example, sixteen whales from at least three species— including two minke whales—stranded over 150 miles of shoreline along the northern channels of the Bahamas. The beachings occurred within 24 hours of Navy ships using mid-frequency sonar in those same channels.¹³⁵ Post-mortem examinations found, in all whales examined, hemorrhaging in and around the ears and other tissues related to sound conduction or production, such as the larynx and auditory fats, some of which was debilitating and potentially severe.¹³⁶ It is now accepted that these mortalities were caused, through an unknown mechanism, by the Navy’s use of mid-frequency sonar.</p> <p>The Bahamas event is merely one of numerous mortality events coincident with military activities and active sonar that have now been documented, only some of which the Navy discusses:¹³⁷</p> <p>(1) Canary Islands 1985-1991 – Between 1985 and 1989, at least three separate mass strandings of beaked whales occurred in the Canary Islands, as reported in Nature.¹³⁸ Thirteen beaked whales of two species were killed in the February 1985 strandings, six whales of three species stranded in November 1988, and some twenty-four whales of three species stranded in October 1989— all while naval vessels were conducting exercises off shore.¹³⁹ An additional stranding of Cuvier’s beaked whales, also coinciding with a naval exercise, occurred in 1991.¹⁴⁰ It was reported that mass live strandings occurred each time exercises took place in the area.¹⁴¹</p> <p>(2) Greece 1996, 1997 – In 1996, twelve Cuvier’s beaked whales stranded along 35 kilometers on the west coast of Greece. The strandings were correlated, by an</p>	<p>Note that the stranding events in this comment did not occur in the NWTT Study Area and did not involve any training or testing scenarios in the Proposed Action.</p> <p>See the EIS/OEIS Section 3.4.1.8 (Stranding) and the cited U.S. Department of the Navy (2013c), “Marine Mammal Strandings Associated with U.S. Navy Sonar Activities” technical report available at the website www.NWTTTEIS.com.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>analysis published in Nature, with the test of a low- and mid-frequency active sonar system operated by NATO.¹⁴² A subsequent NATO investigation found the strandings to be closely timed with the movements of the sonar vessel, and ruled out all other physical environmental factors as a cause.¹⁴³ The following year saw nine additional Cuvier's beaked whales strand off Greece, again coinciding with naval activity.¹⁴⁴</p> <p>(3) Virgin Islands 1999 – In October 1999, four beaked whales stranded in the U.S. Virgin Islands as the Navy began an offshore exercise. A wildlife official from the Islands reported the presence of “loud naval sonar.”¹⁴⁵ When NMFS asked the Navy for more information about its exercise, the Department's response was to end the consultation that it had begun for the exercise under the Endangered Species Act.¹⁴⁶ In January 1998, according to a NMFS biologist, a beaked whale “stranded suspiciously” at Vieques as naval exercises were set to commence offshore.¹⁴⁷</p> <p>(4) Bahamas 2000 – As described above.</p> <p>(5) Madeira 2000 – In May 2000, four beaked whales stranded on the beaches of Madeira while several NATO ships were conducting an exercise near shore. Scientists investigating the stranding found that the whales' injuries— including “blood in and around the eyes, kidney lesions, pleural hemorrhage”— and the pattern of their stranding suggest “that a similar pressure event [i.e., similar to that at work in the Bahamas] precipitated or contributed to strandings in both sites.”¹⁴⁸</p> <p>(6) Canary Islands 2002 – In September 2002, at least fourteen beaked whales from three different species stranded in the Canary Islands. Four additional beaked whales stranded over the next several days.¹⁴⁹ The strandings occurred while a Spanish-led naval exercise that included U.S. Navy vessels and at least one ship equipped with mid-frequency sonar was conducting anti- submarine warfare exercises in the vicinity.¹⁵⁰ The subsequent investigation, as reported in the journals Nature and Veterinary Pathology, revealed a variety of traumas, including emboli and lesions suggestive of decompression sickness.¹⁵¹</p> <p>¹³⁵ Commerce and Navy, Joint Interim Report at iii, 16.</p> <p>¹³⁶ Id.</p> <p>¹³⁷ The following is not a complete list, as other relevant events have been reported in Bonaire, Japan, Taiwan, and other locations. See, e.g., R.L. Brownell, Jr., T. Yamada, J.G. Mead, and A.L. van Helden, Mass Strandings of Cuvier's Beaked Whales in Japan: U.S. Naval Acoustic Link? (2004) (IWC SC/56E37); J.Y. Wang and S.-C. Yang, Unusual Cetacean Stranding Events of Taiwan in 2004 and 2005, 8 Journal of Cetacean Research and Management 283-292 (2006); P. J.H. van Bree and I. Kristensen, On the Intriguing Stranding of Four Cuvier's Beaked Whales, <i>Ziphius cavirostris</i>, G. Cuvier, 1823, on the Lesser Antillean Island of Bonaire, 44 <i>Bijdragen tot de Dierkunde</i> 235-238 (1974).</p> <p>¹³⁸ M. Simmonds and L.F. Lopez-Jurado, Whales and the Military, 337 <i>Nature</i> 448 (1991).</p> <p>¹³⁹ Id.</p> <p>¹⁴⁰ V. Martín, A. Servidio, and S. Garcia, Mass Strandings of Beaked Whales in the Canary Islands, in P.G.H. Evans and L.A. Miller, Proceedings of the Workshop on Active Sonar and Cetaceans 33-36 (2004).</p>	

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>¹⁴¹ Simmonds and Lopez-Jurado, Whales and the Military, 337 Nature at 448.</p> <p>¹⁴² A. Frantzis, Does Acoustic Testing Strand Whales? 392 Nature 29 (1998).</p> <p>¹⁴³ See SACLANT Undersea Research Center, Summary Record, La Spezia, Italy, 15-17 June 1998, SACLANTCEN Bioacoustics Panel, SACLANTCEN M-133 (1998).</p> <p>¹⁴⁴ Id.; A. Frantzis, The First Mass Stranding That Was Associated with the Use of Active Sonar (Kyparissiakos Gulf, Greece, 1996), in P.G.H. Evans and L.A. Miller, Proceedings of the Workshop on Active Sonar and Cetaceans 14-20 (2004).</p> <p>¹⁴⁵ Personal communication of Dr. David Nellis, U.S. Virgin Island Department of Fish and Game, to Eric Hawk, NMFS (Oct. 1999); personal communication from Ken Hollingshead, NMFS, to John Mayer, Marine Acoustics Inc. (March 19, 2002).</p> <p>¹⁴⁶ Letter from William T. Hogarth, Regional Administrator, NMFS Southeast Regional Office, to RADM J. Kevin Moran, Navy Region Southeast (undated); personal communication from Ken Hollingshead, NMFS, to John Mayer, Marine Acoustics Inc. (March 19, 2002).</p> <p>¹⁴⁷ Personal communication from Eric Hawk, NMFS, to Ken Hollingshead, NMFS (Feb. 12, 2002).</p> <p>¹⁴⁸ D.R. Ketten, Beaked Whale Necropsy Findings 22 (2002) (paper submitted to NMFS); L. Freitas, The Stranding of Three Cuvier's Beaked Whales Ziphius Cavirostris in Madeira Archipelago— May 2000, in P.G.H. Evans and L.A. Miller, Proceedings of the Workshop on Active Sonar and Cetaceans 28-32 (2004).</p> <p>¹⁴⁹ Vidal Martin et al., Mass Strandings of Beaked Whales in the Canary Islands, in Proceedings of the Workshop on Active Sonar and Cetaceans 33 (P.G.H. Evans & L.A. Miller eds., 2004); Fernández et al., 'Gas and Fat Embolic Syndrome', 42 Veterinary Pathology at 446-57.</p> <p>¹⁵⁰ Fernández et al., 'Gas and Fat Embolic Syndrome', 42 Veterinary Pathology at 446; K.R. Weiss, Whale Deaths Linked to Navy Sonar Tests, L.A. Times, Oct. 1, 2002, at A3.</p> <p>¹⁵¹ Fernández et al., 'Gas and Fat Embolic Syndrome', 42 Veterinary Pathology at 446-57; Jepson et al., Gas-Bubble Lesions, 425 Nature at 575-76.</p>	
NRDC-122	<p>(7) Washington 2003 – In May 2003, the U.S. Navy vessel USS Shoup was conducting a mid-frequency sonar exercise while passing through Haro Strait, between Washington's San Juan Islands and Canada's Vancouver Island. According to one contemporaneous account, "[d]ozens of porpoises and killer whales seemed to stampede all at once . . . in response to a loud electronic noise echoing through" the Strait.¹⁵² Several field biologists present at the scene reported observing a pod of endangered orcas bunching near shore and engaging in very abnormal behavior consistent with avoidance, a minke whale "porpoising" away from the sonar ship, and Dall's porpoises fleeing the vessel in large numbers.¹⁵³ Eleven harbor porpoises—an abnormally high number given the average stranding rate of six per year—were found beached in the area of the exercise.¹⁵⁴</p> <p>¹⁵² Christopher Dunagan, Navy Sonar Incident Alarms Experts, Bremerton Sun, May 8, 2003.</p> <p>¹⁵³ NMFS, Assessment of Acoustic Exposures at 6, 9.</p> <p>¹⁵⁴ NMFS, Preliminary Report: Multidisciplinary Investigation of Harbor Porpoises (<i>Phocoena phocoena</i>) Stranded in Washington State from 2 May – 2 June 2003 Coinciding with the Mid-Range Sonar Exercises of the USS Shoup 53-55 (2004) (conclusions unchanged in final report). Unfortunately, according to the report, freezer artifacts and other problems incidental to the preservation of tissue samples made the cause of death in most specimens difficult to determine; but the role of acoustic trauma could not be ruled out. Id.</p>	<p>Much of the information presented in this comment is incorrect. See the discussion of the event in Section 3.4.3.1.8 (Stranding) and in the cited U.S. Department of the Navy (2013c), "Marine Mammal Strandings Associated with U.S. Navy Sonar Activities" technical report available at the website www.NWTTEIS.com.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC-123	<p>(8) Kauai 2004 – During the Navy’s conduct of a major training exercise off Hawaii, called RIMPAC 2004, some 150-200 whales from a species that is rarely seen near shore and had never naturally mass-stranded in Hawaii came into Hanalei Bay, on the island of Kaua’i. The whales crowded into the shallow bay waters and milled there for over 28 hours. Though the whales were ultimately assisted into deeper waters by members of a local stranding network, one whale calf was left behind and found dead the next day. NMFS undertook an investigation of the incident and concluded that the Navy’s nearby use of sonar in RIMPAC 2004 was the “plausible, if not likely” cause of the stranding.¹⁵⁵</p> <p>¹⁵⁵ B.L. Southall, R. Braun, F.M.D. Gulland, A.D. Heard, R.W. Baird, S.M. Wilkin, and T.K. Rowles, Hawaiian Melon-Headed Whale (<i>Peponacephala electra</i>) Mass Stranding Event of July 3-4, 2004 (2006) (NOAA Tech. Memo. NMFS-OPR-31); See also R.L. Brownell, Jr., K Ralls, S. Baumann- Pickering and M.M. Poole, Behavior of melon-headed whales, <i>Peponcephalia electra</i>, near oceanic islands, <i>Marine Mammal Science</i>, (publication pending 2009).</p>	<p>Much of the background presented for this event is incorrect. Additionally, the selective sentence construction regarding the “cause” from the findings of the investigation is not correct. As the lead author of that investigation stated with regard to the stranding, they “do not know what caused it” (Southall et al. 2006). See the discussion of the event in the cited U.S. Department of the Navy (2013c), “Marine Mammal Strandings Associated with U.S. Navy Sonar Activities” technical report available at the website www.NWTTEIS.com.</p>
NRDC-124	<p>(9) Canary Islands 2004 – In July 2004, four dead beaked whales were found around the coasts of the Canary Islands, within one week of an NATO exercise. The exercise, Majestic Eagle 2004, was conducted approximately 100 kilometers north of the Canaries. Although the three whale bodies that were necropsied were too decomposed to allow detection of gas embolisms, systematic fat embolisms were found in these animals.¹⁵⁶ The probability that the whales died at sea is extremely high.¹⁵⁷</p> <p>¹⁵⁶ A. Espinosa, M. Arbelo, P. Castro, V. Martín, T. Gallardo, and A. Fernández, New Beaked Whale Mass Stranding in Canary Islands Associated with Naval Military Exercises (Majestic Eagle 2004) (2005) (poster presented at the European Cetacean Society Conference, La Rochelle, France, April 2005); A. Fernández, M. Méndez, E. Sierra, A. Godinho, P. Herráez, A. Espinosa de los Monteros, F. Rodríguez, F., and M. Arbelo, M., New Gas and Fat Embolic Pathology in Beaked Whales Stranded in the Canary Islands (2005) (poster presented at the European Cetaecan Society Conference, La Rochelle, France, April 2005).</p> <p>¹⁵⁷ Id.</p>	<p>Note that the stranding events in this comment did not occur in the NWTT Study Area and did not involve any training or testing scenarios in the Proposed Action.</p>
NRDC-125	<p>(10) North Carolina 2005 – During and just after a U.S. training exercise off North Carolina, at least thirty-seven whales of three different species stranded and died along the Outer Banks, including numerous pilot whales (six of which were pregnant), one newborn minke whale, and two dwarf sperm whales. NMFS investigated the incident and found that the event was highly unusual, being the only mass stranding of offshore species ever to have been reported in the region, and that it shared ‘a number of features’ with other sonar-related mass stranding events (involving offshore species which stranded alive and were atypically distributed along the shore). NMFS concluded that sonar was a possible cause of the strandings and also ruled out the most common other potential causes, including viral, bacterial, and protozoal infection, direct blunt trauma, and fishery interactions.¹⁵⁸</p> <p>¹⁵⁸ A.A. Hohn, D.S. Rotstein, C.A. Harms, and B.L. Southall, Multispecies Mass Stranding of Pilot Whales (<i>Globicephala macrorhynchus</i>), Minke Whale (<i>Balaenoptera acutorostrata</i>), and Dwarf Sperm Whales (<i>Kogia sima</i>) in North Carolina on 15-16 January 2005 (2006) (NOAA Tech. Memo.</p>	<p>This description of the incident is incomplete and incorrect. See the discussion of the event in the cited U.S. Department of the Navy (2013c), “Marine Mammal Strandings Associated with U.S. Navy Sonar Activities” technical report available at the website www.NWTTEIS.com.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	NMFS-SEFSC-53).	
NRDC-126	(11) Spain 2006 – Four Cuvier’s beaked whales stranded on the Almerian coast of southern Spain, with the same suite of bends-like pathologies seen in the whales that stranded in the Canary Islands in 2002 and 2004. ¹⁵⁹ A NATO response force was performing exercises within 50 miles at the time of the strandings. ¹⁵⁹ International Whaling Commission, Report of the Scientific Committee, Annex K at 28 (2006) (IWC/ 58/Rep1).	Note that the stranding events in this comment did not occur in the NWTT Study Area and did not involve any training or testing scenarios in the Proposed Action.
NRDC-127	(12) Ionian Sea 2011 – At least ten and possibly dozens of additional Cuvier’s beaked whales stranded or washed ashore dead on the Island of Corfu in Greece and across the Ionian Sea on the Italian coast of Calabria in December 2011. The stranding event coincided in time and space with a major Italian Navy exercise known as “Mare Aperto” in the central-southern Tyrrhenian, Ionian, and southern Adriatic. At least one of the participating ships in the exercises was equipped with active sonar identical to systems used by the U.S. Navy.	Note that the stranding events in this comment did not occur in the NWTT Study Area and did not involve any training or testing scenarios in the Proposed Action.
NRDC-128	(13) Greece 2014 – At least eleven Cuvier’s beaked whales stranded or washed ashore dead on the island of Crete in Greece from April 1 to April 6, 2014. The stranding event coincided in time and space with a major multinational naval exercise known as “Noble Dina” in the Mediterranean Sea just south of Crete. As part of “Noble Dina,” U.S., Greek, and Israeli naval forces conducted anti-submarine warfare exercises, which require the use of high-powered military sonar.	Note that the stranding events in this comment did not occur in the NWTT Study Area and did not involve any training or testing scenarios in the Proposed Action.
NRDC-129	Some observations can be drawn from these incidents. For example, beaked whales, a group of deep-water species that are seldom seen and may in some cases be extremely rare, seem to be particularly vulnerable to the effects of active sonar. A 2000 review undertaken by the Smithsonian Institution, and reported and expanded by the IWC’s Scientific Committee and other bodies, supports this conclusion, finding that every mass stranding on record involving multiple species of beaked whales has occurred with naval activities in the vicinity. ¹⁶⁰ Indeed, it is not even certain that some beaked whale species naturally strand in numbers. ¹⁶⁰ Marine Mammal Program of the National Museum of Natural History, Historical Mass Mortalities of Ziphiids 2-4 (Apr. 6, 2000); see also 2 J. Cetacean Res. & Mgmt., Supp., Annex J at § 13.8 (2000) (report of the IWC Scientific Committee, Standing Working Group on Environmental Concerns).	See the EIS/OEIS Section 3.4.3.1.6.2 (Behavioral Reactions to Sonar and Other Active Acoustic Sources) which discusses beaked whale reaction to sonar. The data does not support the statement that beaked whales in general area “particularly vulnerable to the effects of sonar”, especially in U.S. waters and U.S. Navy training and testing locations as described in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities).
NRDC-130	But the full magnitude of sonar’s effects on these species—or on other marine mammals—is not known. Most of the world lacks networks to identify and investigate stranding events, particularly those that involve individual animals spread out over long stretches of coastline, and therefore the mortalities that have been identified thus far are likely to represent only a subset of a substantially larger problem. For example, most beaked whale casualties (according to NMFS) are bound to go undocumented because of the remote siting of sonar exercises and the small chance that a dead or injured animal would actually strand. ¹⁶¹ It is well understood in terrestrial ecology that dead and	The EIS/OEIS provides an analysis of potential impacts occurring in the NWTT Study Area, and while it is true that most of the world’s coastlines lack coverage by a stranding network, the Navy’s analysis of impacts has focused on scientific data collected in and around the Navy range complexes, which are the proposed locations for the continuation of historically occurring training and testing activities including the use of sonar. A summary of the compendium of the research in that regard is presented in NWTT EIS/OEIS in Section

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>dying animals tend to be grossly undercounted given their rapid assimilation into the environment, and one would of course expect profound difficulty where offshore marine species are concerned.¹⁶² Along the eastern seaboard and in the Gulf of Mexico, all beaked whale sightings during NMFS shipboard surveys have occurred at considerable distances from shore.¹⁶³</p> <p>¹⁶¹ J.V. Carretta, K.A. Forney, M.M. Muto, J. Barlow, J. Baker, and M. Lowry, U.S. Pacific Marine Mammal Stock Assessments: 2006 (2007).</p> <p>¹⁶² See, e.g., G. Wobeser, Investigation and Management of Disease in Wild Animals 13-15 (1994); P.A. Alison, C.R. Smith, H. Kukert, J.W. Deming, B.A. Bennett, Deep-Water Taphonomy of Vertebrate Carcasses: A Whale Skeleton in the Bathyal Santa Catalina Basin, 17 Paleobiology 78-89 (1991).</p> <p>¹⁶³ G.T. Waring, E. Josephson, C.P. Fairfield, and K. Maze-Foley, eds., U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments—2006 at 232-33, 238, 288, 292, 296 (2007) (NOAA Tech. Memo. NMFS NE 201) (data from NMFS surveys, showing all beaked whales sightings at significant distances from shore).</p>	<p>3.4.4.1 (Summary of Monitoring and Observations During Navy Activities). Unlike the rest of the world’s oceans, there has not been an absence of observation where the U.S. Navy has been routinely training and testing for years. In particular and as ongoing for approximately the last 8 years, the Navy, NMFS, and an independent group of scientists have been engaged in implementing a comprehensive monitoring program and associated research that includes before, during, and after monitoring of Navy activities on U.S. Navy range complexes. In short, the research and monitoring that has been and continues to observe Navy training and testing activities makes the Navy range complexes different than the remainder of the world’s oceans. For beaked whales in particular, not only have there been no mortalities or strandings associated with sonar use, but to the contrary there has been overwhelming evidence from research and monitoring indicating the continued presence or residence of individuals and populations and no clear evidence indicating long-term effects from Navy training and testing in those locations. For example, photographic records spanning more than 2 decades demonstrated re-sightings of individual beaked whales (from two species: Cuvier’s and Blainville’s beaked whales), suggesting long-term site fidelity to the area west of the Island of Hawaii (McSweeney et al. 2007; see the EIS/OEIS for reference to this and the following citations) where intensive swept-channel exercises historically occurred. In the most intensively used training and testing ranges in the Pacific, photo identification of animals associated with the SOCAL Range Complex have identified approximately 100 individual Cuvier’s beaked whale individuals with 40 percent having been seen in one or more prior years, with re-sightings up to 7 years apart (Falcone and Schorr 2014). Data from visual surveys documenting the presence of Cuvier’s beaked whales for the ocean basin west of San Clemente Island (Falcone et al. 2009; Falcone and Schorr 2012, 2014; Smultea and Jefferson 2014) is also consistent with concurrent results from passive acoustic monitoring that estimated regional Cuvier’s beaked whale densities were higher than indicated by NMFS’s broad scale visual surveys for the United States west coast (Hildebrand and McDonald 2009). Falcone and Schorr (2012) suggested that these beaked whales may have population sub-units with higher than expected residency to the Navy’s instrumented Southern California Anti-Submarine Warfare Range in particular. For over 3 decades, this ocean area west of San Clemente has been the location of the Navy’s instrumented training range and is one of the most intensively used</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>training and testing areas in the Pacific, given the proximity to the Naval installations in San Diego. In summary, the best available science indicates the Navy's continued use of Navy range complexes have not precluded beaked whales from also continuing to inhabit areas where sonar use has been occurring, and there is no evidence to suggest that undocumented mortalities are occurring in the NWTT Study Area or on the range complexes where the U.S. Navy routinely conducts training and testing activities.</p>
<p>NRDC-131</p>	<p>Furthermore, although the physical process linking sonar to strandings is not perfectly understood, the record indicates that debilitating and very possibly lethal injuries are occurring in whales exposed to sonar at sea—only some of which may then strand. As first reported in the journal <i>Nature</i>, animals that came ashore during sonar exercises off the Canary Islands, in September 2002, had developed large emboli in their organ tissue and suffered from symptoms resembling those of severe decompression sickness, or “the bends.”¹⁶⁴ It has been proposed that the panic led them to surface too rapidly or pushed them to dive before they could eliminate the nitrogen accumulated on previous descents. This finding has since been supported by follow-on papers, by published work in other fields, and by expert reviews.¹⁶⁵ In any case, the evidence is considered “compelling” that acoustic trauma, or injuries resulting from behavioral responses, has in some way led to the deaths of these animals.¹⁶⁶</p> <p>¹⁶⁴ See P.D. Jepson, M. Arbelo, R. Deaville, I.A.P. Patterson, P. Castro, J.R. Baker, E. Degollada, H.M. Ross, P. Herráez, A.M. Pocknell, F. Rodríguez, F.E. Howie, A. Espinosa, R.J. Reid, J.R. Jaber, V. Martín, A.A. Cunningham, A. Fernández, Gas-Bubble Lesions in Stranded Cetaceans, <i>425 Nature</i> 575-576 (2003); Fernández et al., ‘Gas and Fat Embolic Syndrome’, <i>42 Veterinary Pathology</i> at 415.</p> <p>¹⁶⁵ E.g., Cox et al., <i>Understanding the Impacts</i>. Of course it would be a mistake to assume that an animal must suffer bends-like injury or some other sort of acoustic trauma in order to strand. Some may die simply because the noise disorients them, for instance. See, e.g., NMFS, <i>Assessment of Acoustic Exposures</i> at 9-10.</p> <p>¹⁶⁶ Cox et al., <i>Understanding the Impacts</i>; see also P.G.H. Evans and L.A. Miller, <i>Concluding Remarks</i>, in <i>Proceedings of the Workshop on Active Sonar and Cetaceans</i> 74 (2004); K.C. Balcomb and D.E. Claridge, <i>A Mass Stranding of Cetaceans Caused by Naval Sonar in the Bahamas</i>, <i>8(2) Bahamas Journal of Science</i> 1 (2001); D.E. Claridge, <i>Fine-Scale Distribution and Habitat Selection of Beaked Whales</i> (2006) (M.Sc. thesis); E.C.M. Parsons, S.J. Dolman, A.J. Wright, N.A. Rose, and W.C.G. Burns, <i>Navy Sonar and Cetaceans: Just How Much Does the Gun Need to Smoke before We Act?</i> <i>56 Marine Pollution Bulletin</i> 1248 (2008).</p>	<p>As presented in the EIS/OEIS Section 3.4.3.1.2.6 (Nitrogen Decompression), and elsewhere in the analysis, this topic was already incorporated into the analysis.</p>
<p>NRDC-132</p>	<p>Other Harmful Effects of Sonar</p> <p>Strandings and mass mortalities, though an obvious focus of much reporting and concern, are likely only the tip of the iceberg of sonar’s harmful effects. Marine mammals are believed to depend on sound to navigate, find food, locate mates, avoid predators, and communicate with each other. Flooding their habitat with man-made, high-intensity noise interferes with these and other functions. In addition to strandings and non-auditory injuries, the harmful effects of high-intensity sonar include:</p> <ul style="list-style-type: none"> • temporary or permanent loss of hearing, which impairs an animal’s ability to 	<p>As presented in the EIS/OEIS Section 3.4. (Marine Mammals) these potential impacts have been discussed and incorporated into the analysis with the exception of “aggressive (or agonistic) behavior, which can result in injury” for which there is no citation. The Navy is unaware of any scientific observations on wild marine mammals where high intensity sonar has been shown to cause these behaviors from which injury can result.</p> <p>The Navy agrees that substantial new science has emerged regarding</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>communicate, avoid predators, detect and capture prey, and avoid ship strikes;</p> <ul style="list-style-type: none"> • avoidance behavior, which can lead to abandonment of habitat or migratory pathways; • disruption of biologically important behaviors such as mating, feeding, nursing, or migration, or loss of efficiency in conducting those behaviors; • aggressive (or agonistic) behavior, which can result in injury; • masking of biologically meaningful sounds, such as the call of predators or potential mates; • chronic stress, which can compromise viability, suppress the immune system, and lower the rate of reproduction; • habituation, causing animals to remain near damaging levels of sound, or sensitization, exacerbating other behavioral effects; and • declines in the availability and viability of prey species, such as fish and shrimp. <p>Over the past 20 years, a substantial literature has emerged documenting the range of effects of ocean noise on marine mammals.¹⁶⁷</p> <p>¹⁶⁷ For a review of research on behavioral and auditory impacts of undersea noise, see, e.g., L.S. Weilgart, <i>The Impacts of Anthropogenic Ocean Noise on Cetaceans and Implications for Management</i>, 85 <i>Canadian Journal of Zoology</i> 1091-1116 (2007); W.J. Richardson, C.R. Greene, Jr., C.I. Malme, and D.H. Thomson, <i>Marine Mammals and Noise</i> (1995); National Research Council, <i>Ocean Noise and Marine Mammals</i> (2003); Whale and Dolphin Conservation Society, <i>Oceans of Noise</i> (2004).</p>	<p>sound in the water and marine mammals, however, the citations in the comment are generally old and do not reflect the full scope of current best available science. See Section 3.4 (Marine Mammals) for a fuller review of the current best available science.</p>
NRDC-133	<p>Marine mammals are not the only species affected by undersea noise. Impacts on fish are of increasing concern due to several recent studies demonstrating hearing loss and widespread behavioral disruption in commercial species of fish and to reports, both experimental and anecdotal, of catch rates plummeting in the vicinity of noise sources. Further, the death of species not protected by federal law reduces prey available to listed species. And noise has been shown in several cases to kill, disable, or disrupt the behavior of invertebrates, many of which possess ear-like structures or other sensory mechanisms that could leave them vulnerable. It is clear that intense sources of noise are capable of affecting a wide class of ocean life.</p>	<p>See the NWTT EIS/OEIS Section 3.9 (Fish) regarding discussion of the science and the analysis of impacts to fish. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. This includes impacts to marine habitats, vegetation, invertebrates, and fish.</p>
NRDC-134	<p>CRITIQUE OF THE NAVY'S ACOUSTICS ANALYSIS</p> <p>We urge the Navy to substantially alter the approach it has taken thus far. The Navy must revise its acoustic impact analysis to reflect the evidence of mid-frequency sonar's effects on marine life. Unfortunately, the Navy's current assessment of acoustic impacts disregards a great deal of relevant information adverse to its interests, uses approaches and methodologies that would not be acceptable to the scientific community, and ignores whole categories of impacts. In issuing a revised DEIS the Navy should (1) reduce its thresholds or risk function for marine mammal injury, hearing loss, and significant behavioral change, in accordance with the available science; (2) address the</p>	<p>The criteria and thresholds for determining potential effects on marine species used in the NWTT EIS/OEIS were developed based on best available science. See the cited Finneran and Jenkins (2012; <i>Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis</i> technical report), which can be found at www.NWTTTEIS.com. Indicative that the approaches and methods used by the Navy are in fact acceptable to the scientific community, the National Oceanic and Atmospheric Administration has recently proposed for adoption the same criteria and thresholds used by the Navy for PTS and TTS after</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>considerable scientific record that has developed around sonar and whale injury and mortality; and (3) revise its impact assessment model to take account of complex sound fields, synergistic effects from multiple sound sources, and the presence of vulnerable populations in the NWTT Study Area.</p>	<p>undergoing an internal review and an external peer review [see http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm for more details]. See the EIS/OEIS Section 3.4.3.1 (Acoustic Stressors) for a discussion of the science where these topics have been addressed. Based on the advancement of science, the analysis presented in the NWTT EIS/OEIS included lowering the thresholds over much of the hearing range of many species of marine mammals. See the cited Finneran and Jenkins (2012; Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis technical report), which can be found at www.NWTTTEIS.com.</p> <p>See the EIS/OEIS Section 3.4.4 (Summary of Impacts (Combined Impacts of all Stressors) on Marine Mammals) where synergistic effects are discussed. With regard to the acoustic model, the Navy's analysis accounts for all sound sources within a given training or testing activity and therefore synergistic effects from multiple sound sources.</p> <p>As described in the EIS/OEIS Section 3.4.31.2.12.1 (Sonar and Other Active Acoustic Sources), species which show a sensitivity to sound such as harbor porpoises and beaked whales, received a lower threshold for predicting behavioral reactions than other marine mammal species. Marine Mammals listed under the Endangered Species Act were given special consideration in the analysis (see Section 3.4.3 – Environmental Consequences) and will also be subject to additional consultation requirements under that Act.</p>
<p>NRDC-135</p>	<p>Thresholds of Injury, Hearing Loss and Behavioral Change</p> <p>At the core of the Navy's assessment of acoustic impacts are the thresholds it has established for physiological and behavioral effects. There are significant problems with the Navy's thresholds, as discussed below.</p> <p>1. Injury</p> <p>The Navy sets the threshold for onset permanent threshold shift ("PTS"), which is the highest threshold for direct physical injury, at 198 dB re 1 $\mu\text{Pa}^2\cdot\text{s}$ for all mysticetes, dolphins, beaked whales, and medium- and large-toothed whales; 172 dB re 1 $\mu\text{Pa}^2\cdot\text{s}$ for porpoises and <i>Kogia</i> spp.; 197 dB re 1 $\mu\text{Pa}^2\cdot\text{s}$ for northern elephant and harbor seals; and 220 dB re 1 $\mu\text{Pa}^2\cdot\text{s}$ for sea lions, fur seals, and sea otters. DEIS at 3.4-100. These thresholds are inconsistent with the scientific literature.</p>	<p>The thresholds used in the EIS/OEIS are not inconsistent with current scientific literature given that the criteria and thresholds for determining potential effects on marine species used in the NWTT EIS/OEIS and were developed based on best available science. See the cited Finneran and Jenkins (2012; <i>Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis</i>) technical report, which can be found at www.NWTTTEIS.com.</p>
<p>NRDC-136</p>	<p>For instance, the Navy disregards data gained from actual whale mortalities. The best available scientific evidence, as reported in the peer-reviewed literature, indicates that sound levels at the most likely locations of beaked whales beached in the Bahamas</p>	<p>As presented in the EIS/OEIS Section 3.4.3.1.8 (Stranding), the Bahamas incident and other mortality events have been considered in the analysis. Environmental conditions in the NWTT Study Area and</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>strandings run far lower than the Navy’s threshold for injury here: approximately 150-160 dB re 1 μPa for 50-150 seconds, over the course of the transit.¹⁶⁸ A further modeling effort, undertaken in part by the Office of Naval Research, suggests that the mean exposure level of beaked whales, given their likely distribution in the Bahamas’ Providence Channels and averaging results from various assumptions, may have been lower than 140 dB re 1 μPa.¹⁶⁹ Factoring in duration, then, evidence of actual sonar-related mortalities would compel a maximum energy level threshold for serious injury on the order of 182 dB re 1 μPa²•s, at least for beaked whales. Indeed, to pay at least some deference to the literature, the Navy—under pressure from NMFS—has previously assumed that non-lethal injury would occur in beaked whales exposed above 173 dB re 1 μPa²•s.¹⁷⁰</p> <p>¹⁶⁸ J. Hildebrand, “Impacts of Anthropogenic Sound,” in T.J. Ragen, J.E. Reynolds III, W.F. Perrin, and R.R. Reeves, <i>Conservation beyond Crisis</i> (2005). See also International Whaling Commission, 2004 Report of the Scientific Committee, Annex K at § 6.3.</p> <p>¹⁶⁹ J. Hildebrand, K. Balcomb, and R. Gisiner, <i>Modeling the Bahamas Beaked Whale Stranding of March 2000</i> (2004) (presentation given at the third plenary meeting of the U.S. Marine Mammal Commission Advisory Committee on Acoustic Impacts on Marine Mammals, 29 July 2004).</p> <p>¹⁷⁰ See, e.g., Navy, <i>Joint Task Force Exercises and Composite Training Unit Exercises Final Environmental Assessment/ Overseas Environmental Assessment</i> at 4-44, 4-46 to 4-47 (2007).</p>	<p>the types of activities proposed in the EIS/OEIS have no relationship to those present in the Bahamas incident.</p> <p>As presented in the EIS/OEIS Section 3.4.3.1.6.2 (Behavioral Reactions to Sonar and Other Active Acoustic Sources) and over the last 14 years since the Bahamas incident, the Navy has been funding research in the Bahamas and Southern California specifically to better understand the reactions of beaked whale to Navy mid-frequency sonar. The thresholds and criteria in the NWTT EIS/OEIS represent the best available science and a marked improvement in the state of science over the last 14 years. Note also that the conditions present in the Bahamas are not present in the NWTT Study Area and as presented in Chapter 5, the Navy has avoided training and testing in such areas on it range complexes for more than a decade.</p> <p>The reference to 173 dB and non-lethal injury to beaked whales is out of date science and note that the reference in the comment was to an Environmental Assessment completed over 7 years ago providing a conservative overestimate of impacts given it was one of the first such analyses. Since that time, Navy and NMFS have refined the analytical approach using the best available science as reflected in the NWTT EIS/OEIS and rulemaking over the past 7 years.</p>
NRDC-137	<p>In addition, the DEIS goes to great pains to create uncertainty about published research on bubble growth in marine mammals, which separately indicates the potential for injury and death at levels far lower than what the Navy proposes. DEIS at 3.4-69 to 71. According to the best available scientific evidence, as represented by multiple papers in flagship journals such as <i>Nature</i> and <i>Veterinary Pathology</i>, gas bubble growth is the causal mechanism most consistent with the observed injuries;¹⁷¹ in addition, it was singularly and explicitly highlighted as plausible by an expert panel convened by the Marine Mammal Commission, in which the Navy participated.¹⁷² Nonetheless, the Navy fails to evaluate the impacts from this potential avenue of injury and entirely disregards key literature.¹⁷³ NEPA requires agencies to evaluate all “reasonably foreseeable” impacts, which, by definition, include “impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.” 40 C.F.R. § 1502.22. The scientific literature supporting bubble growth rises far above this standard, and the Navy’s failure to incorporate it into its impact model is arbitrary and capricious. Thus, the Navy’s refusal to consider these impacts is insupportable under NEPA. 40 C.F.R. §§ 1502.22, 1502.24.</p> <p>¹⁷¹ See, e.g., A. Fernández, J.F. Edwards, F. Rodríguez, A. Espinosa de los Monteros, P. Herráez, P. Castro, J.R. Jaber, V. Martín, and M. Arbelo, ‘Gas and Fat Embolic Syndrome’ Involving a Mass Stranding of Beaked Whales (Family Ziphiidae) Exposed to Anthropogenic Sonar Signals, <i>42 Veterinary Pathology</i> 446 (2005); P.D. Jepson, M.</p>	<p>The citations in this comment relate to untested hypotheses presented 9 to 11 years ago. As detailed in the NWTT EIS/OEIS Section 3.4.3.1.2.5 (Bubble Formation (Acoustically Induced)) and Section 3.4.3.1.2.6 (Nitrogen Decompression) the best available science over the last decade has provided numerous additional and informative findings constituting the complete record on issues involving bubble formation in diving animals. In some of the earlier studies, the presence of bubbles postmortem caused by putrefaction in stranded carcasses may have been confused with gas embolism, are not necessarily indicative of bubble pathology, and they may also result from invasive investigative procedures. Also note that the comment’s cited Moore and Early (2004) reference demonstrated that sperm whales, which died over a century ago, have bubble lesions indicating them to be naturally occurring and clearly unrelated to sonar being a cause. NWTT EIS/OEIS has not disregarded key literature on the subject. For example, the comment’s citation of Bernaldo de Quiros et al. (2013) as “key literature” involves autopsy study of rabbits and has little bearing on analysis of the Proposed Action so the Navy does not therefore consider this “key literature”, however, see the EIS/OEIS Section 3.4.3.1.2.5 reference to Bernaldo de Quiros et al. (2012). Navy</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>Arbelo, R. Deaville, I.A.P. Patterson, P. Castro, J.R. Baker, E. Degollada, H.M. Ross, P. Herráez, A.M. Pocknell, F. Rodríguez, F.E. Howie, A. Espinosa, R.J. Reid, J.R. Jaber, V. Martín, A.A. Cunningham, and A. Fernández, Gas-Bubble Lesions in Stranded Cetaceans, 425 Nature 575-576 (2003); R.W. Baird, D.L. Webster, D.J. McSweeney, A.D. Ligon, G.S. Schorr, and J. Barlow, Diving Behavior of Cuvier's (Ziphius cavirostris) and Blainville's (Mesoplodon densirostris) Beaked Whales in Hawaii," 84 Canadian Journal of Zoology 1120-1128 (2006).</p> <p>¹⁷² T.M. Cox, T.J. Ragen, A.J. Read, E. Vos, R.W. Baird, K. Balcomb, J. Barlow, J. Caldwell, T. Cranford, L. Crum, A. D'Amico, G. D'Spain, A. Fernández, J. Finneran, R. Gentry, W. Gerth, F. Gulland, J. Hildebrand, D. Houser, T. Hullar, P.D. Jepson, D. Ketten, C.D. MacLeod, P. Miller, S. Moore, D. Mountain, D. Palka, P. Ponganis, S. Rommel, T. Rowles, B. Taylor, P. Tyack, D. Wartzok, R. Gisiner, J. Mead, and L. Benner, Understanding the Impacts of Anthropogenic Sound on Beaked Whales, 7 Journal of Cetacean Research & Management 177-87 (2006).</p> <p>¹⁷³ A. Fahlman, P.L. Tyack, P.J.O. Miller, and P.H. Kvadsheim, How man-made interference might cause gas bubble emboli in deep diving whales, 5 Frontiers in Physiology 13 (2014).M.J. Moore and G.A. Early, Cumulative sperm whale bone damage and the bends, 306 Science 2215 (2004); R. Williams, S. Gero, L. Bejder, J. Calambokidis, S.D. Kraus, D. Lusseau, A.J. Read, and J. Robbins, Underestimating the damage: interpreting cetacean carcass recoveries in the context of the Deepwater Horizon/BP incident; P.D. Jepson, R. Deaville, I.A.P. Patterson, A.M. Pocknell, H.M. Ross, J.R. Baker, F.E. Howie, R.J. Reid, A. Colloff, and A.A. Cunningham, Acute and chronic gas bubble lesions in cetaceans stranded in the United Kingdom, 42 Veterinary Pathology 291-305 (2005); and Y. Bernaldo de Quiros, O. Gonzalez-Diaz, A. Mollerlokken, A.O. Brubakk, A. Hjelde, P. Saavedra, and A. Fernandez, Differentiation at autopsy between in vivo gas embolism and putrefaction using gas composition analysis, 127 Int. J. Legal Med. 2:437-45 (2013).</p>	<p>does not need to present every publication on the subject to present a thorough presentation of the evolving scientific discourse constituting the best available science pertinent to the NWTT EIS/OEIS.</p> <p>As presented in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) the types of impacts noted in the comment are not reasonably foreseeable given the years of research and monitoring data across multiple Navy range complexes indicating no evidence of "catastrophic consequences."</p> <p>Regarding the scientific literature supporting bubble growth, as presented in the EIS/OEIS Section 3.4.3.1.2.5 (Bubble Formation) and Section 3.4.3.1.2.6 (Nitrogen Decompression), the Navy has considered the issue in its analysis and is consistent with the findings from Bernaldo de Quiros et al. (2012), Dennison et al. (2011) and Kvadsheim et al. (2012) as discussed in those sections.</p>
NRDC-138	<p>2. Temporary Threshold Shift</p> <p>The DEIS sets its threshold for temporary hearing loss and behavioral effects, or "temporary threshold shift" ("TTS"), at 178 dB re 1 µPa²•s for all mysticetes, dolphins, beaked whales, and medium- and large-toothed whales; 152 dB re 1 µPa²•s for porpoises and Kogia spp.; 183 dB re 1 µPa²•s for northern elephant and harbor seals; and 206 dB re 1 µPa²•s for sea lions, fur seals, and sea otters. DEIS at 3.4-100. It bases its cetacean threshold primarily on a synthesis of studies on two species of cetaceans, bottlenose dolphins and beluga whales, conducted by the Navy's SPAWAR laboratory in San Diego and, to a lesser extent, by researchers at the University of Hawaii. Id.</p>	<p>This is not true for cetaceans in general as presented in the EIS/OEIS Section 3.4.3.1.11.3 (Temporary Threshold Shift for Sonar and Other Active Acoustic Sources) although it is accurate for mid-frequency cetaceans. Results from experiments on harbor porpoise have also been considered in the development of the cetacean criteria. See the cited Finneran and Jenkins (2012) for details.</p>
NRDC-139	<p>Notably, the Navy's extrapolation of data from bottlenose dolphins and belugas to all cetaceans other than harbor porpoises and Kogia is not justifiable. Given the close association between acoustic sensitivity and threshold shift, such an approach must presume that belugas and bottlenose dolphins have the best hearing sensitivity in the mid-frequencies of any cetacean. However, killer whales are more sensitive over part of the mid-frequency range than are the two species in the SPAWAR and Hawaii studies.¹⁷⁴ Furthermore, it is likely that the animals in the studies do not represent the full range of variation even within their own species, particularly given their age and situation: the SPAWAR animals, for example, have been housed for years in a noisy bay.¹⁷⁵</p> <p>¹⁷⁴ Richardson et al., Marine Mammals and Noise at 209.</p> <p>¹⁷⁵ M.L.H. Cook, Behavioral and Auditory Evoked Potential (AEP) Hearing Measurements in Odontocete</p>	<p>The criteria and thresholds for determining potential effects on marine species used in the NWTT EIS/OEIS and were developed based on best available science. See the cited Finneran and Jenkins (2012; Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis technical report), which can be found at www.NWTTEIS.com.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	Cetaceans (2006) (Ph.D. thesis).	
NRDC-140	Also, relevant to both calculations for TTS and PTS, it should be noted that low-frequency cetaceans have good low-frequency sensitivity out to 10 kilohertz, thus the Southall weighting function is not the best approach to capture functional hearing ranges, as the low-frequency curve should not be modified until reaching the 10 kilohertz frequency and it should be flatter out to about 30 kilohertz.	As presented in the NWTT EIS/OEIS Section 3.4.2.3 (Vocalization and Hearing of Marine Mammals) the Navy is already aware of these facts and has accounted for the hearing sensitivity of low frequency cetaceans out to 30 kHz based on the best available science.
NRDC-141	<p>3. “Risk Function” for Behavioral Effects and Thresholds</p> <p>There are many glaring problems with the Navy’s adoption of an acoustic risk function to estimate the probability of behavioral effects. Dr. Bain sets forth a detailed critique, which is attached to this letter. Several problems are discussed below.</p> <p>Once again, the Navy relies on studies of temporary threshold shift in captive animals for its primary source of data. DEIS 3.4-104. Marine mammal scientists have long recognized the deficiencies of using captive subjects in behavioral experiments, and to blindly rely on this material, to the exclusion of copious data on animals in the wild, is not supportable by any standard of scientific inquiry. Cf. 40 C.F.R. § 1502.22. The problem is exacerbated further by the fact that the subjects in question, roughly two belugas and five bottlenose dolphins, are highly trained animals that have been working in the Navy’s research program in the SPAWAR complex for years.¹⁷⁶ Indeed, the disruptions observed by Navy scientists, which included pronounced, aggressive behavior (“attacking” the source) and avoidance of feeding areas associated with the exposure, occurred during a research protocol that the animals had been rigorously trained to complete.¹⁷⁷ The SPAWAR studies have several other major deficiencies that NMFS, among others, has repeatedly pointed out. In relying so heavily on them, the Navy has once again ignored the comments of numerous marine mammal behaviorists on the Navy’s USWTR DEIS, which sharply criticized the Navy for putting any serious stock in them.¹⁷⁸</p> <p>¹⁷⁶ See, e.g., S.H. Ridgway, D.A. Carder, R.R. Smith, T. Kamolnick, C.E. Schlundt, and W.R. Elsberry, Behavioral Responses and Temporary Shift in Masked Hearing Threshold of Bottlenose Dolphins, <i>Tursiops truncatus</i>, to 1-Second Tones of 141 to 201 dB re 1 μPa (1997) (SPAWAR Tech. Rep. 1751, Rev. 1).</p> <p>¹⁷⁷ C.E. Schlundt, J.J. Finneran, D.A. Carder, and S.H. Ridgway, Temporary Shift in Masked Hearing Thresholds of Bottlenose Dolphins, <i>Tursiops truncatus</i>, and White Whales, <i>Delphinapterus leucas</i>, after Exposure to Intense Tones, 107 <i>Journal of the Acoustical Society of America</i> 3496, 3504 (2000).</p> <p>¹⁷⁸ See comments from M. Johnson, D. Mann, D. Nowacek, N. Soto, P. Tyack, P. Madsen, M. Wahlberg, and B. Møhl, received by the Navy on the Undersea Warfare Training Range DEIS. These comments are hereby incorporated into this letter. See also Letter from Rodney F. Weiher, NOAA, to Keith Jenkins, Naval Facilities Engineering Command Atlantic (Jan. 30, 2006); Memo, A.R. document 51, NRDC v. Winter, CV 06-4131 FMC (JCx) (undated NOAA memorandum).</p>	<p>As noted in responses above, Dr. Bain’s critique it is in reference to an older (2007) Draft EIS in another location (the Hawaii Range Complex) and which used an analysis that over the last seven years has been updated. Dr. Bain’s critique is therefore not relevant to the NWTT EIS/OEIS. Please note that all comments from Dr. Bain’s critique (all comments within that critique) were previously responded to in the 2009 Hawaii Range Complex Final Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS).</p> <p>The criteria and thresholds for determining potential effects on marine species used in the NWTT EIS/OEIS and related consultation documents were carefully revised since the 2006 USWTR Draft EIS based on best available science. See the cited Finneran and Jenkins (2012; Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis technical report), which can be found at www.NWTTTEIS.com. Additionally, the National Oceanic and Atmospheric Administration has recently proposed for adoption use the same criteria and thresholds used by the Navy for PTS and TTS after undergoing an internal review and an external peer review [see http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm for more details].</p>
NRDC-142	In addition, the Navy appears to have misused data garnered from the Haro Strait incident—one of only three data sets it considers—by including only those levels of sound received by the “J” pod of killer whales when the USS Shoup was at its closest	See the NWTT EIS/OEIS citing to U.S. Department of the Navy 2004 for accurate details regarding the reported behaviors of the “J” pod killer whales. The killer whales of J-pod were exposed to multiple

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>approach. DEIS at 3.4-81; 3.4-104. These numbers represent the maximum level at which the pod was harassed; in fact, the whales were reported to have broken off their foraging and to have engaged in significant avoidance behavior at far greater distances from the ship, where received levels would have been orders of magnitude lower.¹⁷⁹ Not surprisingly, then, the Navy's results are inconsistent with other studies of the effects of various noise sources, including mid-frequency sonar, on killer whales. We must insist, again, that the Navy provide the public with its propagation analysis for the Haro Strait event.</p> <p>¹⁷⁹ See, e.g., NMFS, Assessment of Acoustic Exposures on Marine Mammals in Conjunction with USS Shoup Active Sonar Transmissions in the Eastern Strait of Juan de Fuca and Haro Strait, Washington—5 May 2003 at 4-6 (2005).</p>	<p>stimuli, and it is impossible to assess a precise sound level at which the animals reacted due to all the other stimuli such as the presence of whale watching vessels. Furthermore, the Navy did use the estimated received levels from the Haro Strait/USS SHOUP incident in the development of the behavioral response function. See the cited Fromm 2004a, b; U.S. Department of the Navy 2004; National Marine Fisheries Service 2005b for the propagation analysis for the Haro Strait event.</p>
NRDC-143	<p>The Navy also fails to include data from the July 2004 Hanalei Bay event, in which 150-200 melon-headed whales were embayed for more than 24 hours during the Navy's Rim of the Pacific exercise. According to the Navy's analysis, predicted mean received levels (from mid-frequency sonar) inside and at the mouth of Hanalei Bay ranged from 137.9 dB to 149.2 dB.¹⁸⁰ The Navy has from the beginning denied any connection between its major international exercise and the mass stranding. However, the Navy's specious reasoning is at odds with the stranding behavior observed during the event and with NMFS' report on the matter, which ruled out every other known potential factor and concluded that sonar was the "plausible if not likely" cause.¹⁸¹ The Navy's failure to incorporate these numbers into its methodology as another data set is unjustifiable.</p> <p>¹⁸⁰ Navy, 2006 Supplement to the 2002 Rim of the Pacific (RIMPAC) Programmatic Environmental Assessment D-1 to D-2 (May 2006).</p> <p>¹⁸¹ B.L. Southall, R. Braun, F.M.D. Gulland, A.D. Heard, R.W. Baird, S.M. Wilkin, and T.K. Rowles, Hawaiian Melon-Headed Whale (<i>Peponacephala electra</i>) Mass Stranding Event of July 3-4, 2004 (2006) (NOAA Tech. Memo. NMFS-OPR-31); See also R.L. Brownell, Jr., K Ralls, S. Baumann- Pickering and M.M. Poole, Behavior of melon-headed whales, <i>Peponacephala electra</i>, near oceanic islands, Marine Mammal Science, (publication pending 2009).</p>	<p>See U.S. Department of the Navy (2013) cited in Section 3.4.3.1.8 (Stranding) regarding the Hanalei Bay event for which the "contributing factor" link between sonar and the melon-headed whale event highly speculative at best.</p>
NRDC-144	<p>The Navy also fails to incorporate data on harbor porpoises and beaked whales when setting its thresholds. For both harbor porpoises and beaked whales, the Navy uses lower thresholds to determine behavioral impacts (120 dB and 140 dB, respectively) but fails to also incorporate that data when determining thresholds for other species. While these animals may reflect a particular sensitivity to noise, the DEIS fails to explain why this data cannot be incorporated in some way when determining thresholds for other species. By failing to incorporate this data into its modeling, the Navy unjustifiably ignores relevant information.</p>	<p>Both beaked whales and harbor porpoises have been shown to be particularly sensitive to sound and therefore have been assigned a lower threshold. The Navy will assess data on additional species as it becomes available and work with NMFS to assign the most appropriate thresholds for predicting significant behavioral effects.</p>
NRDC-145	<p>Furthermore, the risk function should have taken into account the social ecology of some marine mammal species. For species that travel in tight-knit groups, an effect on certain individuals can adversely influence the behavior of the whole. (Pilot whales, for example, are prone to mass strand for precisely this reason; the plight of the 200 melon-headed</p>	<p>As presented in the NWTT EIS/OEIS, the acoustic effects model does not operate on the basis of an individual animal but quantifies potential effects that NMFS may classify as takes based on the summation of fractional marine mammal densities. The acoustic effects model is run</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	whales in Hanalei Bay, and of the “J” pod of killer whales in Haro Strait, and the most recent stranding of melon-headed whales in the Philippines may be pertinent examples.) Should those individuals fall on the more sensitive end of the spectrum, the entire group or pod can suffer significant harm at levels below what the Navy would take as the mean. In developing its “K” parameter, the Navy must take account of such potential indirect effects. 40 C.F.R. § 1502.16(b).	multiple times and the average of the results is used to report the number of potential acoustic effects. This method provides a good estimate of potential effects when considering multiple scenarios over a wide area and multiple years. Additionally, the behavioral response function includes observations of the J-pod in Haro Strait.
NRDC-146	We must also note that the Navy’s exclusive reliance on sound pressure levels (“SPLs”) in setting a behavioral threshold is misplaced. The discussion in the DEIS speaks repeatedly of uncertainty in defining the risk function and recapitulates, in its summary of the earlier methodology, the benefits implicit in the use of a criterion that takes duration into account. It is therefore appropriate for the Navy to set dual thresholds for behavioral effects, one based on SPLs and one based on energy flux density levels (“ELs”).	This comment represents a misunderstanding of the criteria and thresholds. As discussed in Section 3.4.3.1.11.3 (Temporary Threshold Shift for Sonar and Other Active Acoustic Sources) a TTS exposure is based on SEL and as presented in Section 3.4.3.1.18 (Application of the Marine Mammal Protection Act to Potential Acoustic and Explosive Effects), since TTS is only a temporary reduction in hearing sensitivity it is considered by the Navy and NMFS as a Level B effect overlapping the behavioral effects quantified using SPL criteria and exposures under the behavioral risk function.
NRDC-147	In addition, the Navy’s threshold is applied in such a way as to preclude any assessment of long-term behavioral impacts on marine mammals. It does not account, to any degree, for the problem of repetition: the way that apparently insignificant impacts, such as subtle changes in dive times or vocalization patterns, can become significant if experienced repeatedly or over time. ¹⁸² <small>¹⁸² The importance of this problem for marine mammal conservation is reflected in a recent NRC report, which calls for models that, inter alia, translate such subtle changes into disruptions in key activities like feeding and breeding that are significant for individual animals. National Research Council. Marine Mammal Populations and Ocean Noise: Determining When Noise Causes Biologically Significant Effects 35-68 (2005).</small>	See Section 3.4.1.7 (Repeated Exposures), Chapter 4 (Cumulative Impacts), Section 3.4.3.1.9 (Long-Term Consequences to the Individual and the Population), and Section 3.4.3 (Summary of Impacts (Combined Impacts of all Stressors) on Marine Mammals) where cumulative impacts are addressed. Specifically for marine mammals, assessment of long-term cumulative impacts to species and stocks is best represented by the discussion in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities). Note that the citation to this comment is approximately 9 years old and since that time, research and monitoring at Navy range complexes have contributed greatly to the science in this regard. See Section 3.4.3.1.6 (Behavioral Reactions) and 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) for more up to date discussion.
NRDC-148	We are also concerned with the weighting of behavioral thresholds for marine mammals. This approach is not as conservative as it should be in the low frequencies given the apparently strong reaction that have been documented in odontocetes in response to predominantly low-frequency sources (e.g., seismic). Thus, we believe there should be no weighting applied to behavioral thresholds.	This comment suggests a fundamental misunderstanding of the weighting function, which is specifically designed to most accurately account for the hearing sensitivity of the various marine mammal groups; See Section 3.4.3.1.11 (Frequency Weighting). Additionally, there is no proposed use of seismic research airguns in the NWTT EIS/OEIS, therefore, this comment regarding modifying the weighting functions based on response to use of airguns is not relevant to the NWTT EIS/OEIS.
NRDC-149	Finally, while the Navy has set a specific threshold for beaked whales (140 dB) based on	The cited studies and their findings were incorporated into the NWTT

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>the Tyack et al. study, it fails to incorporate additional data on beaked whales indicating that the threshold should be even lower.¹⁸³</p> <p>In sum, the Navy has established thresholds and a risk function that are fundamentally inconsistent with the scientific literature on acoustic impacts and with marine mammal science in general. Indeed, using these thresholds to support a final EIS would violate NEPA.</p> <p>¹⁸³ P.L. Tyack et al., Beaked Whales Respond to Simulated and Actual Navy Sonar, PLoS ONE 6(3): e17009. Doi:10.1371/journal.pone.0017009 (2011); B. Southall et al., Biological and behavioral response studies of marine mammals in Southern California, 2010 ("SOCAL-10"), Project Report, 26 February 2011 (2011); B. Southall et al., Biological and behavioral response studies of marine mammals in Southern California, 2011 ("SOCAL-11"), Final Project Report, 8 March 2012 (2012).</p>	<p>EIS/OEIS such as was presented in Section 3.4.3.1.6 (Behavioral Reactions). Based on the best available science 140 dB re 1µPa (root mean square) is a conservative threshold for predicting potential behavioral effects on beaked whales from sonar signals.</p> <p>This comment is not correct. See discussion of the scientific literature in Section 3.4.3.1.11 (Frequency Weighting), Section 3.4.3.1.11.2 (Hearing Loss – Temporary and Permanent Threshold Shift) and the cited Finneran and Jenkins (2012), Section 3.4.3.1.12.2 (Sound from Explosions), and Section 3.4.3.1.13 (Mortality and Injury from Explosions). Additionally, the National Oceanic and Atmospheric Administration has recently proposed for adoption use the same criteria and thresholds used by the Navy for PTS and TTS after undergoing an internal review and an external peer review [see http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm for more details].</p> <p>The statement in the comment that “using these thresholds...would violate NEPA” is incorrect. The threshold and criteria were developed in coordination with the National Marine Fisheries Service as a cooperating agency. In addition, they are fully consistent with previous NEPA analyses, current rulemaking, and were derived using the best available science.</p>
<p>NRDC-150</p>	<p>Modeling of Acoustic Impacts</p> <p>The Navy bases its calculation of marine mammal impacts on a series of models that determine received levels of sound within a limited distance of a sonar array and then estimate the number of animals that would therefore suffer injury or disruption. It is difficult to fully gauge the accuracy and rigor of these models with the limited information that the DEIS provides; but even from the description presented here, it is clear that they are deeply flawed. Among the non-conservative assumptions that are implicit in the model:</p> <p>(1) As discussed above, the thresholds established for injury and behavioral effects are inconsistent with the available data and are based, in part, on assumptions not acceptable within the field;</p>	<p>The description presented in this section of the comments is not accurate. In addition to the data in the EIS/OEIS Section 3.4.3.1.14 (Quantitative Analysis), there is additional information presented and cited in the EIS/OEIS including three technical reports describing the modeling (Navy’s Pacific Marine Species Density Database Technical Report; Navy’s Determination of Acoustic Effects Technical Report; Post-Model Quantitative Analysis of Animal Avoidance Behavior and Mitigation Effectiveness for Northwest Training and Testing Activities).</p> <p>This comment (#1) is not correct. See Section 3.4.3.1.11 (Frequency Weighting), Section 3.4.3.1.11.2 (Hearing Loss – Temporary and Permanent Threshold Shift) and the cited Finneran and Jenkins (2012), Section 3.4.3.1.12.2 (Sound from Explosions), and Section 3.4.3.1.13 (Mortality and Injury from Explosions). Additionally, the National Oceanic and Atmospheric Administration has recently proposed for adoption use the same criteria and thresholds used by the Navy for PTS and TTS after undergoing an internal review and an external peer review [see http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm for more details]</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC-151	<p>(2) The Navy does not properly account for reasonably foreseeable reverberation effects (as in the Haro Strait stranding incident),¹⁸⁴ giving no indication that its modeling sufficiently represents areas in which the risk of reverberation is greatest;</p> <p>¹⁸⁴ NMFS, Assessment of Acoustic Exposures on Marine Mammals in Conjunction with USS Shoup Active Sonar Transmissions in the Eastern Strait of Juan de Fuca and Haro Strait, Washington, 5 May 2003 (2005).</p>	<p>As provided in the EIS/OEIS section 3.4.3.1.14.3 (Navy Acoustic Effects Model) the Navy acoustic effects modeling includes all sources within a scenario simultaneously and incorporates site-specific bathymetry, sound speed profiles, wind speed, and bottom properties into the propagation modeling. Multiple conservative assumptions incorporated into the model are assumed to overestimate impacts. This approach applies the best available science and computer modeling to represent a quantitative estimate of impacts to marine mammals regardless of where they may occur.</p>
NRDC-152	<p>(3) The model fails to consider the possible synergistic effects of using multiple sources, such as ship-based sonars, in the same exercise, which can significantly alter the sound field. It also fails to consider the combined effects of multiple exercises, which, as NMFS indicates, may have played a role in the 2004 Hanalei Bay strandings;¹⁸⁵</p> <p>¹⁸⁵ Southall et al., Hawaii Melon-Headed Whale at 31, 45.</p>	<p>As presented in Section 3.4.3.1.11.1 (Summation of Energy from Multiple Sources) and Section 3.4.3.1.14.3 (Navy Acoustic Effects Model), the model accounts for all sound sources used in the same event (“exercise”). See U.S. Department of the Navy (2013) cited in Section 3.4.3.1.8 (Stranding) regarding the Hanalei Bay event for which the “contributing factor” link between sonar and the melon-headed whale event highly speculative at best. An analysis of impacts from multiple exercises and activities (all Navy training and testing) is presented in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities).</p>
NRDC-153	<p>(4) In assuming animals are evenly distributed, the model fails to consider the magnifying effects of social structure, whereby impacts on a single animal within a pod, herd, or other unit may affect the entire group;¹⁸⁶ and</p> <p>¹⁸⁶ The effects of this deficiency are substantially increased by the Navy’s use of a risk function, rather than an absolute threshold, to estimate Level B harassment.</p>	<p>As presented in Section 3.4.3.1.14.1 (Marine Species Density Data), animals are not evenly distributed as the comment indicates, but are distributed based on density differences across the area. As presented in Section 3.4.3.1.14.3 (Navy Acoustic Effects Model) the group (pod) size has been factored into the modeling. There is no basis for assuming the “effects” of social structure would “magnify” any predicted effects any more than they might potentially diminish effects (experienced animals fail to react and so the entire pod continues with normal behavior). Also, because the model output does not consider the many mitigation measures that the Navy utilizes, including sonar power down and power off requirements should mammals be spotted, the model output overestimates the number of predicted effects. Given that animals in pods are easier to detect, especially when in large pods, it is even more likely that mitigation would be implemented. The use of a mathematical function used to predict potential behavioral effects to marine mammals (a risk function) has been supported by the best available science for many years (see for example, National Marine Fisheries Service (2008), Taking and Importing of Marine Mammals; U.S. Navy Training in the Hawaii Range Complex; Proposed Rule. Federal Register, Monday, June 23, 2008,</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		73(121):35510-35577) and use of an absolute threshold would not in any way be representative of social structure (or any other factor) in acoustic effects modeling.
NRDC-154	<p>(5) The model, in assuming that every whale encountered during subsequent exercises is essentially a new whale, does not address cumulative impacts on the breeding, feeding, and other activities of species and stocks.</p> <p>Before issuing a new DEIS, the Navy must revise its flawed modeling systems and make them available to the public.</p>	<p>The Navy acoustic effects model is not intended nor designed to provide an analysis of cumulative impacts other than from total sound exposure levels. See Section 3.4.1.7 (Repeated Exposures), Chapter 4 (Cumulative Impacts), Section 3.4.3.1.9 (Long-Term Consequences to the Individual and the Population), and Section 3.4.3 (Summary of Impacts (Combined Impacts of all Stressors) on Marine Mammals) where cumulative impacts are addressed. Specifically for marine mammals, assessment of long-term cumulative impacts to species and stocks is best represented by the discussion in Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities).</p>
NRDC-155	<p>Appendix C – CRITIQUE OF THE NAVY'S ACOUSTICS ANALYSIS CRITIQUE OF THE RISK ASSESSMENT MODEL EMPLOYED TO CALCULATE TAKES IN THE HAWAII RANGE COMPLEX SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT David E. Bain, Ph.D.</p> <p>Abstract Rather than using a fixed received level threshold for whether a take is likely to occur from exposure to mid-frequency sonar, the Navy proposed a method for incorporating individual variation. Risk is predicted as a function of three parameters: 1) a basement value below which takes are unlikely to occur; 2) the level at which 50% of individuals would be taken; and 3) a sharpness parameter intended to reflect the range of individual variation. This paper reviews whether the parameters employed are based on the best available science, the implications of uncertainty in the values, and biases and limitations in the model. Data were incorrectly interpreted when calculating parameter values, resulting in a model that underestimates takes.</p>	<p>The analytical methodology used in the NWTT EIS/OEIS was developed in close coordination with NMFS for the Hawaii Range Complex EIS/OEIS finalized in 2009. Past actions also included rulemaking by NMFS and issuance of a five year Letter of Authorization under the Marine Mammal Protection Act using the methodology presented in that previous EIS/OEIS. The "Appendix C – Critique" presented in these most recent comments is almost a verbatim repeat of the same critique presented in 2008 for the Hawaii Range Complex EIS/OEIS and again in 2012 for the Hawaii-SOCAL Training and Testing EIS/OEIS and so the following responses are also necessarily repetitive of the responses provided previously. As noted previously, the analysis presented in the NWTT EIS/OEIS represents the best available and most applicable science with regard to analysis of effects to marine mammals from sound sources. While recognizing there is incomplete and unavailable information with regard to behavioral impacts on marine mammals (see Section 3.4.3, Environmental Consequences), the response function curve extends to 120 dB sound pressure level specifically to encompass uncertainty and the potential for behavioral reactions in marine mammal species that may be affected by sounds perceived at levels just above ambient.</p>
NRDC-156	<p>Errors included failure to recognize the difference between the mathematical basement plugged into the model, and the biological basement value, where the likelihood of observed and predicted takes becomes non-negligible; using the level where the probability of take was near 100% for the level where the probability of take was 50%; and extrapolating values derived from laboratory experiments that were conducted on</p>	<p>NMFS, as a cooperating agency and in its role as the MMPA regulator, reviewed all available applicable data and determined there were specific data from three data sets that should be used to develop the criteria. NMFS then applied the response function to predict exposures that resulted in exposures that NMFS may classify as harassment.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	trained animals to wild animals without regard for the implications of training; and ignoring other available data, resulting in a further underestimation of takes.	NMFS developed two risk curves based on the Feller adaptive risk function, one for odontocetes and pinnipeds and one for mysticetes, with input parameters of B = 120dB, K = 45, 99 percent point = 195 dB, 50 percent point = 165 dB.
NRDC-157	In addition, uncertainty, whether due to inter-specific variation or parameter values based on data with broad confidence intervals, results in the model being biased to underestimate takes.	The commenter provides no specifics on why the takes would be underestimated. There is much conservativeness (overestimation) built into the modeling process (refer to Finneran and Jenkins [2012]). Additionally, NMFS, as a cooperating agency and in its role as the MMPA regulator, reviewed all available applicable data and determined there were specific data from three data sets that should be used to develop the criteria. NMFS then applied the risk function to predict exposures that resulted in exposures that NMFS may classify as harassment. NMFS developed two risk curves based on the Feller adaptive risk function, one for odontocetes and pinnipeds and one for mysticetes, with input parameters of B = 120dB, K = 45, 99 percent point = 195 dB, 50 percent point = 165 dB.
NRDC-158	The model also has limitations. For example, it does not take into account social factors, and this is likely to result in the model underestimating takes. This analysis has important management implications.	The commenter was concerned that if one animal is "taken" and leaves an area then the whole pod would likely follow. The model does not operate on the basis of an individual animal, does account for average group size, and quantifies the exposures NMFS may classify as takes based on the summation of fractional marine mammal densities. Because the model output does not consider the many mitigation measures that the Navy utilizes when it is using mid-frequency active sonar, to include mid-frequency active sonar power down and power off requirements should mammals be spotted within certain distances of the ship, if anything, it overestimates the amount of takes.
NRDC-159	First, not only do takes occur at far greater distances than predicted by the Navy's risk model, the fact that larger areas are exposed to a given received level with increasing distance from the source further multiplies the number of takes. This implies takes of specific individuals will be of greater duration and be repeated more often, resulting in unexpectedly large cumulative effects. Second, corrections need to be made for bias, and corrections will need to be larger for species for which there are no data than for species for which there are poor data.	Modeling accounts for exposures NMFS may classify as takes at distances up to 180 kilometers as described in the Final EIS/OEIS Section 3.4.3 (Environmental consequences) and the Determination of Acoustic Effects on Marine Mammals and Sea Turtles for the Northwest Training and Testing EIS/OEIS technical report. These clearly demonstrate the modeling was conducted over a wide range of bathymetry, sound velocity profiles, and bottom classes. Using these sound propagation characteristics, modeling resulted in less than 1 percent of the exposures that NMFS may classify as a take occurring between 120 dB and 140 dB. Risk function data sets and the parameters, such as the basement values, were chosen to account for uncertainties and for species for which there was less or no data

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		regarding hearing thresholds. The area encompassed by this sound propagation, as determined by NMFS for exposures that may constitute harassment, avoids a bias toward underestimation because the response function parameters were designed with this in mind.
NRDC-160	Third, the greater range at which takes would occur requires more careful consideration of habitat-specific risks and fundamentally different approaches to mitigation. The value of the model is that it provides a focus for future research on the effects of noise on marine mammals. In particular, the sensitivity analysis indicates the primary need for data is determining response probabilities of a wide range of species when exposed to received levels near the level at which 50% of individuals respond.	Section 5.3.4 (Mitigation Measures Considered but Eliminated) of the Final EIS/OEIS evaluates alternative or additional mitigations, specifically, as they relate to potential mitigation approaches. The examples of the fundamentally different approaches noted in the comment were addressed in this section of the Final EIS/OEIS. In addition, NMFS has identified general goals of mitigation measures. These goals include avoidance of death or injury, a reduction in the number of marine mammals exposed to received levels when these are expected to result in takes, a reduction in the number of times marine mammals are exposed when these are expected to result in takes, a reduction in the intensity of exposures that are expected to result in takes, and a reduction in adverse effects to marine mammal habitat. As discussed below, NMFS and Navy have identified mitigation measures that are practicable and reasonably effective. For example, the safety zones reduce the likelihood of physiological harm, the number of marine mammals exposed, and the intensity of those exposures. The Navy has determined that mitigation measures will likely prevent animals from being exposed to the loudest sonar sounds or explosive effects that could potentially result in temporary threshold shift or permanent threshold shift and more intense behavioral reactions (Final EIS/OEIS, Section 5.3, Mitigation Assessment). Mitigation measures that are practicable involve those that reduce direct physiological effects within the temporary threshold shift and permanent threshold shift thresholds.
NRDC-161	<p>The Navy distinguishes two types of takes: Level A, in which there is immediate injury or death; and Level B, in which there is no immediate injury, but cumulative exposure may lead to harm at the population level. However, in certain contexts, Level B harassment may lead to Level A takes through indirect mechanisms.</p> <p>The population effects of Level A takes on populations are relatively easy to assess, as individuals that are killed are obviously removed from the population, and those that are injured are more likely to die whenever the population is next exposed to stress.</p>	This comment is a complete mischaracterization of the analysis presented in the EIS/OEIS. Navy does not anticipate any mortality from its activities. Though the model estimates the potential for mortality based on very conservative criteria, with the implementation of proven mitigation and decades of historical information from conducting training and testing in the study area, the likelihood of mortality is near zero and would not impact populations. Additionally, there is no evidence that the type of injuries that could potentially occur (fully recoverable or limited permanent threshold shift) have or will result in follow on mortality.
NRDC-162	Temporary Threshold Shifts in captive marine mammals are commonly used as an index	The vast majority of these level B takes are short-term behavioral

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	of physical harm (e.g., Nachtigall et al. 2003, Finneran et al. 2002 and 2005, Kastak et al. 2005). Limiting experimental noise exposure to levels that cause temporary effects alleviates ethical concerns about deliberately causing permanent injury. However, repeated exposure to noise that causes temporary threshold shifts can lead to permanent hearing loss. In fact, chronic exposure to levels of noise too low to cause temporary threshold shifts can cause permanent hearing loss.	responses to relatively short-term activities. The population-level impacts are fully discussed in the EIS/OEIS; see Sections 3.0 and 3.4 for the overall discussion, and Sections 3.0.5.7.1 and 3.4.3 for specifics.
NRDC-163	Changes in behavior resulting from noise exposure could result in indirect injury in the wild. A variety of mechanisms for Level B harassment to potentially lead to Level A takes have been identified.	In prior rulemakings, NMFS established that exposures resulting in Level A and B harassment cannot be considered to overlap, otherwise the regulatory distinction between the two criteria would be lost and the required quantification of takes would be ambiguous. To facilitate the regulatory process, the Final EIS/OEIS maintained a clear and distinct division between Level A and Level B Harassment as required by NMFS.
NRDC-164	Captive cetaceans Studies of captive marine mammals provide an excellent setting for identifying direct effects of sound. E.g., one of the datasets employed by the Navy consists of studies relating short-term exposure of bottlenose dolphins and belugas to high levels of noise to Temporary Threshold Shifts. The Navy (Dept. Navy 2008b, p 3-7) noted aggressive behavior toward the test apparatus, suggesting stress was another consequence of the test (see also Romano et al. 2004). Such effects would be unconditional results of noise exposure. However, extrapolation of the level at which aggression was observed to the level at which behaviorally mediated effects might occur in the wild is problematic, as this depends on how well trained the subjects were. For example, the Navy has been a leader in training dolphins and other marine mammals to cooperate with husbandry procedures. Tasks like taking blood, stomach lavage, endoscopic examination, collection of feces, urine, milk, semen and skin samples, etc. once required removing individuals from the water and using several people to restrain them. With training, painful and uncomfortable procedures can be accomplished without restraint and with a reduction in stress that has significantly extended lifespans of captive marine mammals (Bain1988).	The Navy and NMFS relied upon best available science to derive the behavioral response function. The data used were based on one captive animal study and two studies that involved observations of wild animals exposed to sonar or sonar-like signals.
NRDC-165	Right whales exposed to alerting devices consistently responded when received levels were above 135 dB re 1 μ Pa. Due to the small sample size (six individuals), it is unclear whether this is close to the 50% risk, the 100% risk level, or both. These data do not allow identification of B, as lower exposure levels were not tested. In mysticetes exposed to a variety of sounds associated with the oil industry, typically 50% exhibited responses at 120 dB re 1 μ Pa. Thus right whales may be similar to killer whales.	Results of the research by Nowacek et al. (2004) indicated that right whales reacted to multiple "alert stimuli" which were developed specifically to elicit a response. These stimuli had a limited similarity to Navy sonar systems. In addition, Nowacek et al. was one of three primary references used to derive the risk function curve which accounts for effects down to 120 dB sound pressure level. Navy disagrees that there is any science indicating that "mysticetes exposed to a variety of sounds associated with the oil industry, typically 50% exhibited responses at 120 dB re 1 μ Pa." If in reference to Malme et al. (1983, 1984) as cited elsewhere in the critique, then those

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		studies in fact indicated that for migrating whales, a 50 percent probability of response occurred at 170 dB for a continuous, low frequency sound source.
NRDC-166	<p>See Table 1: Bain Appendix H Datasets not considered</p> <p>The Navy incorrectly concludes that additional datasets are unavailable. In addition to the other killer whale datasets mentioned above, data illustrating the use of acoustic harassment and acoustic deterrent devices on harbor porpoises illustrate exclusion from foraging habitat (Laake et al. 1997, 1998 and 1999, Olesiuk et al. 2002). Data are also available showing exclusion of killer whales from foraging habitat (Morton and Symonds 2002), although additional analysis would be required to assess received levels involved. The devices which excluded both killer whales and harbor porpoises had a source level of 195 dB re 1 μPa, a fundamental frequency of 10 kHz, and were pulsed repeatedly for a period of about 2.5 seconds, followed by a period of silence of similar duration, before being repeated. Devices used only with harbor porpoises had a source level of 120-145 dB re 1 μPa, fundamental frequency of 10 kHz, a duration on the order of 300 msec, and were repeated every few seconds. Harbor porpoises, which the Navy treats as having a B+K value of 120 dB re 1 μPa (with A large enough to yield a step function) in the AFAST DEIS (Dept.Navy 2008a), 45 dB lower than the average value used in the HRC SDEIS, may be representative of how the majority of cetacean species, which are shy around vessels and hence poorly known, would respond to mid-frequency sonar. Even if harbor porpoises were given equal weight with the three species used to calculate B+K, including them in the average would put the average value at 154 dB re 1 μPa instead of 165 dB re 1 μPa.</p>	<p>The data sources these comments present as requiring such consideration involve contexts that are neither applicable to the Proposed Action nor the sound exposures resulting from those actions. For instance, the comments' citation to Lasseau et al. involve disturbance to a small pod of dolphins exposed to 8,500 whale-watching opportunities annually. This is nothing like the type or frequency of action that is proposed by the Navy for the NWTT Study Area. Navy training involving the use of active sonar typically occurs in situations where the ships are located miles apart, the sound is intermittent, and the training does not involve surrounding the marine mammals at close proximity. Furthermore, suggestions that affect from acoustic harassment devices and acoustic deterrent devices, which are relatively continuous, high-frequency sound sources (unlike mid-frequency active sonar) and are specifically designed to exclude marine mammals from habitat, are also fundamentally different from the use of mid-frequency active sonar. Finally, reactions to airguns used in seismic research or other activities associated with the oil industry are also not applicable to mid-frequency active sonar, since the sound or noise source, its frequency, source level, and manner of use is fundamentally different.</p>
NRDC-167	<p>An important property of the model is that the biologically observed basement value is different than the mathematical basement value. The Navy proposes using 120 dB re 1 μPa as the basement value. They indicate the selection of this value is because it was commonly found in noise exposure studies.</p> <p>For example, many looked at changes in migration routes resulting from noise exposure, and found that 50% of migrating whales changed course to remain outside the 120 dB re 1 μPa contour (Malme et al. 1983, 1984). These results might be interpreted in several ways. They could be seen as minor changes in behavior resulting in a slight increase in energy expenditure. Under this interpretation, they would not qualify as changes in a significant behavior, and are irrelevant to setting the basement value. They could be interpreted as interfering with migration, even though the whales did not stop and turn around, and hence 120 dB would make an appropriate B+K value rather than B value.</p> <p>Third, the change in course could have been accompanied by a stress response, in which case the received level at which the course change was initiated rather than the</p>	<p>These comments are factually inaccurate. The single citation provided for the repeated assertion that 50 percent of marine mammals will react to 120 dB re 1uPa is Malme et al. (1983, 1984). Malme et al. (1983, 1984) in fact indicated that for migrating whales, a 50-percent probability of response occurred at 170 dB for a continuous, low frequency sound source that is very different from mid-frequency active sonar. Additionally, based on recent work at the Atlantic Undersea Test and Evaluation Center and SOCAL (Southall et al. 2007 and Tyack et al. 2011), with the exception of beaked whales there is no evidence to suggest the 120 dB basement value is incorrect, and for beaked whales a 140 dB receive level step function criteria was chosen.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	highest level received (120 dB re 1 µPa) could be taken as the biological basement value.	
NRDC-168	See Table 2: Bain Appendix Take numbers are based on Alternative 3 in the Hawaii Range Complex SDEIS (Dept. Navy 2008b), which in turn is based on the No Action Alternative, Table 3.3.1-1. Where the number of takes approaches the size of the population, the actual number of takes will be smaller than shown in the table. However, individuals will be taken multiple times and the duration of takes will be longer than if the calculated number of takes were small. Presumably, longer and more frequent takes of individuals will have more impact on the population than takes due to single exposures.	The vast majority of these level B takes are short-term behavioral responses to relatively short-term activities. The population-level impacts are fully discussed in the EIS/OEIS. See Sections 3.0 and 3.4 for the overall discussion, and Sections 3.0.5.7.1 and 3.4.3 for specifics.
North Coast Environmental Center - 01	Hi. Thank you. I'm Jennifer Savage. I am the Coastal Programs Director for the North Coast Environmental Center, and I chair the local chapter of the Surfrider Foundation. I want to thank you for coming here and providing the information that you have today. According to the information that we have, and according to government estimates, the proposed training and testing is expected to injure, disturb, or kill thousands of individual sea creatures, including different marine mammal species supposed to be protected under the Marine Mammal Act. Multiple studies show impacts from this sort of testing can cause whales and dolphins to abandon critical habitat, halt foraging behavior, and forgo the critical feeding opportunities they need to survive. It is clear that this proposal does not substantially reflect the need to protect marine life and the ways in which protecting whales, dolphins, and other species can be better done. It's clear that alternatives have not been adequately explored. Surface lookouts are not enough. The Navy must keep out of those areas most important to these vulnerable marine mammals for feeding and breeding, by putting critical ocean habitats off limits, as is already done on land. Exclusion zones are not a new concept. We do not need to choose between national security and marine life. What we do need is to offer better protection in a more progressive method of training and testing. It is worth noting that environmental advocates have prevailed in the past, and lawsuits to halt this are currently underway. I'd like to suggest that rather than using the Navy's considerable resources, attempting to assert a perceived right to harm, harass, and/or kill whales and dolphins and other species during your testing and training, we request that you use those resources to best determine how to protect them. Thank you.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, during its training and testing activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However,

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/SpeciesMonitoring) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Oregon Fishermen's Cable Committee - 01</p>	<p>Commander Hahn, Mr. Mosher, thank you for coming and hearing us. I represent the Oregon Fishermen's Cable Committee. We have an office here in Astoria. We represent the commercial troll fishing industry on the West Coast of the United States. I just, I don't have a particular comment on which alternative, but I would like to ask that under any alternative that the Navy consider staying outside the National Marine Fisheries Service 700-fathom essential fish habitat fishery restriction line, stay offshore of that line in all exercises unless a specific shallow water exercise is required. In doing so, by staying offshore, it would eliminate conflict of fishing vessels and the socioeconomic impact to the fleet when we're asked to move out of an area for an exercise, which I admit doesn't happen very often in my experience, but it would eliminate conflict that way. It would also eliminate the debris, the occasional debris that we get in our nets, sonobuoy cases, things like that, that we've had from naval operations that get left on the seabed and come up in our fishing gear and kind of foul our nets and maybe don't damage it, small items that don't necessarily damage our net, but do take some time for us to clear. And the other thing is another benefit of staying further offshore is I think you'd have less impact to the marine mammals if you stayed outside the 700-fathoms is typically, you're quite a ways offshore. So I'd just like to ask that the Navy consider that request. Thank</p>	<p>Many Navy at-sea training and testing ranges are accessible to the public for recreational and commercial purposes. The Navy acknowledges that during specific exercises, its training and testing could briefly interfere with public access (usually lasting hours) to a very limited portion of coastal and ocean areas to ensure public safety.</p> <p>Nearly all of the Navy's proposed activities would continue to occur outside 12 nm. To stay outside of 700 fathoms (4,200 ft.) would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. Limiting access to</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>you.</p>	<p>coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).</p> <p>The Navy has conducted training in these operating areas regularly for decades. Though the intensity of live training and testing may increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant.</p> <p>Most commercially important fish species are not believed to hear mid- and high-frequency sound sources, which make up the majority of sound producing activities.</p>
<p>Oregon Shores Conservation Coalition - 01</p>	<p>The Oregon Shores Conservation Coalition opposes expansion of U.S. Navy Training exercises as considered in Draft NWTT EIS/OEIS. We do so on the grounds that with regard to potential environmental impacts, the proposed activities are indiscriminate and the potential impact on a wide range of species cannot be known. The proposed war-fighting activities, including the use of sonar and live ammunition, might take place anywhere within a large marine area, inhabited by many species that are threatened, at risk or of significant concern. There is debate about the degree of harm that might be done by sonar, depth explosions, bombing, etc., and we can't profess special expertise in this area. But it is clear that there is a real potential for deleterious impacts to wildlife and marine ecosystems, and equally clear that the Navy is not able to state with any degree of certainty what these impacts will be. Moreover, it is not clear, at least to the public, what areas will be affected within the entire training range; there does not appear to be any provision for protection even of known areas of special value. In light of these legitimate doubts about the impacts to particular areas and species, conducting this type of military activity in the marine environment is fundamentally inappropriate. We understand the value to the Navy in conducting such training exercises, and we don't pretend to any expert knowledge of potential alternatives. However, we consider it a reversal of priorities to value the temporary benefits of training for defense activities more highly than the ecological integrity of the nation being defended. Sailors, weapons systems and geopolitical concerns come and go; destruction of marine habitats or the elimination of species populations will degrade the productivity and abundance of the marine environment for many generations in the future (and all generations, if species are driven to extinction). Without being dismissive of the Navy's interest in training, the preservation of marine ecosystems must weigh much more heavily in the scales. The Oregon Shores Conservation Coalition is a long-standing regional conservation</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, during its training and testing activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>organization, addressing the full range of environmental concerns in the Oregon coastal region, including land use planning, water quality, shoreline management and marine conservation. We represent about 900 members. Sincerely, Phillip Johnson, Executive Director</p>	
<p>Oregon Wild - 01</p>	<p>Oregon Wild Comments on the Northwest Training and Testing Draft EIS/OEIS Dear Ms. Kler, On behalf of Oregon Wild and our approximately 14,000 members and email activists, we request that the comments below be incorporated into the administrative record and considered for the Navy's Northwest Training and Testing Draft EIS/OEIS, dated January 2014. Oregon Wild's mission is to protect and restore Oregon's wildlands, wildlife, and water as an enduring legacy for all Oregonians. Our mission includes the protection and restoration of marine mammals and other sea life that use Oregon's coastal and offshore areas. Oregon Wild also has a strong interest in preserving recreational opportunities for visitors to the state's coastal and offshore areas. Additionally, we wish to maintain options for the establishment of Marine Reserves and wilderness areas throughout the affected area. Oregon Wild recognizes the need for the Navy to provide adequate training and testing grounds. However, the proposed activities will result in significant harm to dolphins, whales, fish and other marine life -- including several species protected under the Endangered Species Act. The current EIS/OEIS fails to provide basic information necessary to adequately analyze the impacts of the proposed activities. The EIS/OEIS also fails to provide adequate measures to mitigate the harmful effects of the proposed activities on marine mammals and other wildlife. The proposed training and testing activities include the use of sonar, explosives, weapons firing, and other acoustic devices. These activities have well known and well documented negative impacts on orca whales, blue whales, harbor porpoises and other marine wildlife. Marine mammals are extremely sensitive to noise, and sonar disrupts basic behaviors necessary for survival such as migration, surfacing, navigating, hearing, nursing, breeding and feeding. The proposed activities will also have significant impacts on critical habitat areas for marine mammals and other wildlife. High intensity-mid-frequency sonar -- along with activities like dumping debris, the use of toxic chemicals, and detonating explosives -- will degrade sensitive habitat necessary for the survival of marine mammal populations. Additionally, to the extent that threatened or endangered species -- including humpback and sperm whales -- are negatively impacted, the proposed activities may result in violations of the Endangered Species Act. The current EIS/OEIS fails to adequately analyze the impacts on marine mammals. The proposed alternatives involve new and expanded activities that include the use of sonar, unmanned vehicles with acoustic sensors, and explosives. Yet, nowhere does the EIS/OEIS disclose the total number of species that will be adversely affected. Without this information, it is impossible to assess the cumulative impacts of the project and provide meaningful comments and recommendations. The mitigation measures contemplated in the EIS/OEIS are wholly inadequate to address the harmful impacts to</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, during its training and testing activities. A conservative overestimate of the likely effects of testing and training on marine species can be found in the discussion in Section 3.4.3.1.14 (Quantitative Analysis).</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>marine mammals and other wildlife. Mitigation focuses on using lookouts and fish finders to reduce impacts to marine mammals. However, these activities have are ineffective to protect marine life, as sonar can travel beyond the detection ability of human lookouts and fish finders. In conclusion, the current EIS lacks basic information necessary to understand the proposal and determine the impacts. Further, the proposed mitigation measures are inadequate to address the impacts to marine life. We strongly urge the Navy to consider an alternative that puts critical habitat areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on marine wildlife. Thank you for considering our comments. Sincerely, Quinn Read Oregon Wild Wetlands and Wildlife Advocate</p>	<p>Final EIS/OEIS.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The Navy has determined that alternatives based on varied mitigations would not provide the decisionmaker meaningful alternatives. Not limiting mitigation measures to a single alternative allows the protections to be applied to any selective alternative, and it allows consideration of options of training levels that also includes mitigation measures.</p> <p>The Navy is in consultation with both NMFS and USFWS regarding ESA-listed species and critical habitat. No critical habitat will be destroyed or adversely modified as a result of the Navy's proposed activities.</p>
<p>The Ocean Conservancy</p>	<p>Overfishing has reduced some fish populations by up to 95%. There is a gyre of debris the size of Texas floating around in the Pacific. The Fukushima disaster has raised nuclear radiation levels in Pacific fish. Now the U.S. Navy wants to conduct sonar exercises off the Pacific coast, exercises that have, in the past, deafened and killed large numbers of sea mammals. Is there anything left in the oceans that we haven't decimated? Look at a couple of WWII U.S. Navy movies to see how effective that era's sonar detection was. In the long run, I would rather an enemy sub (whose, by the way?) gained access to our coastal waters than our Navy killed what's left of sea creatures in those waters. Don't say you're defending me, Navy, when you're planning to kill off the things that make life worth living. Do not let these exercises go forward.</p>	<p>The Navy disagrees that its past actions have “deafened and killed large numbers of sea mammals.” Based on the best estimates for sound exposure presented in this Final EIS/OEIS (and previous documents), the Navy expects to have some permanent effects on a few individual marine mammals, but not at a rate which would adversely affect the populations. The vast majority of Navy impacts would be behavioral responses, which are short term and temporary.</p> <p>See Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS to understand the need for training and testing and the scope of the Navy's proposed action. Nothing in the proposed action will result in the marine mammals being “deafened” or “killed”; see the analysis presented in Section 3.4 (Marine Mammals) of the EIS/OEIS.</p>
<p>Ocean Protection Coalition</p>	<p>I would like to know what areas are NOT going to be subjected to the Navy warfare testing on the West Coast To date there is not any information on what areas will not be used: Where is the map for public review of the non-testing areas? I want to know this information and when and where it will be available to the public. Since the Navy record of success with visual sighting of marine mammals is only 9% I</p>	<p>Please refer to Figure 1-1 for a description of the action area where training and testing is proposed to continue as it has for decades; it is available on the website where you submitted this comment, in multiple local libraries. and was on display at the public meetings. The Navy went to a great amount of effort to coordinate and organize the</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>want to know what other methods you are using to visually protect the whales? This figure is from NOAA. This percent of success used to monitor and protect marine mammals is totally unacceptable.</p> <p>I would like to know what mitigation measures will be reviewed during the NOAA process and what data will be used to identify those mitigation measures?</p> <p>How will NOAA's recommendations mitigate and protect the whales?</p> <p>Your recent presentation in Fort Bragg was only a chance for people to ask questions of the contractors and was not during a public meeting with actual Navy personal. This process is not effective and should be changed.</p> <p>The three minutes allowed for public comment is not effective, as it does not give enough time for any real relevant information to be given and I want to know if you would reconsider the time allowed. After all the entire program is quite short and if you come all the way to Fort Bragg, why not really allow the public to comment. I believe this way of running your meetings is a attempt at crowd control and a attempt to limit public opinion. Are you willing to change this organization of meetings?</p>	<p>public meetings to meet the needs of all of the public. The format allowed for ample opportunity for valuable exchange of information between the public and Navy subject matter experts. The meetings also provided opportunity for individuals to comment publicly or privately, orally or in writing.</p> <p>The information presented in the comment regarding a “9%” success for visual detection is not correct. Please see the discussion on the topic of Navy’s detection of marine mammals presented in Section 3.4.3.1.16 (Implementing Mitigation to Reduce Sound Exposures).</p> <p>Please see Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) describing the proposed mitigation measures and the data that has been used to identify and evaluate those measures.</p> <p>Two uniformed Navy representatives were present at the Fort Bragg meeting. In addition, 14 Navy employees were present. All Navy representatives were specifically chosen for the subject matter expertise and their personal involvement in the development of the EIS/OEIS.</p> <p>Regarding the time allowed for publicly spoken comments, it is important to note that there is no limit to the length of comment that can be given to the Navy in a variety of other formats. Written and oral comments (provided directly to the court reporter privately) carry as much weight as comments provided publicly. The time limit is a typical public meeting length of time that also ensures time during the meeting for all voices to be heard.</p>
<p>Port Townsend Marine Science Center - 01</p>	<p>Dear Ms. Kimberly Kler: We appreciate the opportunity to comment on the Navy’s Proposed Action for SONAR training and testing currently under EIS review. Briefly, the Port Townsend Marine Science Center, a private, not for profit organization dedicated to inspiring conservation of the Salish Sea, has a strong history of collaborating with federal and state agencies in collecting data for scientific monitoring, research and providing educational programs and exhibitions regarding the marine environment. As the local node of NOAA’s Marine Mammal Stranding Network we have a strong interest in marine mammals and their wellbeing. In addition to that important role, we interact with multiple agencies and twenty thousand citizens every year through our education and citizen science programs in support of our mission to inspire conservation of the Salish Sea. We understand the strategic significance of SONAR testing and training in maintaining our national defense particularly with recent advances in submersible technology. Moreover we appreciate the Navy’s steps to reduce impacts of such training on marine life. It is our position that more protections are needed. We request these additional measures be taken: 1. SONAR or munitions testing and training that is expected to have the most</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>impact on marine life should not be scheduled either near migration routes or during peak marine mammal migration periods. 2. Immediately prior to SONAR or munitions blasts, in addition to human observations, hydrophone monitoring should be used to detect marine mammals in the area and testing should be rescheduled if marine mammals are in range. We appreciate the Navy's understanding that marine mammals are greatly impacted by a number of environmental stressors and recognize the Navy's initiatives to mitigate these stressors where possible balanced against the increasing complexity of our national and global security. Thank you for your consideration of our comments. Sincerely, Janine Boire, Executive Director</p>	<p>mammals from Navy activities.</p>
<p>Sierra Club, North Olympic Group (Sierra Club)-01</p>	<p>On behalf of Sierra Club North Olympic Group and our hundreds of members, activists, and supporters, we are writing to submit comments on the Navy's Draft Environmental Impact Statement/ Overseas Environmental Impact Statement (DEIS), dated January 2014, for its continued training and testing activities in the Pacific Northwest. Please include these comments in the administrative record.</p> <p>The Navy's activities in the Northwest Training and Testing (NWTT) Study Area will pose significant risks to whales, fish, and other wildlife that depend on sound and a peaceful environment for breeding, feeding, navigating, and avoiding predators- in short, for their survival. There is no longer any debate that the Navy's training and testing activities currently have, and will continue to have, significant negative impacts on the environment. While the quantification of these negative impacts has largely focused on the hundreds of thousands of takes of marine mammals resulting from the Navy's use of high-intensity active sonar, impacts from training and testing activities are not limited to marine mammals, as fish and other species are harmed, nor are they limited to the use of sonar technology, as species and the marine environment are also impacted by other activities, such as the use of explosives, the release of large amounts of hazardous and expended materials into the environment, and the movement of Navy vessels. The long-term, cumulative impacts of all of these activities on marine wildlife have not been assessed in this DEIS.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science shows that there are not significant risks to whales, fish, and other wildlife as a result of sound associated with Navy training and testing activities. Also please note there are not "hundreds of thousands of takes"; see for example Section 3.4.3 (Environmental Consequences) in the marine mammals chapter. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS, which has been updated for the final EIS/OEIS.</p>
<p>Sierra Club-02</p>	<p>Our overriding concern is the Navy's failure to protect biologically important areas for</p>	<p>As part of the Navy's effects analysis, the Navy considers all the</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>marine mammals within the NWTT Study Area and especially within the Olympic Coast National Marine Sanctuary along the west coast of Washington. There is a general consensus among the scientific community, as the National Oceanic and Atmospheric Administration (NOAA) has recognized, that “[p]rotecting marine mammal habitat is ... the most effective mitigation measure currently available” to reduce harmful impacts on marine mammals. Nonetheless, the DEIS does not consider establishing any protection zones in the NWTT Study Area where training or testing could be limited or excluded, despite the common-sense efficacy of such measures.</p> <p>The Navy's failure is particularly troubling in light of the emerging information on potentially important habitat for marine mammal populations in the NWTT Study Area. Over the last few years, the NOAA has been guiding the work of two working groups to improve the tools available to agencies, including the Navy, to evaluate and mitigate the impacts of anthropogenic noise on marine mammals. The Working Groups' draft products were recently released and one key product of this effort was the Cetacean Density and Distribution Mapping Working Group's (CetMap) identification of density and distribution maps for marine mammal populations in the Pacific Northwest-potentially important habitat for marine mammals. Nonetheless, this information was not incorporated into the Navy's analysis through the development of reasonable alternatives or examined as possible mitigation measures based on limiting or excluding training and testing activities in these areas. The fact that the Navy must analyze this new information and determine how it will impact its development of alternatives and mitigation measures supports a revision of the DEIS, which would place the Navy's analysis of this critical information before the public, giving the public an opportunity to comment.</p>	<p>science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, “existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
Sierra Club-03	<p>The Navy has failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the DEIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Furthermore, the overall cumulative impact analysis omitted stressors or activities found to have a negligible impact on an individual marine mammal species. The Navy's omission is contrary to the purpose of a cumulative impact assessment. CEQ's regulations for implementing the National Environmental Policy Act point out that "[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time."</p> <p>The DEIS should consider the cumulative impacts of its actions in light of ocean acidification in the Pacific Northwest. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become</p>	<p>The Final EIS/OEIS has been revised to include analysis of ocean acidification relative to sound transmission. See Section 4.3.5.8 (Ocean Acidification Effects on Noise in the Ocean), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent farther with only a change of 0.1 pH—a change that has occurred on average in the global oceans due to anthropogenic carbon dioxide.</p> <p>Ocean acidification is especially pronounced in the Pacific Northwest because of the upwelling in the California Current system. Adding carbon dioxide to the region's upwelling waters, in which carbon-dioxide-rich waters from the deep ocean are drawn up to the surface, results in a sort of hyper-acidification. Surveys of coastal waters show carbon dioxide levels that were not expected until the end of the century. Therefore, we direct the Navy to the following two important reference reports on the subject matter in and around the State of Washington: Climate Change and the Olympic Coast National Marine Sanctuary: Interpreting Potential Futures, Marine Sanctuaries Conservation Series (ONMS-13-01); and Washington State Blue Ribbon Panel on Ocean Acidification (2012): Ocean Acidification: From Knowledge to Action, Washington State :S Strategic Response. Washington Department of Ecology Publication no. 12-01-015.</p> <p>Accordingly, noise pollution in the action area is increasing in intensity and range due to ocean acidification. Ocean acidification and its effect of decreasing sound absorption within frequency ranges, thus increasing ambient noise levels, are well established phenomena. In addition, rising global temperatures contribute to decreased sound absorption in the lower frequency range, amplifying the effects of increased acidification. A recent study shows that ocean acidification and reduced ventilation will significantly decrease sound absorption in the ocean for frequencies lower than about 10 kHz. Changes in the low frequency range have already exceeded ten percent and even greater changes in the future are inevitable. Shallow waters are of particular concern because they are the first area affected by atmospheric changes and greatly impact marine mammals.</p>	
Sierra Club-04	<p>The Navy's analysis is also devoid of geographic alternatives and even minor seasonal restrictions. This omission is inappropriate in light of the strong consensus-at NOAA and in the scientific community-that spatial-temporal avoidance of high-value habitat represents the best available means to reduce the impacts of mid-frequency active sonar and certain other types of ocean noise on marine life. Protected areas should ordinarily be identified during the planning stage based on biological and oceanographic factors, rather than merely on the confirmed presence of marine animals in real time.</p> <p>Further spatial-temporal alternatives do not require large shifts in location, but rather can be very effective by simply carving out small areas of known biological importance. The Navy fails here to identify areas and develop an alternative based on avoiding a handful of biologically important areas. Instead, all of the alternatives propose year-round,</p>	<p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>unrestricted use without regard to seasonal variations in marine mammal and fish abundance. This is true despite the well-documented seasonal migrations of numerous endangered species and the identification of biologically important areas. In fact, moving in the wrong direction on these matters, the Navy has proposed withdrawing spatial-temporal protections for the Endangered Species Act-listed marbled murrelet.</p> <p>Carefully siting the activities proposed to occur in the range to avoid concentrations of vulnerable and endangered species and high abundances of marine life is the most critical step the Navy can take in reducing the environmental impacts of this project. However, because the Navy has failed to undertake an alternatives analysis that allows it to make an informed siting choice, the DEIS is inadequate and must be revised.</p>	<p>Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIA's located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>The Navy is retaining all measures that are effective at mitigating impacts to marbled murrelets. Regarding the measure the Navy</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		proposes to eliminate, as stated in Section 5.3.3 (Mitigation Areas), there is no evidence to support that marbled murrelet hearing is within the frequency ranges of the sound sources where the mitigation measures were being applied. The Navy is in ongoing consultations with USFWS regarding mitigation measures to be applied during these and other activities.
Sierra Club-05	Just as it fails to consider the direct, indirect, and cumulative impacts of increased training and testing in the NWTT Study Area on the region's marine mammals and other fish and wildlife, the DEIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The DEIS makes no mention of the value lost from the harm to marine mammals that attract a number of our Sierra Club members and members of the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly those areas centered on observing whales and other marine mammals in their natural habitats.	Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.
Sierra Club-06	Specifically, the Navy, when training and testing in the NWTT area, should adopt the following measures: seasonal avoidance of marine mammal feeding grounds, calving grounds, and migration corridors; avoidance of, or extra protections in, marine protected areas; use of all available range assets for marine mammal detection; use of third-party monitors for marine mammal detection; and avoidance of fish spawning grounds and important fish habitat for fish species potentially vulnerable to significant behavioral change, such as wide-scale displacement within the water column or changes in breeding behavior.	Please refer to Section 5.3.4.1.11 (Avoiding Marine Species Habitats) for discussion of seasonal restrictions, feeding and calving grounds, and mitigation corridors. The Navy has proposed a seasonal measure for the marbled murrelet, as discussed in Section 5.3.3 (Mitigation Areas). Please refer to Section 5.3.4.1.12 (Avoiding Marine Protected Areas) for discussion of these areas. Please refer to Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations) and Section 5.3.4.1.15 (Conducting Visual Observations Using Third-Party Observers) for discussion of marine mammal detection techniques considered but eliminated. Please refer to Section 3.9 (Fish) for the complete analysis of the Navy's proposed activities and potential impacts to fish and fish habitat.
Sierra Club-07	The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable-particularly because the Navy's plan fails to adopt commonsense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm.	Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective. The U.S. Navy has conducted active sonar training and testing activities for decades in the seaspace depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>The Navy has been and will continue to be engaged in discussions, as necessary, with the Olympic Coast National Marine Sanctuary managers (as has been occurring for many years) as well as in the identification of biologically important areas in the Pacific and elsewhere. The Navy thoroughly considered the biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas.</p> <p>The Navy is in consultation with NMFS regarding ESA-listed marine</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		species and critical habitat. No critical habitat will be destroyed or adversely modified as a result of the Navy's proposed activities.
Sierra Club-08	The Navy's deficient DEIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Surfrider Foundation – Mendocino Coast Chapter - 01	April 15, 2014 Naval Facilities Engineering Command, Northwest Attention: Ms. Kimberly Kler – NWTT EIS/OEIS Project Manager 1101 Tautog Circle, Suite 203 Silverdale, WA 98315-1101 Re: Draft Environmental Impact Statement/Overseas Environmental Impact Statement for Northwest Training and Testing Dear Ms. Kler: The Surfrider Foundation is a grassroots environmental organization dedicated to the protection and enjoyment of the world's oceans, waves, and beaches for all people. On behalf of our Mendocino Coast Chapter supporters, activists, and members, we submit the following comments on the proposed Navy Northwest Training & Testing EIS/OEIS. The Mendocino Coast Chapter of the Surfrider Foundation has significant concerns with the actions proposed by the Navy to occur within the Northwest Training and Testing Study Area, including air and water space off the Northern California Coast. Alternatives 1 and 2 involving sonar testing and explosive testing would cause significant environmental harm to marine life and the ocean ecosystem. Pursuant to the Marine Mammal Protection Act (MMPA), the use of sonar, other active acoustic sources, and explosive sources may result in Level A harassment or Level B harassment of certain marine mammals. The Marine Mammal Protection Act defines Level A Harassment as the potential to injure a marine mammal or marine mammal stock, and Level B Harassment as any act that disturbs or is likely to disturb a marine mammal by causing disruption of natural behavioral patterns including migration, surfacing, nursing, breeding, feeding, or sheltering to a point where such behaviors are abandoned or significantly altered. Pursuant to the Endangered Species Act (ESA), sonar, other active acoustic sources, and explosive sources may affect, and are likely to adversely affect, certain ESA-listed marine mammals. Anti-submarine warfare sonar can produce intense underwater sounds in the Study Area. It is well established that the high-intensity pulses produced by airguns can cause a range of impacts on marine mammals, fish, and other marine life, including broad habitat displacement, disruption of vital behaviors essential to foraging and breeding, loss of biological diversity, and, in some circumstances, injuries and mortalities. These sounds are likely within the audible range of most marine mammals and can produce both Temporary Threshold Shift (TS) and Permanent Threshold Shift (PTS), resulting in temporary or permanent hearing loss. Until their hearing recovers, these animals will have a reduced ability to detect relevant sounds such as predators, prey, or social vocalizations. The use of sonar and other active acoustic sources for testing activities as	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, during its training and testing activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>described under Alternative 1: • May expose marine mammals up to 88,544 times annually to sound levels that would be considered Level B harassment • May expose marine mammals up to 119 times annually to sound levels that would be considered Level A harassment • May affect, and is likely to adversely affect the following Endangered Species Act-Listed whales: humpback whale, blue whale, fin whale and sei whale The use of explosive sources for training activities as described under Alternative 1: • May expose marine mammals up to 10 times annually to sound or energy levels that would be considered Level B harassment • May expose Dall’s porpoise up to 2 times annually to sound or energy levels that would be considered Level A harassment. In addition to the previously described injuries, the proposed plan would also significantly increase risks to marine mammals in regards to the following stressors: -entanglement in fiber optic cables, guidance wires, and parachutes -ingestion of military expended materials from munitions - injury or mortality from vessel strike - nitrogen decompression caused by behavior or avoidance responses The Mendocino County Chapter of the Surfrider Foundation believes that such impacts to our nation’s marine resources are not an acceptable price to pay for an increase in military training and testing.</p>	<p>Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>The Whale Museum - 01</p>	<p>The Board of Directors of The Whale Museum appreciates the opportunity to provide comments on the Navy’s Draft Environmental Impact Statement/Overseas Environmental Impact Statement (“DEIS”) for the Northwest Training Range Complex (“NWTRC”). Please include the following comments in the administrative record.</p> <p>To be successful, conservation and recovery programs for endangered species need strategies that minimize threats or disturbances both in time and in space. This is one of the main reasons why recovery plans for endangered species include areas considered critical habitat. The Navy DEIS only tries to provide these exclusion zones by protecting areas around marine mammals that have been detected. This strategy is heavily reliant on the Navy’s ability to reliably detect marine mammals. We feel strongly that the Navy needs to incorporate better techniques to improve their detection rates of marine mammals, extend their exclusion zones around detected marine mammals, and utilize exclusion zones based on specific areas and times in their mitigation strategies.</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy’s specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
<p>The Whale Museum - 02</p>	<p>The sounds (active sonar, explosions, vessel/aircraft noise) that the Navy will be generating with increasing frequency as part of their training activities on the NWTRC will likely have significant impacts on marine mammals and other species within this area. While considerable research has been conducted on the impacts of some of these</p>	<p>The Navy shares your concern for marine life. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	noise sources, especially active sonar, the Navy's estimates of zones of influence are too small and not conservative enough. Much of the modeling relies on tests conducted on a few species in captivity and probably do not accurately reflect the hearing ability and physiological impact on wild populations of the various species that inhabit the NWTRC.	Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities. The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no documented proof of injuries to marine mammals. The Navy and NMFS relied upon best available science to derive the behavioral response function. The data used were based on one captive animal study and two studies that involved observations of wild animals exposed to sonar or sonar-like signals.
The Whale Museum – 03	To appropriately mitigate the noise impacts that the Navy wishes to generate in the NWTRC we feel they need to do the following: <ul style="list-style-type: none"> Improve their ability to detect all marine mammals, paying special attention to the endangered Southern Resident killer whales (SRKWs). This should involve passive acoustic arrays and high elevation (quiet) aerial over-flights for visual observations. The Navy can and should do better at knowing where marine mammals are within the Navy's training region. It is preferable that a third party organization conduct this monitoring and that the sightings be reported and made available to the scientific and management communities. 	The Navy is in the process of assessing Lookout effectiveness at detecting marine mammals during Navy exercises. Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities. Results from the Lookout effectiveness study will be reviewed and any recommendations for improving Lookout effectiveness will be considered at that time. In the interim, please note that the Navy's visual mitigation has been demonstrated to be effective over the eight years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website. Regarding the comment that the Navy should supplement its visual monitoring efforts with other measures, please see the discussion in Section 5.3.4.1.13 (Increasing visual and passive acoustic observations). For a discussion on the practicality of third-party observers, please see Section 5.3.4.1.15 (Conducting Visual Observations Using Third-Party Observers).
The Whale Museum - 04	<ul style="list-style-type: none"> If marine mammals are sighted or detected within acoustic range, then exercises should be shut down, if in progress, and postponed or moved elsewhere if the exercises have not yet started. For example, an appropriate threshold for such a decision is when ever noise levels from naval operations as well as other sources at the location of SRKWs are expected to be greater than 130 dB re 1µPa. 	Please see the discussion in Section 3.4.3.1.10 (Thresholds and Criteria for Predicting Acoustic and Explosive Impacts on Marine Mammals) describing the development of the thresholds for impact, including mid-frequency cetaceans like the SRKWs. Note that as presented in Section 3.4.3.2.4 (Impacts from Vessel Noise), the ambient noise level in Puget Sound very often exceeds 130 dB across

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>a broad spectrum of frequencies as a result of commercial vessel traffic so even absent any Navy activity, noise levels are often likely to exceed the threshold proposed in the comment. Also note that the intention of the Navy's mitigation is to reduce the potential for injury to marine mammals. As presented in Section 3.4.3.2.1 (Range to Effects), for mid-frequency cetaceans, the PTS (injury; Level A harassment) range from even the SQS-53C sonar is only approximately 10 meters and therefore all stationary sources, which are all much less powerful, would require a sperm whale or beaked whale to be much closer to the source. As described in Section 3.4.3.2 (Marine Mammal Avoidance of Sound Exposures), there are many activities for which it is unlikely a marine mammal will remain close enough to those activities for a Level A exposure to occur. The Navy does not expect that mitigation will eliminate all potential effects, but has proposed measures that are effective, practical, and safe to implement, justify a negligible impact determination by NMFS, and that do not impact the readiness objective underlying the purpose for the activity.</p>
<p>The Whale Museum - 06</p>	<ul style="list-style-type: none"> Exercises that generate loud noise (active sonar, explosions) should not be conducted at night because visual detections of SRKWs or other marine mammals are not usually possible. 	<p>As stated in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy must train in the same manner as it will fight. Mid-frequency active sonar training is required year-round in all environments, including night and low-visibility conditions. Training occurs over many hours or days, which requires large teams of personnel working together in shifts around the clock to work through a scenario. Training at night is vital because environmental differences between day and night affect the detection capabilities of sonar. Temperature layers that move up and down in the water column and ambient noise levels can vary significantly between night and day, which affects sound propagation and could affect how sonar systems are operated. Consequently, personnel must train during all hours of the day to ensure they identify and respond to changing environmental conditions, and not doing so would unacceptably decrease training effectiveness and reduce the crews' abilities. Therefore, the Navy cannot operate only in daylight hours or wait for the weather to clear before training.</p>
<p>The Whale Museum - 06</p>	<ul style="list-style-type: none"> Exercises that generate loud noise (active sonar, explosions) should not be conducted in the inland waters (including the Strait of Juan de Fuca) because these form critical habitat for endangered SRKWs and because this area already has so many anthropogenic noise sources. Although current anthropogenic noise sources are not as acute as those due to naval training operations, they do create long term 	<p>The information regarding killer whale vocalizations relative to the background noise has been added to the analysis in the Final EIS/OEIS in Section 3.4.3.1.6.3 (Behavioral Reactions to Vessels). As described in Section 5.3.3.2 (Puget Sound and the Strait of Juan</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>stressors. For example Holt et al. (2009)¹ found that Southern Resident killer whales are increasing the amplitude of their calls to compensate for increased noise from boats. Further increases of this stress are not acceptable for this endangered species.</p> <p>¹ M.M. Holt et al. (2009), "Speaking up: Killer whales (<i>Orcinus orca</i>) increase their call amplitude to vessel noise," <i>The Journal of the Acoustical Society of America</i> 125 (1).</p>	<p>de Fuca), Currently, the Navy is not conducting nor is it proposing to conduct training with mid-frequency active hull-mounted sonar on vessels while underway in Puget Sound and the Strait of Juan de Fuca. The Navy's process since 2003 requires approval prior to operating mid-frequency active hull-mounted sonar in Puget Sound and the Strait of Juan de Fuca.</p> <p>Navy will continue the permission and approval process through U.S. Pacific Fleet's designated authority for all mid-frequency active hull-mounted sonar on vessels while training underway in Puget Sound and Strait of Juan de Fuca that has been in place since 2003.</p> <p>Pierside maintenance/testing of sonar systems within Puget Sound and the Strait of Juan de Fuca will also require approval by U.S. Pacific Fleet's designated authority or Systems Command designated authority as applicable, and must be conducted in accordance with PMAP for ship and submarine active sonar use, to include the use of Lookouts.</p> <p>The only explosions proposed in the Inland Waters are EOD underwater detonations with small charges (no greater than 2.5 lb. net explosive weight) in carefully monitored areas where these exercises have occurred for years.</p>
<p>The Whale Museum - 07</p>	<ul style="list-style-type: none"> The only reason the outer coast was not included as critical habitat for Southern Resident killer whales is that there was not enough information about how regularly they use different areas on the outer coast. The Navy should be supporting efforts to better understand habitat and resource use of all marine mammals in the NWTRC so that they can avoid specific areas or specific areas at certain times of the year that are critical to these species. Special efforts should be made to survey the location and behavior of the SRKWs when they forage in and transit through the Olympic National Marine Sanctuary and to avoid naval operations that would create stress on the SRKWs while they are in the Sanctuary. 	<p>The U.S. Navy has conducted active sonar training and testing activities for decades in the seaspace depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>OCNMS.</p> <ul style="list-style-type: none"> The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities, including the SRKWs.</p> <p>As stated in Section 3.0.2.2 of the EIS/OEIS, “Since 2006, the Navy, as well as non-Navy marine mammal scientists and research institutions, has conducted scientific monitoring and research in and around ocean areas in the Atlantic and Pacific where the Navy has been training and testing and where it proposes to continue these activities. Data collected from Navy monitoring, scientific research findings, and annual reports provided to NMFS may inform the analysis of impacts on marine mammals for a variety of reasons, including species distribution, habitat use, and evaluation of potential responses to Navy activities. Monitoring is performed using various methods, including visual surveys from surface vessels and aircraft and passive acoustics. Navy monitoring can generally be divided into two types of efforts: (1) collecting long-term data on distribution, abundance, and habitat use patterns within Navy activity areas; and (2) collecting data during individual training or testing activities. Monitoring efforts during anti-submarine warfare and explosive events focus on observing individual animals in the vicinity of the event and documenting behavior and any observable responses. Although these monitoring events are very localized and short term, over time they will provide valuable information to support the impact analysis.”</p>
<p>The Whale Museum - 08</p>	<ul style="list-style-type: none"> Aircraft that are transiting any region containing SRKWs should re-route their flight paths to avoid direct over-flights by noisy aircraft. Existing noise levels already cause SRKWs stress and additional noise, especially additional startling noise, should be avoided. 	<p>The majority of proposed over-water aircraft flights would take place at higher altitudes, where disturbance of marine life would not occur.</p> <p>As described in Section 5.3.4.1.12 in the EIS/OEIS, “Exposure of marine protected area resources to aircraft overflights would be brief and is expected to cause only a minor and temporary behavioral reaction for marine mammals, sea turtles, birds, or fish that may be present in the area. Additional mitigation or avoidance of these marine protected areas would be unnecessary, and limiting passage through</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		<p>the areas would restrict direct access to training and testing locations. Such avoidance would ultimately increase transit time and for platforms with fuel restrictions (e.g., aircraft) would therefore result in an unacceptable increased risk to personnel safety.”</p> <p>Based on the aircraft noise study (see Section 3.12.3.3, Airborne Acoustics, in the Final EIS/OEIS) conducted by the Navy for activities in the Olympic MOAs and in W-237, aircraft overflights are not a source of significant sound levels.</p>
<p>The Whale Museum - 09</p>	<p>Additionally, we are concerned that the Marine Mammal Section 3.4 of the DEIS has failed to incorporate findings and recommendations from the NMFS’s Recovery Plan for Southern Resident Killer Whales (2008)², especially concerning impacts from explosives in DEIS Section 3.4.3.2.2, vessel noise in Section 3.4.3.2.4, weapons in Section 3.4.3.2.3, and aircraft noise in Section 3.4.3.2.5. The DEIS does make frequent reference to the NMFS’s Southern Resident Killer Whale Critical Habitat Designation (2006), however the 2008 Recovery Plan is a significantly more comprehensive document addressing the United States federal government’s strategy for addressing the plight of this endangered population. We strongly suggest you address the 2008 Recovery Plan in your DEIS document, particularly the 3rd risk factor: sound and disturbance from vessels. This risk factor covers obvious sub-topics for the DEIS, including: Military mid-frequency sonar, Canadian activities in the Haro & Juan de Fuca Straits (which are not addressed in the DEIS yet impact the same area) Vessel strikes and Oil spills.</p> <p>² National Marine Fisheries Service. (2008). Recovery Plan for Southern Resident Killer Whales (<i>Orcinus orca</i>). National Marine Fisheries Service, Northwest Region, Seattle, Washington. 251pp.</p>	<p>The Navy agrees that there was not specific citation to the recovery plan in the Draft EIS/OEIS, however, the information presented in the recovery plan was considered in the analysis presented. As a result of this comment, that citation has now been added to the Final EIS/OEIS. Note that the issues (such as the recovery plan’s identification of “sound and disturbance from vessel traffic” as a risk) were discussed in detail in various sections of the Draft EIS/OEIS under the applicable stressor categories. See Section 3.4.1.6 (Behavioral Reactions) and the subsections below that covering impulsive, non-impulsive, and vessel noise. Also, see Section 3.4.3.4.1 (Impacts from Vessel Strikes) regarding a discussion of vessel strikes. Canadian activities (military or otherwise) are not part of the Proposed Action.</p>
<p>Whidbey Audubon Society Conservation Committee - 01</p>	<p>To: Ms. Kimberly Kler NWTT EIS/OEIS Project Manager 1101 Tautog Circle, Suite 203 Silverdale, WA 98315-1101 At Whidbey Audubon Society, conserving local habitat and protecting the fragile and important environment around Whidbey Island has been our primary mission for nearly three decades. We are particularly concerned about the impact that the introduction of the planned training program including underwater active and passive sonar, underwater weapons training, and introduction of drones will have on important bird and wildlife habitat. To this end, we ask the Navy to respond to our questions and concerns as part of their Environmental Impact Statement. Whidbey Island has five designated Important Bird Areas (IBA): Crescent Harbor, Crockett Lake, Deception Pass, Deer Lagoon, and Penn Cove. These five IBA are of extraordinary significance to migrating, wintering, and nesting birds. In particular, around Crockett Lake and the surrounding area of Ebey’s Reserve there have been 213 species of birds sighted. From raptors like the Peregrine Falcon, Bald Eagle and Snowy Owl to the thousands of shorebirds that stop at the lake from July to November to feed and rest</p>	<p>The Navy shares your concern for marine life. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. For potential impacts to Birds, please see Section 3.6 (Birds). Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities.</p> <p>As discussed in Section 5.3.2.1.2.3 (Mine Countermeasure and Neutralization Activities Using Positive Control Firing Devices), the Navy is in consultation with USFWS regarding mitigation measures for the marbled murrelet during underwater detonations. Although the mitigation zone and monitoring procedure for the marbled murrelet are being determined in consultation with USFWS, the Navy proposes to</p>

Table I.4-4: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	<p>before continuing their southward migration to wintering grounds, to the nine species of ducks and numerous species of passerines, all of these birds rely on the habitat around Crockett Lake for their very survival. At Crescent Harbor, another IBA, the endangered Marbled Murrelet is found year-round. How will the Navy determine and monitor the impact of underwater explosives on the Marbled Murrelet? What SPECIFIC studies have been identified by the Navy to determine the effects that active and passive sonar training could have on the specific species that use Crockett Lake and Crescent Harbor? Using data from studies completed on dissimilar species of birds in other areas is not an adequate response to this concern. Any Environmental Impact Statement needs to be specific. To date we can not find specific data from the Navy that addresses this concern. (For example, in an EIS on the introduction of the P-8A, the Navy concluded there would be minimal impact on the Marbled Murrelet by selecting certain citing studies of dabbling ducks - a totally different type of bird - and omitting studies by the same researchers that DID show an impact from aircraft noise on different duck species.) In addition to these five IBA just off the west coast of Whidbey Island lies another very significant area, the Smith and Minor Island Aquatic Reserve. This reserve is part of the larger San Juan Islands National Wildlife Refuge, which is managed by the US Fish and Wildlife Service. Containing the largest kelp bed in Puget Sound, this reserve provides critical habitat for numerous seabirds and marine mammals. Puffins, Rhinoceros Auklets and Cormorants nest on the islands and they are a haul out sites for seals and sea lions. Active and passive sonar training is scheduled to occur in Puget Sound close to or within the Aquatic Reserve. How will this training affect migratory and endangered birds and marine mammals? Finally, we request the Navy to clarify any practices related to fuel dumping around Whidbey Island. For years there have been rumors of this practice and we feel it would be in good faith for the Navy to explain in detail any circumstances where fuel dumping around Whidbey Island would or would not occur. Our concerns are the impacts and consequences from fuel dumping on the marine and land habitat and wildlife that inhabit these areas. Please include this information in the context of the EIS. Thank you for the opportunity to provide input and comments. Whidbey Audubon Society looks forward to your response. Respectfully submitted, Susan Bennett, Co-Chair Whidbey Audubon Society Conservation Committee</p>	<p>continue visual monitoring for the marbled murrelet within the mitigation zone. The Navy will report all injured marbled murrelets sighted during the post-detonation observations to the appropriate Navy Region Environmental Director, Navy Pacific Fleet Environmental Office, and local base wildlife biologist. No sonar activities are proposed for Crockett Lake or Crescent Harbor. The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no documented proof of injuries to marine mammals or to birds.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals. The Navy's proposed activities do not include dumping of any materials, including explosives.</p> <p>Regarding impact to endangered birds and marine mammals, the Navy is in ongoing consultations with NMFS pursuant to the MMPA and with NMFS and USFWS pursuant to the ESA.</p>

Table I.4-5 contains comments from private individuals received during the public comment period and the Navy's response. Responses to these comments were prepared and reviewed for scientific and technical accuracy and completeness. Comments appear as they were submitted and have not been altered with the exception that expletives, addresses, and phone numbers have been removed, as necessary.

Table I.4-5: Responses to Comments from Private Individuals

Commenter	Comment	Navy Response
A (Electronic)	I think that the continued experimentation with explosives is reprehensible, considering that you knowingly deafen, injure and maim marine animals for no reason. These tests can be done elsewhere, you have the ability (and the funding, I know, I pay for it) to build facilities in which to test these instruments for our defense instead of putting more stress and debris into an already stricken ecosystem. If you don't care about the animals at all, their ability to sustain life or even the oceans, at least consider the fact that if they go, we go. You're putting our lives at risk by doing this too, just in a more removed way than if you were allowing us to be attacked. Please consider alternative methods of testing.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
K. Adams (Written)	REGARDING THE USE OF SONAR IN THE PACIFIC OCEAN I believe that naval training using sonar should not be allowed in areas where marine mammals are migrating through training waters. We do not have the right to disturb, hurt, or kill these animals.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
L. Adams (Electronic)	Right now our earth is in a world of hurt. Between the ocean being over fished, destroyed by man made disasters, such as oil spills and the sonar testing including anything that causes sound waves and explosions our earth as we know it will cease to exist. The ocean and the creatures in it are why we are here today. If the ocean dies, meaning the creatures that live in it today means we die with it. I ask you to please reconsider your testing. It effects us all. Many Bright Blessings, Rev Leandra Adams	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Aiello (Written)</p>	<p>The Navy's draft environmental impact statement for the NW Training Range, a vast area stretching from Puget Sound to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to kill and injure thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Weapons testing should not be done in marine sanctuaries anywhere. This area includes the Olympic Coast National Marine Sanctuary.</p> <p>Our west coast waters have some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, threatened and endangered species of rockfish, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. In all of North America, the state of Washington, in particular, has</p> <ul style="list-style-type: none"> • The greatest number of endangered marine species of any state or province in North America • The most depressed fisheries of any state or province (according to the American Fisheries Society) • The least amount of habitat designated and protected as marine reserves or sanctuaries for the restoration of fisheries of any state or province • The most closed or restricted fisheries for recreational fishing of any state or province in North America. <p>The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable especially in any marine sanctuaries - particularly because the Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put all critical marine habitats and sanctuaries off-limits to sonar and explosives, something it is not now willing to do despite the scientific community's view that this would be the most effective means of reducing harm and simultaneously restoring our marine fisheries.</p> <p>Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>First, and most importantly, the Navy does not expect any marine mammal mortalities as a result of its proposed activities.</p> <p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p> <p>Furthermore, all military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Alfaro (Electronic)	STOP your BLATANT DISRESPECT FOR THE EARTH AND ALL LIVING CREATURES. "I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Alvarez (Oral)	My name is Maria Theresa Alvarez. And as I sit here and listen to all of this the thing that comes to my mind more than anything is that if any country were to go into another country and begin to do experimentations and testing and bombings, we would probably be bombed out in no time flat. Imagine doing this in Iran. And yet we don't seem to recognize or realize that there is a country which happens to be just next to our land full of inhabitants that have the right, as much as we do, to their life and to the peacefulness that we all seek in our own life. So I'm really perturbed to think that these very gentle, sensible animals are going to be exposed to sonar that are more than 100 times what will cause them to go crazy. And that we as human beings can possibly entertain this or that we can bomb them. Imagine what it would be like if we were having bombs coming out of the air. And they're helpless. I mean this is like -- to me this is the greatest crime because you're taking somebody who is dumb and who can't help themselves and you are imposing this on them. This is -- this is completely irrational. We human beings have gone mad. Thank you for listening.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Amdal (Electronic)	Practicing war is killing everyone-----doesn't work---let's live and let live! Peace for everyone---including the beautiful ocean creatures!	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
J. Anderson (Electronic)	I think always preparing for WAR leads to WARS. I also feel you will harm my environment and the critters of the ocean that you feel free to put in harms way. We should feed people and take care of each other not bomb and kill.I am against your way of misrepresenting the facts.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, during its training and testing activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
L. Anderson (Electronic)	I strongly oppose your proposed actions in Puget Sound, which will cause injury to sea mammals in the area. If the Navy needs to test this "equipment," please do so outside of Puget Sound. The Sound is a precious resource, rich with marine life that will/has been damaged by your actions. Killing our natural resources in the name of progress is no progress at all.	<p>The Navy is committed to protecting the marine environment and mammals during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
M. Anderson (Written)	How can anyone do more damage to our ecosystem than the U. S. Navy expanding Training and Testing Ranges along our entire Eastern and Western coasts? Peace through statesmanship and understanding is a far more suitable option with humanitarian benefits. Citizens of the earth are weary of the destruction, death, toxic pollution, waste of	<p>Recommendations to change the mission of the Navy or the policy of the United States government are beyond the scope of this EIS/OEIS. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>resources and squandered funds.</p> <p>There have been global reports for years of whales and dolphins mysteriously beaching themselves during American military exercises. How many were lost at sea with injuries too severe to beach themselves? There are many recent reports confirming this carnage by the U.S. Navy. The U. S. Navy's 235-decibel pressure waves are certain death, or "takes" as the U.S. Navy calls these deaths of marine life. Vibrations rupture lungs, cause brain hemorrhages and deafness of marine mammals. Maintaining a distance of 500 yards from marine mammals is not adequate they can be disturbed by noise for miles. Loss of hearing results in loss of marine mammals ability to communicate and locate food causing certain death. This horrific death of over 1 40,000 whales and dolphins is not acceptable in the name of defense.</p> <p>Death of our oceans is death of our planet. Oceans regulate our climate provide food and recreation. Acidification of our waters is deadly for our shell fish industry. What will be left to defend after the demise of our oceans? How can the U.S. Navy justify destruction of the global ecosystem? How can Americans maintain respect as a beacon of peace while the U.S. Navy is a threat to the world's oceans?</p> <p>Who is going to attack Americans? Most countries are dependent on our commerce to maintain their economies. Is China going to bomb the local Wal-Mart? There is no need to increase our security at the expense of humanitarian concerns. There has been no act of war committed against Americans in decades. The American role of global cops engaging in wars of choice must stop. We have far more urgent diversified needs for our tax dollars. Squandering funds on U.S. Navy Training and Testing Range turning the majestic Pacific Northwest into a war zone and our oceans into sonic soup is not a valid use of our tax dollars.</p> <p>The unlimited expansion in the past decade of military presence in Puget Sound has destroyed our quality of life. We have lost our privacy, peace and quiet, property values and rights to enjoy our land for recreation and healthy lifestyle. We have nowhere else to go we have lived here for generations this is where we want to live.</p>	<p>as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. The comment's assertion that the proposed action will result in thousands of deaths is not correct. The Navy does not expect any marine mammal mortalities resulting from the proposed activities. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around the Sound. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
<p>V. Anderson (Written)</p>	<p>I am writing to express my opposition to expansion of the Northwest Training and Testing Study Area.</p> <p>I am concerned about the health and safety of marine mammals whales and dolphins. I understand sonar testing at over 200 decibels will cause the death of thousands of marine mammals.</p> <p>I am opposed to testing bombs in the Pacific Ocean near my home I am 94 I have lived here since 1942 we enjoy the pristine nature of my area.</p> <p>Please consider the welfare of marine life and the health of the ocean that is important to our climate.</p> <p>Thank you for extending the comment period giving me an opportunity to submit my</p>	<p>Thank you for your comment. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. The comment's assertion that the proposed action will result in thousands of deaths is not correct. The Navy does not expect any marine mammal mortalities resulting from the proposed activities. Based on</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	opinion.	the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Andreo (Electronic)	"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".	Your opposition to the Proposed Action is noted; and The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Cate Andrews (Oral)	I protect those that cannot speak. The orcas cannot speak. The marine mammals cannot speak. The snow geese and the migratory swans cannot speak. Those that inhabit this island on the ground, above ground that cannot speak, someone has to speak for them. Two hundred-and-thirty-five decibels is what they're being subjected to with underground sonar, 235 decibels. There is currently 75 orcas that live in and around the Puget Sound area. You have contemplated, because I've reviewed the lawsuit of the Friends of the Earth that is fighting this issue in California. Friends of the Earth has documented that there are -- you have said that 50 takings of orcas is essential. Fifty takings means either damage, reaction to sound or death. You have estimated 35,000 takings of other marine species. That's in their lawsuit in California. Someone has to speak up. Someone has to tell the truth. I'm not a newbie, but somebody's got to speak for those who can't speak. I	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. The comment's assertion that the proposed action will result in thousands of deaths is not correct. The Navy does not expect any marine mammal mortalities resulting from the proposed activities. Based on the best available science summarized in the

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>can speak for myself about that. I can speak for myself about what's happening to babies or unborn babies. I can talk, but they can't. I'm asking you to change your thinking. I'm asking you to change the military's pyridine and the way you think and the way you conduct your business because I know from the Freedom of Information Act, we know that you know what you're doing. We know that you know what you're doing to all the species, not just in Puget Sound, not just around the San Juan Islands, but everywhere. You can do it better. I know you can.</p>	<p>EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). Because the Navy is continuing to improve mitigation measures, the Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Cathryn Andrews -01 (Electronic)</p>	<p>This is concerning your expansion of the Northwest Military Training and Testing Center, although I hold little hope that anyone will read this, or if they do, will give it any measure in the decision making process. You hold yourselves accountable to no one, you hold yourselves above all. You are wantonly dismissive of human, avian, and mammalian health, not to mention those that inhabit our oceans. You estimate ' taking ' 650,000 mammals as acceptable, you say ' taking ' 70 Orcas is part of the collateral damage you expect. How many Orcas are even left, and yet you casually mention the ' taking ' of them. You order new planes because someone at Boeing thinks it will help their bottom</p>	<p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>The Navy shares your concern for marine life, but this concern must</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>line, you increase the Northwest Training Center for much the same reason. You don't need to do this, you don't need more planes, you don't need to subject anything to 235 db'l's, yet you do. I disrespect you as an organization that I support with my taxes, I disrespect your casual attitude towards life. Eisenhower was right, beware the Military Industrial Complex.</p>	<p>be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The comment's assertion that the proposed action will result in 70 Orca deaths is not correct. The Navy does not expect any marine mammal mortalities resulting from the proposed activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Cathryn Andrews – 02 (Electronic)</p>	<p>I wish that there were the right words, in the right combination, that would make you understand what it is you are doing. The immorality of what you are proposing is shocking enough. Look around you . Citizens are waking up. We the people are regaining consciousness to what it is the military has done while we weren't looking. Public opinion has turned against you , there is no longer room for your wanton destruction of our hearing, our peace of mind, our physical health , children both born and unborn, - our environment, our ecosystem, our endangered species, our marine mammals and sealife. This must stop. It isn't necessary and we know that you know that. You are merely trying to keep a system that no longer works in operating order. Boeing threatens to move unless more Growlers are ordered, the Navy publicly states it does not need more Growlers, and then we find out a week later that the Navy has ordered 22 more. You</p>	<p>The NWTT EIS/OEIS considers the cumulative impacts to the environment from other relevant past, present, and reasonably foreseeable future actions (federal, state, local and private) in addition to the proposed action. Section 4.3.3.17 (Environmental Impact Statement for the EA-18G Growler Airfield Operations) discusses the potential for cumulative impacts from the ongoing Growler homebasing EIS and concludes that the training and testing activities proposed in the NWTT EIS/OEIS adequately account for the potential homebasing activity.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	aren't even playing smart anymore.	
Anonymous (Written)	<p>It sickens me to think the U. S. Navy wants a “replay” of the horrific devastation of the Washington state massacre of marine life. Did you watch the documentary and listen to the screams and the agony of all the whales that were killed ??? What the hell is the reason or purpose ??</p> <p>If, by any stretch of the imagination this testing should occur, I hope the marine life are armed with a gynormous load of napalm that can be disbursed on the testers prior to the start of the Navy's “murderous training exercise” so it does not take place !! Have you seen the horrific devastation that napalm and agent orange caused in the 60's for Navy personnel that chose to serve/defend their country??? Now the Navy wants to murder/slaughter our innocent marine life. No !!!</p> <p>That may sound cruel and harsh, but what the Navy is planning is worse than cruel and harsh!!!! Do something constructive and go to the Indian Ocean and use sonar training/testing to locate the poor lost souls of Malaysia Flight 370!!!!</p> <p>I use to be proud of possessing Naval documentation, medals, patches, clothing, etc. that I have from Pearl Harbor and Vietnam, but any more!!</p> <p>In strong opposition to the proposed Navy training/testing in the northwest!</p>	<p>The Navy does not expect any marine mammal mortalities resulting from the proposed activities.</p> <p>Your opposition to the Proposed Action is noted; however, this concern for marine life must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Arlia	Please do not renew permits for bombing and sonar exercises in the northwest. It causes maine mammals to suffer tremendously, and die. They have rights and deserve	The Navy does not expect any marine mammal mortalities resulting from the proposed activities.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	protections against our damage. We need to put an end to this suffering.	Your concern in regard to the Proposed Action is noted; however, this concern for marine life must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Armenta (Electronic)	PLEASE STOP further US Navy testing of the Pacific Northwest. Protect our waters, environment and all living beings.	Your opposition to the Proposed Action is noted; however, the alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Armon - 01 (Electronic)	March 18, 2014 I appreciate that NOAA, NMFS, Scientists, the Navy, and stakeholders are now working together to research, understand, and mitigate the US Navy Training and Testing Activities, with the objective to minimize the impacts on marine life. That it is also becoming a transparent process with information available to the public, including our participation and comments. Our human survival depends upon survival of sea life. However, I have many concerns, such as; Avoidance behavior used as an exposure mitigation strategy: As Michael Stocker, Director of Ocean Conservation Research stated: "Avoidance behavior used as an exposure mitigation strategy: We also find it troubling that this section is loosely hinged on the idea of "avoidance behavior" being a mitigating factor in the exposure. With the understanding that the Draft Guidance document is specifically about MMPA "Level A Takes" and not behavioral impacts Castellote et.al. (2010) notes that seismic survey noise disrupted an entire migration season of fin whales. In this case the avoidance behavior was at cause for a loss of entire breeding year (which is not strictly physical damage to the organism but does have a profound bearing on survival). That this "avoidance behavior" occurred at hundreds of kilometers from the airgun source points to a fallacy in the assumption that animals can escape the impacts of noise by moving out of the noise field. It may be that case that animals would avoid the most direct physiological impacts of noise by moving away from the source, although this is not always the case as commonly seen in dolphins that gambol in the bow waves of	Thank you for your comment, however, the quotes presented in the comment from Michael Stocker are not accurate with regards to the Navy's proposed action or the analysis presented in the Draft EIS/OEIS and the reference to "the Draft Guidance" suggests the quote addressed a totally different proposed action. Navy is not using avoidance behavior as a mitigation strategy. Please refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities. The science detailed in Section 3.4.3.1.6 (Behavioral Reactions) indicates that most marine mammals will leave the immediate vicinity of an area where there is intense human activity or a stressor is present. Because the preliminary acoustic modeling does not incorporate horizontal animal movement, the post-model analysis of effects incorporates likely avoidance behavior to reduce some of predicted effects in the immediate vicinity of a sound source (See Section 3.4.3.1.15, Marine Mammal Avoidance of Sound Exposures). This post-modeling analysis is to provide a more accurate assessment of effects and has no relationship to mitigation measures. Please note that because there are no airguns proposed for use by

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	ships and in the “diner bell” effect of net predator pinnipeds ³⁵ that for one reason or another have elected not to avoid noise exposure. Thus “avoidance behavior” cannot be relied upon as a mitigation strategy and should not be incorporated into any exposure models.”	Navy and nothing in the proposed activities even remotely like a “seismic survey”, the effect of seismic survey noise has no relationship to the Navy’s proposed action. Finally, please note that as detailed in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, there is a special provision made for bow-riding dolphins.
Armon - 02 (Electronic)	The Navy’s analysis also fails to account for cumulative behavioral impacts for the years of activity. According to the Acoustic Institute: “Behavioral impacts clearly replaced strandings and deaths as the key issue for marine mammals encountering human noise. Several studies released during 2008 all suggest that whales of many species may stop or reduce their feeding when loud human sounds enter their habitat, and this particular impact is likely to become a central focus of future research and regulatory consideration.” AEI further states: “All parties seem to be accepting that gross injury is rare to the point of being difficult to use as a lever to shift the balance of interests with the Navy’s national security imperative, but NGOs, many field researchers, and agency staff are all looking more closely at the behavioral impacts that take place at much longer ranges (up to several or even tens of kilometers).”	The analysis in the EIS/OEIS accounts for cumulative impacts both broadly (see Chapter 4, Cumulative Impacts) and in a resource specific manner in each resource section. For marine mammals specifically, please see the science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities). The Navy therefore believes that long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Armon - 03 (Electronic)	How far and wide are the Navy sonar and explosives traveling in the water, considering the long distances of cetaceans hearing abilities (and the most utilized, primary, sense for acoustically oriented marine species)? The current distance mitigations are not enough, the testing and training still impacts marine mammals miles away. The mitigation measures detailed are not sufficient to reliably identify the presence of cetaceans in most instances, in part because the marine mammals themselves often attempt to avoid detection.	Regarding the “how far” questions, for sonar see Section 3.4.3.2.1.1 (Range to Effects) and for explosives see Section 3.4.3.2.2.1 (Range to Effects). The Navy recognizes that there is no means to totally eliminate effects to marine mammals, which is why the EIS/OEIS is part of the effort that includes a request for authorization of under the MMPA and other regulatory review to replace the existing authorization. As detailed in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the mitigation measures and safety zones were developed with these ranges in mind, plus the addition of an additional buffer to be further protective.
Armon - 04 (Electronic)	What are the qualifications, training, and time scheduled during all testing and training, dedicated solely to marine mammal observation, of Marine Mammal Observers and onboard crew observers? Has the Navy considered having researchers aboard during testing and training, as marine mammal observers, while supporting research, as the Navy claims to strive to be a world leader and has financially provided more than \$100 million over the last 5 years, toward research projects?	Regarding the qualifications and training for Navy Lookouts, please see Section 5.3.1 (Lookout Procedural Measures). Regarding the use of dedicated Marine Mammal Observers, please see Section 5.3.4.1.15 (Conducting Visual Observations Using Third-Party Observers). Note however, that the Navy does fund monitoring and research that can include dedicated Marine Mammal Observers (see the reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications)).

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Armon - 05 (Electronic)	All species population estimates should be based on minimum population estimate; are population estimates based on 'Carrying Capacity'? Has the Navy considered also using drones to identify marine mammals present in the testing and training areas and beyond? As we do know the ranges of many cetaceans and marine life, migratory and year round,	Regarding the recommendation that "all species population estimates should be based on minimum population estimate," the estimates presented in Table 3.4.1 (Marine Mammals with Possible or Confirmed Presence within the Northwest Training and Testing Study Area) are the stock abundance numbers from the National Marine Fishery Service Stock Assessment Reports; they are not based on carrying capacity. With regards to the number of marine mammals used in the acoustic impact modeling, see Section 3.4.3.1.14.1 (Marine Species Density Data). Regarding the use of drones to identify marine mammals, Navy in coordination with National Marine Fishery Service and other scientists has had an ongoing monitoring program as detailed in Section 5.5.1 (Approach to Monitoring) and considers all emergent scientific methods as they become applicable to the goals of the overall monitoring program.
Armon - 06 (Electronic)	Navy testing and training (or any seismic or acoustic harm) should not be conducted in those areas. It should be moved to pelagic sea depths, away from near shore, the continental shelf, and islands where the least amount of marine species live and will be impacted. Near shore and near marine life, testing and training should be simulated, as space travel testing and training is simulated. As science shows the habitat needs, ranges, acoustic thresholds, and behavioral change impacts of marine species, the Navy training and testing must adapt.	Regarding moving Navy training and testing to "pelagic sea depths" away from the areas where it has been ongoing for decades, see Section 5.3.4.1.7 (Avoiding Locations Based on Bathymetry and Environmental Conditions) and Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines). Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Armon - 07 (Electronic)	The Navy should not be allowed to increase training and testing hours, areas, ranges, or testing of new systems, while the impacts are not fully documented and understood. Under current circumstances, Please do not issue LOAs for the Navy to incidentally (and directly) harass (and harm) marine mammals.	Please see Chapter 2 describing the proposed action. In general, Navy is re-analyzing ongoing activities and specifically is not increasing "areas" or "ranges."
Arndt (Electronic)	To Whom It May Concern: Any testing which poses a threat to marine mammals shall not be done. It is that simple.	Your opposition to the Proposed Action is noted; however, the alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Arps (Electronic)	I feel very strongly that the navy's Pacific Fleet should NOT be allowed to test any mid range sonar system that is damaging to threatened and endangered marine mammals in the area extending from Alaska to Northern California, including the inland waters of Washington. Additional training and testing should be curtailed until the cumulative effects	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>of their activities have been studied in this already very stressed ecosystem. Other options should explored that do not damage the marine ecosystem. Don't you have giant tanks to experiment in? The inland waters of the eastern North Pacific, particularly Puget Sound and the Salish Sea, are experiencing stress already, and the science and governmental action needed to prevent or re mediate problems are not being supported. Evidence shows that these stressors can be cumulative and have widespread effects on the whole ecosystem, besides the threatened and endangered mammals. The Navy's environmental impact statement (EIS) admits that mid range sonar testing is damaging to threatened and endangered dolphins and whales, which are dependent on the use of sonar for hunting. The Navy already conducts hundreds of explosive tests and training exercises in the test area, with potential for ingestion of pollutants, entanglement, physical damage, and stress on the entire marine environment. It seems to me that this is all about human safety. A destroyed ecosystem is not safe for us either. Let's be reasonable here and actually protect the marine environment that we say we love.</p>	<p>training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Aschenbrenner (Oral)</p>	<p>Okay, so I'm following, the conclusion. My name Kindra Aschenbrenner, and I'm also with EPIC. In conclusion, the EIS is severely inadequate, as mitigation measures are piteous and the Proposed Actions would result in violations of several regulations that are in place to protect the environment and species from these types of harmful activities. The risk is too large. Please extend the public comment deadline and/or withdraw the proposed training and testing activities and explore other alternatives to train military personnel that do not put hundreds of thousands of species at risk in the global commons. I also have some -- I also have public comment here from Sylvia DeRooy, and I'm going to interject some of what she had to say in what I have to say. And I'm speaking here also not to -- personally to the Navy, because we all know that they've already been brainwashed by</p>	<p>Your opposition to the Proposed Action is noted; however, the alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>the military tactics. Rather, I'm addressing all of you, Humboldt County residents. Do not allow the Navy's training and codified words dissuade you in your concern for our waterways. The Navy, without public outrage, will never stop using sonar and explosive techniques, adds Sylvia. And it's really all about establishing the imperialistic presence everywhere. The Navy is going to war against our marine habitat. They want to use explosives and bombings across the U.S. Pacific Coast. According to Sylvia, why does the Navy have to do their training over such huge areas rather than one limited area far from the most endangered species? Why does their garbage from shells and bombs have more -- and more have to litter the ocean floor over a vast area? The sonar program exerts thousands of hours per year of testing, adversely affecting, and behavioral changes not only include taking of our species but also their disappearance in this region. This hearing is one step, but this is just showing we need to continue our pressure on the legislature and participate in petitions, for just speaking here will not change the Navy's mind, according to Sylvia. We need to do -- what we need to do is organize and start putting pressure on our legislators and start online petitions. To the extent that this petition that will be passed around, put in your contact info so we can get in contact with you. Thank you, guys.</p>	<p>need for the Proposed Action, and would therefore be unreasonable.</p> <p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. Because the Navy is continuing to improve mitigation measures, the Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
Ashe (Electronic)	<p>Please do not bomb and use sonar in the Southern Resident orca critical habitat off the NW Coast. Protect this incredible species' habitat and find another place to conduct the testing. Thank you.</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
Atly (Electronic)	<p>Stop violence against whales.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Attwood (Electronic)</p>	<p>Kimberly Kler NWTT EIS/OEIS Project Manager 1101 Tautag Circle, Suite 20301 Silverdale, WA 98315 Dear Ms. Kler, I am writing with citizen input regarding the Environmental Impact Statement relative to proposed sonar and explosive training on our coast and its effect on wildlife species in the Pacific Northwest. I have reviewed the Navy's video on the stated need for sonar and bombing practice in the Pacific Northwest coastal areas. I understand the need to train your naval forces, but I strongly disagree that these trainings need to be conducted in sensitive marine habitats. Your video claims that you are aware of the likely damage to whales and other habitat of your testing and you are therefore committed to protecting them by avoiding them. But I am deeply concerned that you apparently are unwilling to designate areas as no sonar and no testing areas even though those are known to contain vulnerable species' estuaries and habitats. So I write to strongly request that you designate marine habitat in our area off limits to your testing. Further, this is one of the busiest shipping lanes in US waters, already forcing marine fish and mammals into less and less nautical miles. Also, this is the 2nd largest estuary in the US, a sensitive and biologically diverse area producing large economic benefits for the region, including tourism. Expanded military activities such as those planned by the Navy are not conducive to tourism or current usage of his region. Our concern is heightened by the difficulty many on Whidbey Island have had in failing to get a response to the strong, repeated requests that the outlying field used by the Growlers in Coupeville be closed. Only after a lawsuit was filed were the trainings temporarily halted. The devastating noise from the Growlers has been shown to be harmful to our health, especially hearing, even to Naval personnel, yet the Navy has insisted on its right to subject local citizenry to this abuse. How much less sensitive will you be to the health and welfare of the whales, dolphins and other creatures endangered by your sonar and explosive testing if their habitat is not specifically designated as off limits to your training and testing? We believe that all of us are concerned about our children and grandchildren and the environmental legacy we are leaving them. Please, in</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Wildlife-dependent tourism activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around the Sound. The Draft and Final</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the name of our children and generations to come, in addition to the endangered creatures, change your proposed policy and protect our precious wildlife. Thank you for your consideration of this request.	EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
G. Austin (Electronic)	The science is clear and known to the Navy. Our security must be balanced with the security of the environment. Littering the ocean with radioactive waste, disrupting and injuring wildlife, and spending unnecessary dollars to use up the budget is not in our best interests. As to the present issue, sonar use near wildlife is unacceptable. As a Puget Sound islander, I find the threats to our diminishing Orca population particularly sad. After all these years of plans, research, and comments, I can't believe it's still an issue.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy expends no radioactive materials of any type in its proposed activities."
S. Austin (Electronic)	Our waters are already showing evidence of harm from climate change and the Navy's draft EIS plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. The Navy's draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. This draft fails to adopt common-sense measures which would dramatically reduce these injuries and deaths without compromising national security. The Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. The Navy considered short-term, long-term, direct and indirect effects on all the resources of the Study Area, using

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. The Navy has failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution.</p>	<p>the best available science about the existing condition and location of resources, and about how each resource reacts to the types of stressor associated with Navy activities.</p> <p>Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the seaspace depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>any adverse impacts on Sanctuary resources and qualities.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. Additionally, literature discussing ocean acidification and noise pollution has been reviewed. It is now discussed in Section 4.4.4 (Climate Change), of the EIS/OEIS.</p>
<p>Ayres (Electronic)</p>	<p>Quote from the Navy, "Marine mammals rely on underwater sound to survive. Similarly, the U.S. Navy depends on sonar for defending our ships at sea." The lives of sentient beings that we share the planet with vs defending ships? Who is attacking us? Is Russian going to send a submarine to attack one of our ships? I doubt it. But for sure we are attacking hundreds of animals for no reason at all. I say NO to this testing. It is not worth the sacrifice of other beings!!</p>	<p>Thank you for participating in the NEPA process. Your opposition to the Proposed Action is noted; however, the alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Bacigalupi – 01 (Electronic)</p>	<p>In recent years, science has continued to find support for the concept that low and mid-frequency active sonar used by navies around the world are having a significant negative impact on marine mammals and other ocean going species. Such data have been developed by numerous sources, including studies funded by the Navy. Even if the ever-growing body of science supporting this concept is unavailing, the precautionary principle and the lofty Congressional intent to incorporate the precautionary principle into the Endangered Species Act ("ESA") further dictate that in order for the Navy to satisfy their obligations under federal environmental law, they must consider the acoustic harm to marine fauna from their actions in greater detail. Recently, a study funded by the U.S. Navy found that blue whales passed on nearly a ton of food. For large highly migratory species like whales, every calorie they get is important. The caloric loss of nearly a ton of food is quite significant, and could impair their ability to continue to survive and thrive. This study, however, is just one of many that demonstrate that Navy sonar is having a serious impact on marine wildlife. These data are buttressed by numerous real-world examples. Just to name a few, the Bahamas in 2000 , Washington State in 2003 , and Spain in 2006 all have connections between sonar and marine mammals. These are just a few examples. The potential harm to marine mammals was reinforced by the recent stranding event in Crete, which happened to correspond to a NATO anti-submarine exercise. Although correlation does not necessarily equal causation per se, the frequent correlations between naval sonar activity and marine mammal strandings have become more than mere coincidence. At the very least the 'institutionalized caution' of the ESA and the "hard look requirements of NEPA dictate that the Navy should go back and conduct a more thorough review of the impact of their actions and consider less harmful alternatives. While it is true that NEPA does not have any substantive mandates to it, it requires agencies take a "hard look" at their actions, and can further assist agencies in ensuring compliance with other substantive statutes, such as the Endangered Species</p>	<p>Please see the EIS/OEIS Sections 3.4.3.1.6 through Section 3.4.3.1.9 where the Navy took a hard look at the best available science regarding marine mammal short-term, long-term, direct, and indirect impacts. Regarding the precautionary principle, please see the information summarized in the Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) noting 8 years of research and monitoring at Navy ranges. Based on 8 years of research and monitoring, along with outside studies, the Navy believes that long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area.</p> <p>Regarding the comment's mentioned study involving blue whale feeding, the science regarding those studies is presented and discussed in Section 3.4.3.1.6.2 (Behavioral Reactions to Sonar and Other Active Acoustic Sources).</p> <p>Regarding previous strandings, see Section 3.4.3.1.8 (Stranding) and the referenced technical report "Marine Mammal Strandings Associated with U.S. Navy Sonar Activities" (U.S. Department of the Navy 2013c). While the annual strandings in Washington in 2003 had no relation to Navy activities, the Navy does not consider all cases simply "coincidence" as the comment asserts and has presented five specific mass stranding events where sonar use had been identified as a contributing cause or factor in a stranding. The fact remains, however, that the Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Act and Marine Mammal Protection Act. A full and thorough consideration of all possible environmental harms is also essential for the agency to consider a full range of feasible alternatives. Even if NEPA does not require a specific outcome, that does not change the Navy’s obligations under the ESA. The lethal take authorizations sought by the Navy from NMFS, as well as the information in the DEIS, indicate that the Navy has drastically underestimated the true impact of the harm they will have on marine species. This inadequate consideration stands in stark contrast with the body of scientific knowledge, which continues to grow, supporting the broad range of acoustic harm caused by the Navy’s proposed actions.</p>	<p>Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area.</p> <p>Regarding analysis of alternatives, please see Chapter 2 and also refer to Section 5.3.4 (Mitigation Measures Considered but Eliminated) where there is a discussion of the Navy reviewed mitigation alternatives. The comment’s assertion that the analysis “underestimates true impacts” is incorrect. Please refer to Section 3.4.3.1.14.4 (Model Assumptions and Limitations) where in a precautionary approach, if there was a lack of definitive data to support an aspect of the modeling, conservative assumptions believed to overestimate the number of exposures were chosen. Furthermore and regarding “lethal take”, as presented in 3.4.3.1.13 (Mortality and Injury from Explosions) the criteria and threshold for mortality is based on a number of conservative assumptions that overestimate the likely impact. Furthermore, given the accidental nature that vessel strikes are not reasonably certain to occur, the Navy has rescinded the request for authorization of a single lethal take by ship strike in the NWTT Study Area, and no other mortality takes were identified in this EIS/OEIS.</p> <p>Finally, as presented in Section 3.4.3.1.16 (Implementing Mitigation to Reduce Sound Exposures), only some mitigation measures were considered in the reduction of quantified likely impacts, again leading to an overestimation of likely effects.</p>
<p>Bacigalupi – 02 (Electronic)</p>	<p>Furthermore, the unique resources of the Olympic Coast National Marine Sanctuary are the subject of considerable federal efforts to preserve them, as mandated by the National Marine Sanctuary Act. Although the recent management plan for the Olympic Coast National Marine Sanctuary considers Navy involvement, it, like the Navy’s own analysis, underestimates the true impact the Navy’s actions will have. Simply put, without the “hard look” required by the National Environmental Policy Act (“NEPA”), the Navy will never be able to ensure that they are using the best available science to ensure that they do not jeopardize listed species. Conversely, if the Navy does the “hard look” required by NEPA, there is no way to rationalize the project as it is currently proposed without being found contrary to the Marine Mammal Protection Act, Endangered Species Act, and National Marine Sanctuaries Act, and therefore arbitrary and capricious. Accordingly, the proposed training plan should be substantially revised before it is implemented.</p>	<p>The U.S. Navy has conducted active sonar training and testing activities for decades in the seaspace depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life.</p> <ul style="list-style-type: none"> • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>See Section 3.4.3.1.8 (Stranding) and the referenced Navy technical report (“Marine Mammal Strandings Associated with U.S. Navy Sonar Activities”), which provides further details regarding strandings and their link to Navy sonar. The stranding report is available on the NWTT EIS/OEIS website.</p>
<p>Bacigalupi – 03 (Electronic)</p>	<p>The DEIS is also notably lacking in its consideration of cumulative impacts. Given the sizable acoustic footprint created by military sonar and munitions, and the highly migratory nature of numerous oceanic species, it is unfathomable that the Navy would not consider cumulative impacts of other significant sources of stress to marine mammals, including the Navy’s own actions. The ocean is an ever growing body of threats and danger. Survival in the ocean, which has never been easy, has grown considerably more difficult in recent decades. Increases in fishing technology, massive shipping vessels, pollution, acoustic saturation, ocean acidification, climate change are just some of the most notorious sources of harm to marine wildlife. While any one of these threats individually may not significantly harm a species, the combined impact of them may have synergistic qualities that far exceed what the Navy has already considered. Two particular sources of concern for me are the cumulative effects of sonar from the SOCAL training range, and acoustic harm from oil and gas explorations near Alaska. Because of the long range transmissions of these sounds in the ocean and the fact that numerous marine species overlap all three geographic impacts, these harms impact and ultimately change the nature of the environmental harm that the Navy must consider in their EIS. Yet the DEIS is notably bare when it comes to its consideration of cumulative impacts. The sections of the DEIS addressing cumulative impacts looks at a narrow number of stressors, so narrow that it strains the idea of it being considered a cumulative impacts</p>	<p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. The Navy has returned to the analysis in Chapter 4 due to concerns raised in public comments, and the Chapter has been revised in response to those public comments. The literature on ocean acidification has been reviewed, and is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	analysis. Similarly, the 46 cumulative sources considered in chapter 4 of the DEIS reveals that narrowness in which the Navy chose to consider cumulative impact. This narrowness applies to both the number of projects the Navy considered as having a potential impact, as well as the geographic narrowness of the Navy's considerations. Given how slight the consideration of cumulative impacts is in the DEIS, it fails to live up to the hard look standard necessary under NEPA.	
Bacigalupi – 04 (Electronic)	The Navy's proposed actions also contribute to an increase in water pollution. The idea that the military can cause harm to water quality is not unprecedented, nor is the military being required to curb their actions to minimize the impact of their harm. The concerns over water pollution are exacerbated by the increasing acidification of the ocean that is already occurring. When the pollution from ship actions and munitions testing is added in, it is just one more straw on the back of seriously strained camel. It is beyond question that a byproduct of live weapons testing is pollution. While terrestrial bases can put in mitigation measures to minimize and contain the impact this has on the surrounding environment, nothing stops the same pollution from fully impacting the marine environment and from being carried across the sea on ocean currents. Water pollution stemming from military testing and training is nothing new. On Cape Cod, Massachusetts, the Otis Air National Guard Base currently finds itself a source of a major clean-up efforts to address the harm their training has had. It is one of the first times the military was required to curb training activities because environmental harm. After expending considerable time and energy the military is still working to resolve the pollution problem there. The Navy can avoid having similarly drastic impacts on the ocean environment by voluntarily acting now to reduce the impact their actions have on the ocean. This is particularly important because implementing a clean-up of pollution would prove logistically infeasible on the open ocean. As proposed the pollution added to the ocean by these actions would be significant and should be more adequately considered, and less impactful alternatives considered. Given that the ocean is already straining from numerous stressors, there is no reason for the Navy to exacerbate this.	Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals. The literature on ocean acidification has been reviewed, and now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.
Bacigalupi – 05 (Electronic)	Thank you for allowing me the opportunity to comment on the Navy's proposed training and testing operations. As a law student who has invested considerable time and resources to the protection and preservation of marine wildlife generally, and the Southern Resident Killer Whale population specifically, I am deeply concerned about the proposed training operations being considered by the Navy. Furthermore, I continue to derive personal, professional, recreational, and aesthetic benefit from all marine mammals, and particularly those in the Pacific Northwest. For the foregoing reasons I respectfully requests that the Navy consider these concerns and that the Final Environmental Impact Statement consider the full extent of the Navy's acoustic harm on marine species, the full extent of the cumulative impact on marine species, and the full extent of the Navy's contribution to an increasingly polluted ocean. Thank you for your	As identified in responses above, the Navy believes it has considered the material related to your concerns and incorporated it into the Final EIS/OEIS. Thank you for taking the time to comment.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	time and consideration in this important matter.	
Bagnell – 01 (Electronic)	<p>If there is any chance that marine life will be harmed the proposed activities should absolutely not take place.</p> <p>I am concerned for the marine life in this area if the proposed activities were to take place.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Bahls (Electronic)	<p>The Navy’s failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area is both unacceptable and unconscionable—particularly because the Navy’s draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community’s view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean’s absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH; this change has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy’s deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the</p>	<p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the seaspace depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Navy’s plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy’s specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
<p>Bailey (Electronic)</p>	<p>I am writing with grave concerns about the Navy’s proposed use of sonar and underwater explosions in the Northwest Training Range. I live in the San Juan Islands — Endangered orca whale country. There are only 80 orcas left off the entire coast of Washington, Oregon, and California. They already face many man-made threats along their migration routes, without more preventable and needless deaths. People come from all over the world to see the whales off the Pacific coast. Many of our coastal economies depend on eco-tourism and fishing, but our concern for the wellbeing of cetaceans goes far deeper — we love, appreciate, and respect these highly intelligent beings. Marine mammals are extremely sensitive to noise. Sonar destroys important habitat and disrupts the essential behavior of killer whales, blue whales, harbor porpoises and other marine wildlife. If you deafen a cetacean, you essentially kill it, destroying their navigational and communication abilities. Has the Navy considered the deafening of whales in its kill estimates? What about other cetaceans affected, and the loss of habitat and food supply caused by sonar and explosion testing? What are the real numbers when it comes to maimings and deaths? In 2004 the Navy’s sonar was implicated in a mass stranding of as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. And in 2003 the USS Shoup exposed a group of endangered orcas to sonar in Washington’s Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound. There is no need for this torture of innocent marine mammals — and it IS torture. Who will be physically and fiscally responsible — the Navy, or the U.S. taxpayers — for cleaning up the carnage of whale and dolphin corpses, or worse, dying cetaceans that we’re powerless to help, washed up on our beaches? And how do we explain to a traumatized population, to our kids and grandchildren, WHY these magnificent creatures died — needlessly — at the hands of our own military? The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on the region’s valuable wildlife. Has it been scientifically proven that the impacts can be mitigated? Our cetacean populations are sacred to us, and to the many First Nations Tribes and Bands along our coasts — who ultimately have final say in what happens to our waters, under National and Tribal Law. The waters of the United States, including marine environments, belong to First Nations and the people, under the Clean Water Act. What other effects on our waters will sonar testing and explosions have? What else will they kill, and in what estimated numbers? How else will they pollute? How else will they warm and acidify our oceans? What will they do to the marine food chain, and to coastal economies and Aboriginal cultures? Have these questions and many more, been considered, and satisfactorily answered? Have outside,</p>	<p>The Navy is committed to protecting marine life, but this commitment must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	unbiased Academic Marine Biologists weighed in on the EIS? Who really stands to make their fortunes, or increase them, on these weapons tests, against the will of the U.S. taxpayers footing the bill? As you continue to provide for our country's defense, please find a way to train that respects and protects our natural resources and our ocean's sensitive wildlife, and the people who see the value in cetaceans.	mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.
Bair (Electronic)	Whales and dolphins are among the most intelligent and awe-inspiring creatures on earth. We don't need more weapons to destroy life. We need to throw all of your resources into protecting and enhancing life. The National Marine Fisheries Service should take it as a sacred trust to protect fisheries and marine life, not sign off on sonar weapons testing that will deafen and ultimately kill more whales and dolphins. This is an inexcusable disservice to the organization's mission.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the Draft EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
D. Baker (Electronic)	Please minimize or eliminate sooner testing due to its impact sea life particularly mammals such as wells and dolphins. The sonar's predicted impact of "harm[ing] marine mammals 2.8 million times over five years" is unacceptable. Harming 2.8 million mammals on earth would be seen as pandemic. It is no different for sea life.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the Draft EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>N. Baker (Electronic)</p>	<p>Dear Commander of the Pacific Fleet, Congressman Kilmer, Senators Murray and Cantwell: The Navy’s draft environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area of Washington to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to injure and possibly kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. The Navy’s failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable—particularly because the Navy’s plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community’s view that these would be the most effective means of reducing harm. Please send the Navy’s deficient draft EIS back to the drawing board and direct the Navy to meet it’s legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy’s plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. Sincerely, Norman T. Baker, PhD</p>	<p>mammals from Navy activities.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the seaspace depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>proposed testing activities would occur within or immediately adjacent to the OCNMS.</p> <ul style="list-style-type: none"> • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p>
<p>Balcomb III (Electronic)</p>	<p>18 March 2014 Dear Commander of the Pacific Fleet, Congressman Larsen, Senators Murray and Cantwell: The Navy’s environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area of Washington to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to injure and probably kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. We have just witnessed the tragic killing of a baby Endangered Southern Resident Killer Whale by Canadian Forces training in this area and the incredible cover-up/whitewash that followed. It is clear that the Navy and the NOAA Fisheries consider it adequate to mitigate these training casualties post-mortem, but that serves only to reduce confidence in our government while driving endangered species closer to extinction. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including seven endangered whale species (right, blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. The Navy’s failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable—particularly because the Navy’s plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. Sincerely, Kenneth C. Balcomb, III</p>	<p>on the development of alternatives.</p> <p>Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the seaspace depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Balse (Electronic)	ATTN: KIMBERLY KLER We have been writing to you for years expressing our concern and dismay over your proposed sonar and weapon testing in our pristine waters in the Pacific Northwest. It is an ongoing horror to us that you cont. to not only pretend to care about our public opinion but also extend the areas for your wargames and imminent destruction of our oceans, marine life, beaches, and well-being. We are, as always, against this, do NOT support it in anyway, and demand that you stop immediately. There is no possible gain for anyone that you continue to needlessly pollute our oceans and kill our whales and marine life. With all the billions of dollars the navy has for I-252 experimentation , I can't imagine why you haven't figured out another way to test your silly missiles without completely destroying the well-being of our oceans. Are you aware that there is an international agreement signed in 1937 to protect grey whales? How do you intend to uphold this international treaty while playing your wargames?	would therefore be unreasonable. The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.
Barnes (Electronic)	I want to strongly urge the U.S. Navy to end its war on whales and other marine life by being much better stewards of the ocean by ending trash and waste dumps, and most importantly, ending bombing and sonar exercises. The most powerful navy in the world should protect marine life as well as human life.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.
Barnett (Electronic)	The US Navy should not be allowed to use explosives or sonar in any protected areas such national marine sanctuaries. Furthermore, they should not be used outside of protected areas if in the proximity to any marine mammals and/or endangered species. The US military should not be exempt from any environmental regulations during peace time.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p>
<p>Barris (Electronic)</p>	<p>Allowing the navy to do this kind of testing off of Humboldt is further destroying Pacific ocean sea life who is having a hard enough time as it is dealing with nuclear waste from Fukushima. The balance of life is fragile and plans like this just further extinguish it. Please REJECT the navy’s plans and have them carry out their training some other way that does not destroy whatever precious life remains in the contaminated Pacific.</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Barry (Electronic)	Dear Navy, It deeply troubles me that you are not protecting our magnificent sea mammals. Your application for renewing your sonar permits should be denied till you actually come up with a mitigation process to protect the whales and dolphins. The ocean is not yours to destroy. These mammals are being tortured with you blasting your sonar through out their home. This MUST end. The environmental cost of your actions is not accounted for in the budget. You cannot replace these creatures. Below is an article I copied from the Huffington Post. Please read it as it represents how I feel and think. Back in 2000, while researching my National Geographic book, SIGHTINGS: The Gray Whales' Mysterious Journey, and my Sierra Club novel, Animal Heart, I met many marine scientists who were deeply troubled by the U.S. Navy's sonar. "The military only regards the oceans as a big acoustic battleground map—not a living ecosystem that needs protection itself," the scientists told me. "The Navy wants to ensonify the seas just like the now defunct Star Wars plans for space. As military sonar has increased its territory and the "take" or kill grows with each target practice—from the Bahamas, to Greece, to Hawaii and our East and West Coasts—many scientists are courageously speaking out. Long-time orca researcher, Ken Balcomb, calls military sonar an "acoustic holocaust" and Nova Scotian whale researcher, Lindy Weilgart," writes in a Christian Science Monitor op-ed: "I cannot imagine why we would subject marine inhabitants, the majority of which are highly sensitive to sound, to yet another source of pollution." To limit military sonar and make it off-limits in biologically sensitive marine areas, EarthJustice and NRDC, among other environmental groups, have filed suits."The Fisheries Service basically issued a blank check to the Navy, allowing it to kill scores of marine mammals—including endangered whales—and critically imperiled turtles, with no meaningful limits to ensure these species will not be pushed closer to extinction," said David Henkin of Earthjustice. Respectfully, Ms. Barbara Barry	a decade. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. When cetaceans have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).
Baskette (Electronic)	No! NO, NO, NO, NO, NO! Haven't we made a big enough mess of the world without that kind of testing off our coasts?	Thank you for participating in the NEPA process.
Beasley (Oral)	I'm a local commercial or used to be a local commercial fisherman here and I represent the local crab association and Coalition of Coastal Fisheries. And, first of all, I'd like to thank the Navy for the one comment I heard here tonight and that's their, one of their primary purposes is to maintain free use of the sea. Our group needs that and we appreciate that that's one of your missions in life. So if -- The other thing I didn't see in	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	that EIS, I read it quickly, is that we've got some equipment that may be going in offshore that may interfere with our flight patterns and whatnot on the coast, 600-foot-tall windmills over the coast, that you might want to expand your area to protect some of that free use of the sea. Thank you.	
Beaton (Electronic)	I don't claim to be one of those staunch environmentalists. Nonetheless, when I hear reports that the Navy exercises along the west coast (particularly the northwest region) affect migratory patterns of marine life, hurting them—and yes, even greatly reducing the their population—it seems beyond reasonable to adopt a drastic change in the way these naval activities are conducted. I don't have a problem in conducting activities lead to a more secure defense of our borders. Make no mistake, we ought to be able to defend ourselves from foreign enemies. But shouldn't we perform these activities responsibly? That is a question that demands to be answered. If marine life is greatly affected by the sonar tests, weapons testing, etc., then it becomes very disturbing that you would not take into account of such things. So again, I say to you, even from a former Navy man (Seabee), conduct the military exercises responsibly!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Beck (Electronic)	Dear Navy, I'm sure your intentions for various testing is national security etc. With your reputation at stake, again(remember sonar testing disaster in Washington), it would only make sense to continue your testing in areas already used for such purposes. San Clemente island windward side has been used before as I have witnessed. Otherwise far off testing like Marshall Islands etc. Would damage less wildlife, freak out less people, possibly show compassion and understanding of a complex situation and bolster your reputation in this matter. Otherwise it appears you are intentionally harming the environment and wildlife and possible income of already strapped Americans just to see what happens. In this day and age where responsibility is important please do your testing(WHICH I'M SURE CANNOT BE STOPPED) NOT ALONG THE COAST OF NORTH AMERICA! Thank you for your consideration in this matter. Mike Beck	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. As discussed in Chapter 1 (Purpose and Need) proximity of the NWTT range complexes to naval homeports is strategically important to the Navy because the close access allows efficient execution of training activities and non-training maintenance functions, equating to reduced fuel costs and reduced air emissions. The proximity of training to homeports also ensures that Sailors and Marines do not have to routinely travel far from their families. Less time away from home is critical to military readiness, morale, and retention. The proximity of the testing ranges to technical centers of expertise (e.g., NUWC

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Keyport) is crucial to the successful completion of testing activities. The proximate availability of the NWTT range complexes is critical to Navy efforts in these areas.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Bedell (Electronic)	Stop testing sonar in I-256uget sounds, save the orcas!!!	Thank you for participating in the NEPA process.
Beer (Oral)	<p>All right. Well, my name is Jack Beer. I was born and raised here locally. I'll tell you a little bit first about my background, where -- why I'm here. December -- I'm really bad at public speaking. December 22nd, 1871, my great, great, great grandfather, Carl Lindstrom, migrated from Sweden to what's now Fairhaven on the Humboldt Bay Peninsula. He opened up the Lindstrom Shipyard, which was one of the first shipyards in the area, and started commercial fishing. That tradition has been passed down now four generations to me, making a living also, here on the ocean, commercial fishing. And everything I've -- me and my family does revolves around no other subsistence style living, which we live, and also the way we make -- make our income. Well, I'm not against bringing, you know, making it easier for troops, you know, to get back and forth to work. I'm not against the military. I'm not against any of that. But all I got to say is that if there is a slip-up with making sure there's, you know, no mortalities, things like that -- if there is a slip-up, what the hell's going to happen to me? You know, what's going to happen to the tradition that my grandfather showed to me, when I can't show that to my grandson someday? What's going to happen to the way my family's been living for hundreds of years with -- with, you know, if -- if there's no more -- if -- if something does happen? It's just the risk is too much. It's too much. And we've made -- we've made accidents before. It's not the first time. The North Coast, we're still -- we're trying to, you know, come back from accidents that -- you know, all kinds of things. We've been hit with so many blows here, why take the risk of one more? That's all I got to say. Why take that risk?</p>	<p>The Navy has conducted training in these operating areas regularly for decades. Though the intensity of live training will increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range, but as stated in the EIS/OEIS in Section 3.9.3.1.2.1 (No Action Alternative), the majority of sonar and other acoustic sources proposed would occur outside the hearing range of most fish species. Therefore, long-term consequences for fish populations are not expected.</p> <p>Most commercially important fish species are not believed to hear mid- and high-frequency sound sources which make up the majority of sound producing activities.</p>
Beers (Written)	I would like to comment on the sonar and explosive exercises in Washington State Coastal Beaches. Your sonar testing hurts the sensories of whales and other species.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Please stop. I have personally found metal projectors of the Navy on the beach and large whale die offs with ears bleeding. Certainly the Navy can test without endangering the marine animals. Also had a torpedo race up the beach. Please reconsider the danger involved. Thank you.</p> <p>P.S. The Navy might think about the vibrations of these testings. They could effect the Cascadian Subduction Zone, causing a rift and earthquakes. This would effect more people than your testings is worth.</p>	<p>Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
Beising (Electronic)	Please find a safer way to do your testing. Our activities conterminates the oceans as is, making life difficult for many or all ocean creatures. Take a hard look at how to do better. Thank you, Norbert Beising	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Belford (Written)	<p>Once again, I must write to let the Navy know how appalled I am that they are planning training and testing activities within the NWTT Study Area. The testing which is to include sonar and explosives is well known to adversely affect, disrupt, and yes - even kill marine mammals. Studies have shown and the Navy well knows that noise in the oceans interferes with the acoustics these mammals depend on to feed, communicate, and rear their young. Testing of this kind has been done over and over again and it is high time that the Navy stop these ridiculous activities.</p> <p>The ocean and the precious life that lives within it need to be protected, not needlessly subjected to this terrible testing! Please stop this now before you people do more needless testing and killing.</p>	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		mammals from Navy activities.
Bengn (Electronic)	Please stop the Sonar killings. This is just unacceptable. The people do not want this. It is not our ocean to do what we want with it. Think of how many whales/dolphins you are killing by continuing with the sonar testing and usage. These mammals are dying a very painful death due to this. We must stop. As a U.S. citizen I am TOTALLY opposed to what you are doing here on our shores and elsewhere in the ocean world. Stop now!!! Keep our oceans healthy. We only have one world and it's systematically being destroyed by humans. Leave these creatures swim in peace without harm. They deserve it.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Benko (Electronic)	Please put safeguards in place that will dramatically reduce the threat to whales without compromising military readiness. Do not go to court to defend your plan. The very least the navy should do is provide "exclusion zones" – to avoid areas known to be critical habitat and feeding/foraging grounds for whales and dolphins.	The Navy shares your concern for marine life. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>mammals while still being able to meet its operational needs to train for real-world conditions. The Navy’s specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
<p>K. Bennett (Electronic)</p>	<p>I think it is very sad that the Navy would risk the lives of innocent sea life, that they know will be affected by such noise pollution. This is something that needs to stop. It is cruel to subject animals to blown ear drums and cause them so much pain in their home where they should feel safe. Please reconsider this practice and testing. There is no one even to treat injured and suffering animals. I hope enough people speak up for the beings that can't</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Bernsten (Written)</p>	<p>Looking over the Informational Materials (Northwest Training and Testing EIS/Overseas EIS) handed out at the meeting in Poulsbo tonight (Feb. 28, 2014), I find this statement on page 7 under the section: Marine Mammals: The use of vessels, sonar, explosives or other sources of underwater sound during training and testing activities may affect certain marine mammals, including individual mammals listed as threatened or endangered. However, these activities are not expected to decrease the overall fitness of any marine mammal population. How can this be? I understand the resident orca population in Puget Sound numbers only 80 or so individuals. So every individual orca in Puget Sound matters when the population is so endangered.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		mammals from Navy activities.
Berntsen (Oral)	I appreciate this process. I did have some questions. I'm here because they emphasized how important it is to the Navy to undertake this testing. I just wonder how very important this is when compared to keeping the orcas and other marine mammal populations healthy. I just wonder how much damage can be sustained by this population before the Navy would say, "It's not that important that we do testing in this area." It's been emphasized that the projected damage will be minimal to the marine mammals but as the monitoring goes along and there is found to be damage detected at what point does the Navy say, "That's enough." So I'm just speaking for the whales and the marine mammals because they are important and they've been here longer we have. So I hope that the Navy will consider alternatives to testing with sonar in Puget Sound.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Binder (Electronic)	I live on the Pacific Coast in the area of the proposed Northwest Training and Testing area. I am very opposed to the Navy's plans for our area. More and more of the world's oceans are polluted and damaged. Fukushima and the B.P. oil spill are only a couple of the many examples of damage to our seas. it becomes more and more important to protect them and the animals and plants that depend on them. I attended the workshop the Navy held in Eureka. The potential damage to our environment far outweighs whatever benefits the testing off our coast might have. Reading the booklet the Navy handed out at the workshop, I was not reassured. To quote p. 7-8: 1."Navy training and testing activities could result in local, short- and long-term changes in sediments and water quality." 2."The use of vessels, sonar, explosives or other sources of underwater sound ...may affect certain marine mammals, including individual mammals listed as threatened or endangered." 3."The use of vessel, sonar, explosives and testing activities may affect individual sea turtles." 4.Navy ...testing activities may affect individual birds, including the marbled murrelet." 5."Navy training and testing activities could affect individual marine plants." 6. Training...could affect individual marine invertebrates." 7.Navy training and testing... may affect individuals of certain fish species including	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Endangered Species.” That the Navy says that these results “are not expected” or are “unlikely” does not reassure me. It has been my observation that many unexpected things happen: for instance the Fukushima meltdown and the B.P. oil spill. Once the environmental damage is done, it is impossible fix. Please no training and testing off our coast. Sincerely, Carol Binder</p>	<p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
<p>Blackberry (Written)</p>	<p>I attended the public meeting in Eureka California sponsored by the Navy regarding Northwest Training and Testing. I totally support all of the public testimony that was given. I believe the biggest national security threat is the destruction of our environment, including the oceans. Rather than doing more harm with training and testing exercises to be prepared for war activities, the Navy needs to refocus on protecting us from the massive pollution and destruction of the ocean environment which IS CRITICAL to our survival.</p> <p>How about cleaning up all the plastic and other garbage in our oceans. Climate change and increasing toxic pollutants poisoning our earth, air and water is the most serious crisis that needs immediate attention! PLEASE HELP NOW.</p>	<p>Thank you for participating in the NEPA process.</p>
<p>Blade (Electronic)</p>	<p>“I am writing in opposition to the Navy’s proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. “Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: “Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation’s military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy’s Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event”. All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Northwest. It's time to end the Navy's war on whales".</p>	<p>mammals from Navy activities. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Blair (Electronic)</p>	<p>To whom it may concern: The proposed activities by the Navy would result in significant harm to whales, dolphins, fish and countless other marine animal species including many species, such as Humpback and Sperm Whales, that are listed as threatened or endangered under the Endangered Species Act. Testing and training activities including the use of explosives, weapons firing, sonar and other acoustic devices would result in risks that would disrupt basic behaviors of marine mammals, including activities necessary for survival such as migration, surfacing, navigating, hearing, nursing, breeding and feeding. For these reasons, the proposed activities would result in violations of the Endangered Species Act by placing threatened and endangered species in jeopardy. The analysis of effects to marine mammals, especially endangered species is severely inadequate, as the Navy does not disclose anywhere in the EIS the total number of species that will be adversely affected. Furthermore, upon contacting the Navy's public affairs officer for the project, even this official did not know the total number of individual species that would be affected by the proposed training and testing operations. How can cooperating agencies, concerned public citizens and international governments provide accurate assessment of the project and meaningful comments if the documentation fails to disclose the total number of species that will be disturbed or killed? The cumulative effects of this project, combined with the impacts of the Navy's historic and ongoing operations, will significantly harm the environment and is not in the best interest of the global commons, which is in direct violation of Executive Order 12114. Activities like dumping debris on the seafloor, spreading toxic chemicals, detonating explosives, and blasting high intensity mid-frequency sonar will significantly degrade habitat areas, including many sensitive habitat areas that serve for countless species, and that are critical to the health and survival of dozens of marine mammal populations. The proposed mitigation measures are derisory and would result in significant impacts to marine species. Human lookouts on the ships and fish finders are inadequate for reducing impacts to marine mammals, as the sonar, expended materials and toxic chemicals would travel beyond the distances that people and fish finders can detect animals. In conclusion, the EIS is severely inadequate, the mitigation measures are piteous, and the proposed actions would result in violations of several regulations that are in place to protect the environment and species from these types of harmful activities. The risk is too large; please rescind the proposed training and testing activities and explore other alternatives to train military personnel that do not put hundreds of thousands of species at risk in the global commons.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/submit/display.asp?template_id=10000) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Boecker (Oral)	<p>My name is Sue Boecker and I apologize for speaking out when you were speaking. I know you're doing your job and my animosity is not towards you. I'll reserve that for the process. I do think that you need to speak to your assistant, your public relations assistant, Mark. I called to get a copy of the EIS about two weeks ago and he told me it was an expensive document and the Navy didn't give it out and that I need to find one where I live. I told him I was an old lady and I was doing the best I could. So after about five minutes he came back and said there was one at the Fort Bragg Library. And I told him that the chairs there are very hard, I'm very old and I couldn't spend day after day there going through what I know is a lot of information. And he said that I was being hostile, and I said no, I'm just a crabby old lady. And I asked for your phone number and he absolutely would not give it to me, but I did get a copy of the EIS, the Draft EIS. I don't think that we should have to argue to get the information. I think it's important that it be out there. I also think it's important that this many people show up to comment on something that they probably have not had an opportunity to read or see. I know you can't change the direction of the Navy or that we can, but I do think it's important that you look at the entire cumulative effects of your naval testing and training. If you have the whole of the Atlantic seaboard I don't believe it's -- I don't -- I think it's overkill to -- to take in the Pacific seaboard as well. There are lots of mammals other people have referred to, and I know you're aware, that are endangered and we're probably not too far from getting up to the top of the list. I thank you for listening, I thank you for coming, and I plan to send in other comments.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
Boram (Electronic)	<p>Please consider and respect the cetaceans in the oceans – give them time to swim away as the noise is destroying their sonar and killing them.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Boreen	<p>Do it in your swimming pool and see how you like it. Bet you leap out of the pool with</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	blood draining from your ears.....	
Born (Electronic)	Stop all testing and training that would harm marine birds and animals. These types of testing and training disturb vital migration routes, and kill or permanently handicap defenseless animals. This type of warfare is much less likely than it was in WWI and WWII, and the risk is not worth the damage caused.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Borsz (Electronic)	To Whom It May Concern, I greatly respect the work of our government and military, but I urge you to take every consideration and precaution in protecting our marine habit and endangered orcas in particular. I will never forget meeting a sailor in college who told me the best part of being in the Navy was the war games and watching all the marine life float dead to the surface. I expect (and sincerely hope) this is not the attitude of all sailors or government workers. National security is important but marine resources and endangered species are incredibly important too and if depleted too far, unrecoverable. Noise in the marine environment and physical threats from training operations are deadly to the whales and could lead to the collapse of an entire ecosystem. Please keep Naval training operations out of such vital habitat. There are ways to balance the Navy's objectives while still protecting our marine resources. Respectfully,	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Bosiger (Electronic)	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Bosworth-Cooper (Electronic)	Begging, please do not train in our Puget Sound with noise & sonar. We already have an endanger species Orca pods in the area, we don't need to add to the noise already abounding in the Puget Sound, such as ferries, pleasure boats & cargo ships. A cruise ship showing up at port with a dead whale across its bow is bad enough. Please do not add to their increasingly dangerous natural habitat. They have not recovered from marine park selections or the Exxon Valdez. The Puget Sounds marine mammals should be protected in every way by all humans, including the Navy. Be proud in a choice to care for these magnificent fellow mammals. Sincerely, Be Bosworth-Cooper	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Boucher (Electronic)	I understand that the Navy has to test sonar/explosives, etc. It's a part of the Navy's job to continue these training exercises in the likely hood that these may be necessary to the safety and the security of the United States and others. I have a great deal of respect for all the Navy does. However, there has to be a way to schedule these tests in and around areas where no marine mammals are injured. Make no mistake, all of these mammals are at risk of becoming extinct and many are already listed as endangered. My opinion is they all are endangered. I'm sure the Navy can find a way to work with the marine mammal experts and prove to those of us who cherish these magnificent creatures, in safely conducting all necessary testing, that the Navy cares about all life. Thank you for taking the time to read this comment.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
Boyd (Electronic)	Do NOT not test your weapons of war within 100 miles of our coast line or during whale migration and fish migration. Stay away!	Thank you for your participation in the NEPA process.
Breevaart-Jansen (Electronic)	Don't do it please!? You don't know how much you destroy! Many Orca's and other sea life fall victim to your tests and training. Their hearing organs just explode, which doesn't kill them btw. And what for..... for unsustainable power. Please stop	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Brett (Oral)	I'm talking to you from Oak Harbor, Washington. I was just chatting with one of the biologists at the station here at the high school and she suggested I come and make a comment. What I wanted to say was that I have lived on this property, my residence, for more than 30 years. I've never experienced the smell of jet fuel or the fallout of jet fuel as much as I have in the last six months and I think it's something to do with the new planes. I am concerned with this impact study. My question for the impact study is: Does this jet fuel land on the water and is it impacting the animals, the fish, the mammals, etc.? I just wonder whether or not the new planes that are flying around NAS Whidbey, the Growlers and Prowlers or whatever they are, the F-18s, are they using a different kind of fuel or why has there been such a change in the last six months versus 29 other years? Please look into that.	This study does not directly study the impact of jet fuel entering the ocean, as there is no planned activity in which that would occur. However, the Navy can confirm that there are no changes in the fuel or in the manner in which the aircraft are operated that would result in the smell of jet fuel.
E. Brown (Electronic)	Gentlemen and Ladies: There simply must be another way for you to test sounds that do not drive marine mammals out of their minds. We all know now how these noises drive them to beaching when their internal radar leaves them hopelessly confused and bent on self-destruction. It's simple. You either do your job with the intended outcome of love or fear. Just two choices. If you do nothing, the high rates of marine mammal deaths will be on your hands. Just think how American military technology can serve us in beneficial ways. Find another test. You can do it and show the world it can be done. Stop killing our marine mammals. If you believe in a Higher Power, then ask for forgiveness now. You might spend eternity listening to high pitch noises and I don't mean from Heaven.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
J. Brown (Electronic)	I urge you to please stop this deadly testing that results in mass strandings (killings) of our amazing marine mammals. There are other, nontoxic ways to achieve the same goals. Thank you.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Bruce (Electronic)	By your own admission, I understand you expect to further harm marine mammals with sonar testing. Please stop sonar testing, as our future and the future of our planet and seas depend on this kind of irresponsible behavior coming to an end. Thank you. Carolyn Bruce	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Bryant (Electronic)	Your permit to bomb and use sonar in Southern Resident critical habitat off the NW Coast would put the killer whales in immediate danger. These killer whales are an endangered population. Please consider a new plan away from the critical habitat off of NW Coast.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Buchanan (Electronic)</p>	<p>regarding Northwest Training and Testing range EIS: Ongoing and past military operations offshore in so. california have trashed the bottom of the ocean literally. the bottom is littered w/military trash and bags of its garbage. The continued farce need for this training is far outweighed by the damage it causes to the area it occurs (i.e. military trash) and to the animals that live there (sonar). Quit wasting resources and damaging the productivs areas of our coast in the name of security. what a joke.</p>	<p>mammals from Navy activities.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
<p>Buckheim (Electronic)</p>	<p>PLEASE stop the Navy's sonar assault on marine life! Please stop looking at the oceans as only battlefields, and start thinking about defending US citizens from dying oceans. Long-time orca researcher, Ken Balcomb, calls military sonar an "acoustic holocaust" and Nova Scotian whale researcher, Lindy Weilgart," writes: "I cannot imagine why we would subject marine inhabitants, the majority of which are highly sensitive to sound, to yet another source of pollution." Stop the killing, and start saving our seas!</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Buckheim (Electronic)	PLEASE stop the Navy's sonar assault on marine life! Please stop looking at the oceans as only battlefields, and start thinking about defending US citizens from dying oceans. Long-time orca researcher, Ken Balcomb, calls military sonar an "acoustic holocaust" and Nova Scotian whale researcher, Lindy Weilgart," writes: "I cannot imagine why we would subject marine inhabitants, the majority of which are highly sensitive to sound, to yet another source of pollution." Stop the killing, and start saving our seas!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Bukoski (Electronic)	"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Bullas (Electronic)	Please find an alternative; something less harmful to the marine critters.	The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Burbach (Electronic)	We need to do everything we can to protect our marine wildlife. Please keep the waters safe and natural of them. They deserve peace and quiet too. Thank you, Joel	on the development of alternatives. The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Burks (Electronic)	Conducting sonar and explosives exercises anywhere near the Puget Sound or off the coast of Washington, Oregon Or, California is unacceptable. Our Marine Life is more important than any exercise.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Burns (Electronic)	I understand that we as a nation must be ready for warfare at any time and that the navies' training is imperative. However, I do believe that many of the beaching of sea mammals is due to the over use of high powered sonar. These poor creatures are driven to madness in their attempt to avoid these horrific sound pressures. The sea is their world, their environment and we are the visitors and users of their space. I can't believe that these powerful sounds are not harmful to all sea life that lie within the strong fields of such pressures. I would ask that lower power be used along the coasts for training, and while still maintaining vigils for these sea mammals with the cessation of its use when they are in peril. Thank you, James Burns	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Burrows (Electronic)	I think humans in general have done quite enough damage to the oceans and its creatures. All the military preparedness in the world will not matter once we have finished killing everything that swims; because when that happens this planet will be finished. It's past time to stop hurting and killing animals. I am adamantly opposed to any further ocean testing by the U.S. or any other Navy. If we can send men to outer space surely we can figure a way to protect ourselves without harming the environment and its creatures.	Thank you for participating in the NEPA process.
Charles Bush (Oral)	Thank you. I really want to address everybody who's here tonight and remind you that this room is filled with 16 tables with six chairs around it and it's open every single weekday from eight o'clock in the morning until four o'clock in the evening and if for want of another	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>place for this conversation, not to be once in a while but to continue, which I believe is our only real hope at being heard deeply -- not once in a while but continuous, please feel free to use this space any time you want to continue this conversation. And I'll do my best to see if we can't get a copy of that document here. The library's not the only place. This isn't always a very soft-seated place either, but I'll do my best to get one here so you can come here and read it, also. There are a dozen computers here that are accessible here during that same period of time at no cost and you can partially access those documents here. So please use it. It belongs to you.</p>	
Cheri Bush (Electronic)	<p>Please do not do the sonar testing in the areas Eastern Pacific Gray whales migrate and feed and the orca live. Also do very thing you can possibly do to prevent injury to the Blue whales, sperm whales and fin whales that feed in the eastern pacific along the US.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Sakina Bush (Oral)	<p>I came here tonight and realized that I don't really know hardly anything about what you're doing or what you want to do, and there are some people here who know a lot more than I do and I thank them for their excellent comments. I thought I would try speaking to someone in the Navy, even though I kind of don't think that there's any real dialogue possible because we're so different in our view of what's necessary in the world, but I thought, okay, I'll ask a simple question. I'll say -- like I'll go up and I'll say well, how do you know if there's a mammal around before you test? I've heard that the way you tell is you just look around and see if you can see one and since they mostly swim underwater, that didn't seem like maybe the best way to find out where they are. I thought okay, I'll just try the process. I was escorted over to someone who was an expert who could answer my question, and I said, you know, can you tell me how you monitor for the presence of marine mammals if you're going to do testing. I've heard that the main way you do this is through visual monitoring. They said well, we have a lot -- we have multiple ways that we monitor. I said well, is the primary way that you monitor visual? Well, we have a lot of ways that we do this. Well, you know, you're not answering my question. You know, do you have a main way, like is there a primary method that is used for monitoring the</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>presence of animals? Well, we have many different things that we do. This person was really not answering my question. Which really, again, like made me feel like, yeah, I can't trust you. I can't come here and get an honest answer. And, you know, I came, I tried in good faith to ask a really basic question. And so we talked a little bit about sonar and listening for whales and if that could maybe happen. But, you know, it doesn't seem like a very effective way to prevent harm to just use someone with binoculars. It seems like there must be other ways of studying habitat. Obviously there's a migration. People brought this up. I really like the idea of extending the corridor for not testing and not having these giant, huge areas of the ocean, you know, where animals are vulnerable to impact. There should just be a lot more of a buffer for them. It would be better if there wasn't anything at all. It may not be realistic, but that's all. Thank you.</p>	<p>mammals from Navy activities.</p> <p>When cetaceans have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p>
Butor (Electronic)	<p>No! You cannot test your weapons of destruction and kill whales and dolphins in the ocean! Stop! These creatures are pure beauty and peace! hatred anger and death,keep it away from our oceans!</p>	<p>Thank you for participating in the NEPA process.</p>
Butterfield (Electronic)	<p>I strongly support the NO ACTION alternative in all areas that increase the intensity and frequency of sonar in the ocean. With the NO ACTION alternative, you still have a baseline of activities that harm marine life. I am especially concerned about the increase in intensity causing deafness and navigational confusion in marine life. How would we respond if invaders to our country started blasting deafening levels of sound upon our population, including sounds that were completely disabling? Clearly this would be considered a human rights violation. In fact, what you are proposing violates the right-to-life of millions of sea creatures within their natural homeland. They can't go anywhere else to get away from your assault. Assaults on them are also assaults on Americans who are sickened by this planned carnage.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Byrne (Oral)	<p>I just want to tell you that I'm not anti-military. My family has been in this country from before the Civil War or before the Revolution. I've had someone in my family in the military including my father. I know you have to protect this country, but, again, I want to speak for the ones that don't have a voice. We really know and it's in your reports that we are going to harm or kill the mammals that remain on the earth. I just want you to be careful. I just</p>	<p>Thank you for your comment. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	want you to really look at how important it is and to think outside the box. I just really would hope that you would do that. It's very important in preserving our country and our people.	the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Caid (Written)	Please Vote No to Northwest Training and Testing. The EIS/OEIS are not acceptable and show obvious effects on Endangered Species. Our Seas and Pacific Ocean are under attack and the Navy is unaware of or ignoring the Threat. The Pacific Ocean and the people of California are undergoing a Nuclear disaster from the Fukushima Nuclear power plant that has been dumping tons of nuclear waste into our seas and is not getting any better. How can we allow environmentally damaging defense practices and ignore the real threat in the Pacific Ocean. It is time to restore the damage we have caused. Please Protect our seas without damaging them.	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
Cahill (Written)	I am very concerned about the naval testing along the Pacific coast – by the Navy – for the mammals. Please think ahead for the citizenry.	Thank you for participating in the NEPA process.
Cain (Electronic)	Do not allow the testing in a MPA. Phil Morin and other researchers have worked hard on conservation for the Southern Resident DPS. They are already down to 82 individuals from over 100 in the 1990's. They are a huge intrinsic value and iconic species. They are also an indicator species of low abundances of salmon and pollution. Please understand they feel pain. Don't harm them. They feel love and empathy and grief when they lose a family member. Please let conservation will this battle.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Campbell (Electronic)	<p>I had the privilege of working on the base in Puerto Rico with Navy Divers and the occasional SEAL team, as an MWR lifeguard. I enjoyed teaching officers kids how to swim in the officers pool, which was right next to the ocean. The Ocean continues to be right outside my front door, as I now live on a cliff overlooking the Pacific Ocean in Northern California. I have a healthy respect and understanding of both the NAVY and the Ocean. With regards to the EIS/OEIS, I would like to encourage the following: Using “exclusion zones”. PLEASE consider avoiding areas that are known to be critical habitat and feeding/foraging grounds. As stated earlier, I have a healthy respect for the Navy and I realize the need for national security. I am not asking the Navy to cease activities, but I am asking that the Navy use some common sense by looking at the options that would better protect marine mammals and other sea life. Options like AVOIDING areas of critical habitat, foraging and feeding. These areas have been identified clearly. Establishing EXCLUSION ZONES around these areas would go a long way to protecting endangered species, such as the blue whale. PLEASE explore more progressive alternatives to traditional training and testing. Simulations and other non-harmful training methods should be utilized. With the Navy's current proposed activities - expected injuries, disturbance of and sadly killing of more than 100,000 individual marine animals, including 29 different marine species that are protected under the Marine Mammal Act is unacceptable and raises huge concerns! Proposed activities that cause whales and dolphins to abandon important habitat, halt foraging and forgo critical feeding opportunities needed to survive is unacceptable. I was shook up when jets flew by our home and raced around over the ocean earlier this year. I had no warning. Initially I heard groans, that became louder and shook the house. I ran outside, unsure of earthquake. When I saw the jets I realized Navy maneuvers were occurring. Dolphins and whales don't get memos or warnings! Thank You so much for your time and especially for extending the comment period.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the Draft EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities). Please see Chapter 2 describing the proposed action. In general, Navy is re-analyzing ongoing activities and specifically is not increasing “areas” or “ranges”.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
Campbell DeWinter (Oral)	<p>My family landed in Ebey's Landing in 1852. I've lived in Washington almost my entire life. I was born in Washington state. In memory of Ben White, our beloved professional activist from San Juan Island who contracted stomach cancer after being in the waters off of Hawaii protecting the whales from the sonar that the Navy used for testing, I would like to request that the Navy Department of Defense consider the manner in which they are doing all of their testing and training and how that affects the marine life and how it affects the citizens. What we are learning from the documents that the Navy and Department of Defense has put together, from their research and other medical documents, that the health effects on us humans is far greater than any of us ever understood a few months ago. It's frightening. When I was listening to the beginning of the introduction here at</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>tonight's presentation and they were talking about how this area is the perfect area for all this training and testing, it almost brings me to tears because what I was hearing was this is a pristine area up here. It's not really populated that much and, therefore, it's an ideal area for us to be able to do what we need to do, which is basically destroy it. Thank you.</p> <p>I represent Whidbey Noise Coalition, which is a gathering of representatives from everywhere from Port Townsend to La Conner, Camano and including the San Juan Islands. We've been getting calls from people since the Growlers have been flying with noise difficulties, everything from cracked windows to animals who are severely affected. People are really concerned about the frequency, the low-frequency level of the Growlers and the damage that they effect, different than anything that anyone signed in a supposed noise ordinance with their deed to their property; in other words, people really did not expect to be having the experiences that they're having now. Earlier when the presentation was talking about mitigating the effects on everything from marine to humans, it tends to make me think that the military believes that there are hazardous effects to the living beings and, therefore, they need to be mitigated. I don't want any of us to forget Dwight Eisenhower and his quote in regards to warning us about the military industrial complex. In 2004, the Washington State Legislature changed our mission statement. We're no longer a logging, apple, timber, fishing community; we are now solamente committed to increasing our economic standing with the military industrial complex and bringing as many military bases to Washington state and enlarging the ones that we have. I think we should listen to Eisenhower. I think this is wrong. I don't think that the military should be an economy that supports the United States, much less Washington state.</p> <p>Please bear with me, this is difficult. What Cate said absolutely broke my heart. I had no idea it was 235 decibels. I've lived on San Juan Island for the better part of 30 years. I live on the Straits of Juan de Fuca. I have a little cove below my house where the whales would come in. Every morning when I left for work they were heading south; in the evening when I was coming home, they were heading north. I've had eagles. I've had deer. I've had coyotes and wolves occasionally -- or fox, I guess, that would pass through my yard, the others would spend much more time. The whales -- the whales compared to the other wildlife were incredibly different than any of the others. The whales are incredibly sensitive mammals. They're so in tune with us. They're more in tune with us than we are with ourselves. I know from personal experience the majesty and the sensitivity of the animals. We all know that people around here kayak when the whales and dolphins come over to feed and interact with them. I beg you not to do testing where you're going to affect mammals or humans. And this testing that's being done these days, it's too abusive for the health and well-being of either of those species. Thank you.</p>	<p>marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around the Sound. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>The NWTT EIS/OEIS does not include airfield activities, which are covered under separate analysis.</p>
<p>Capozzelli (Written)</p>	<p>I am writing because it is disturbing that the Navy's five-year plan for training and testing with sonar and explosives will needlessly kill or maim thousands of whales and other marine mammals. All in all, the Navy expects its ships to harass or harm these intelligent</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>creatures tens of millions of times. These numbers are staggering and unconscionable.</p> <p>The Navy's practice exercises and sonar are wreaking havoc on highly intelligent and social endangered orcas, dolphins and other marine mammals that depend on sound to communicate, find food and raise their young. Sonar risks putting a stop to all that life-sustaining activity because it is nearly as loud as an explosive, and it can cause hearing loss and even death.</p> <p>Endangered orcas, dolphins and other marine mammals are being devastated by the U.S. Navy's war games and sonar. They are relentlessly harassed by the Navy's activities and are experiencing disorientation, hearing loss and even death. There will more than 13,000 serious injuries, such as permanent hearing loss or lung damage.</p> <p>Ships will be blasting ocean waters with deafening mid-frequency sonar, up to 236 decibels, for 300,000 hours, the equivalent of more than 34 years' worth of continuous eardrum-splitting noise that can cause whales' internal organs to hemorrhage.</p> <p>In addition, the navy will be conducting torpedo tests, bombing exercises and underwater explosions - some 1.1 million of these events overall (an average of one detonation every two minutes for the next five years), many of them in and around sensitive whale habitat where the animals mate and feed.</p> <p>The harm of Navy sonar use 'are well documented, implicated in the mass stranding of marine mammals from Southern California to the Bahamas and as far as the Canary Islands off the coast of Morocco. In 2004 Naval sonar use stranded as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. Now the Pacific Northwest is about to get more Navy war games off its coast.</p> <p>There are only about 80 orcas left off the coast of Washington, Oregon and California, so protection for each of them is vital. It is up to the Navy to train in a way that does not tear the fragile fabric of our oceans' web of life.</p> <p>There is no military justification for the Navy's unrestrained assault on whales. By taking just a few proven, commonsense measures (such as avoiding relatively small yet vital areas where whales are known to migrate and raise their young), the Navy could dramatically reduce the number of whale casualties without sacrificing military preparedness.</p> <p>The Navy should be putting safeguards in place that will dramatically reduce the threat to whales, but, instead, the Navy is preparing to defend its unconscionable plan in court.</p> <p>Thank you for your consideration and help in this urgent matter. The Navy can continue to protect our national security and protect marine mammals at the same time. How can we ever hope to have peace in our world when we treat other species with such callousness and contempt."</p>	<p>Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Carbia	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an	Your opposition to the Proposed Action is noted; however, the Navy's commitment to protecting marine life must be balanced with the

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	<p>ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales. Thank you.</p>	<p>purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Carbonneau (Electronic)	<p>I don't want any war games or exercises off the northern California coast. This is an unmolested area that is supporting salmon habitat. I dont believe there is any threat that justifies this.Any extra activity in this area will have a negative impact that an already stressed fishery cannot support. Also theses exercises are a masive wast of tax payer money</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p>
Cardenas (Electronic)	<p>I am opposed to the Navy's proposed expansion of their Northwest Training Complex. Pier side sonar testing in an ESA listed habitat for resident orcas should not be permitted. Increasing dock side testing is out of the question.The damage and deaths it will cause is unnecessary. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Carlson (Electronic)</p>	<p>Please reconsider the proposed under water testing in the Haro straight. You will endanger and likely kill many marine animals. We are totally against this testing and do not support this decision.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the Draft EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Carter (Electronic)	Please abandon the plan to create underwater sounds that will disturb, deafen and ultimately kill a multitude of underwater mammals? Hasn't enough of this testing been conducted already that you should have the data you need? Please, please stop harming innocent animals in this manner all in the name of WAR! Thank you.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Carter (ret) (Electronic)	I am begging you, please don't do this. The estimated number of whales killed is more than the estimated numbers remaining of some species. Do you really believe you can wipe out an entire species of MAMMAL without global repercussions? Besides being a horrible act of negligence, it changes the future of the planet's oceans on a biological level. There is no excuse for these actions. They can be conducted on land and mathematically extrapolated to what the result would be in water. Any 4th year math major could do the simple equations. My daughter could do the math for you in her head. Again, PLEASE do NOT do this. LCDR Cynthia Carter (ret)	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Catching (Oral)	I'm from Amboy, Washington, lived in the Northwest a long time, retired from research and science work. So I have some questions about predicting effects, of maybe changing levels and types. And I know you have a model that has been worked on and there's a	Please see Section 3.4.3.1.14.3 (Navy Acoustic Effects Model) for a full description of the acoustic model and the assumptions used during modeling. More detailed information can be found in the Navy's

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>description of seven components to it. I've done some modeling. That sounds pretty good. But I know models have airbags around them. The further you get out, the worse they get. So what I want to know is how well that has been tested, calibrated, round truths with empirical data, how well it's been exercised over the range of options in the variables you're talking about, changing, and what your confidence level is in that model's predicting ability. So if you could just address that in that EIS, the strength of the model and the work that's gone into it in as much detail as possible, that would be good in helping us determine the reliability of it in a layperson sort of way. The three alternatives, I'm not sure if an EIS is required to have at least three, but your first one doesn't seem viable. It said it is a baseline but it would not support the intended or the planned changes in the level of testing and training. If that's correct, is that either a nonviable alternative, that you really only have two, or if it is a viable alternative, it must mean you would and could change the training mission to be in sync with that alternative, the baseline do nothing. That sounds like you would not be able to expand your training by staying with the baseline. So you either have to be willing to stay with the baseline levels of training or else that's not a viable alternative. And lastly, do you deal and do testing in fresh water? Do you go up the Columbia, for example? I think that's regulated by fresh water, Clean Water Act, Corps of Engineers. Is that addressed in the EIS or is it irrelevant and you don't go up there? I hope you do, because I want to be safe there, too. And finally, if this prevents World War III, I think that's good for the fish and the whales. Thank you.</p>	<p>"Determination of Acoustic Effects on Marine Mammals and Sea Turtles for the Northwest Training and Testing Environmental Impact Statement/Overseas Environmental Impact Statement," which can be found on the project website at: http://nwtteis.com/DocumentsandReferences/NWTTDocuments/SupportingTechnicalDocuments.aspx.</p>
Cayer (Electronic)	My heart breaks ..the Navy is killing Cetaceans left and right. With all the contra rest of Blackfish death rape child ab	Thank you for participating in the NEPA process.
Chaplen (Electronic)	Proposed Sonar training plans are inconsistent with the health and safety of large marine mammals and should be banned. The harm caused three years ago was morally wrong and there is no way to preserve the safety of the marine mammals in any case. The only time this type of sonar should be used is in localize war situations.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Charles (Electronic)	Hello I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales. Thank You John Charles	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Chawes (Electronic)	The draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats.	Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.
Chernoff (Electronic)	As much as I would like to have faith in the U.S. Navy's assessment of what is or is not environmentally safe, the fact that an organization that sees no environmentally compelling reason not to use depleted uranium in their ordinance seems to me unlikely to be particularly sensitive to the nautical nuances of California's northern coast. I therefore urge a concerted effort from our local representatives to thoroughly examine the effects of	The Navy does not propose the use of ordnance containing depleted uranium. Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	these proposed tests and, if necessary, publicly protest against them as vociferously as possible, and should that not suffice (as, quite frankly, seems likely to be the case), to introduce legislation to further limit the ability of our armed forces to run amok upon our own waters, fisheries, and other delicate ecosystems.	Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.
Cherry (Electronic)	Please stop the sonar testing in the coastal waters off the west coast of the the United States. You are damaging a biodiversity hotspot. Please cease & desist!! Whatever you feel you are accomplishing is not more important than the loss of sea life. Please, stop!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Chiapero (Oral)	Hello. My name is Lisa Chiapero. And I don't have a T.V. set at home, but I get a lot of information from looking at the Internet and I've studied quite a bit about the ocean because I live here and, you know, it's in my backyard. It's part of me growing up and I've always liked to go see the whales, you know. You don't see them that often, but when they're migrating you see a lot of whales go by. And one question I had was, you know, I know there's submarine trenches that are offshore here and I'm wondering if those whales, are they following the submarine trenches, because it's deep and their food might be down there? I don't know. It's just a question that I had. And another thing that I saw which kind of blew me away, and I don't know if you've heard of this or not, but there was a nuclear submarine that was actually put out of commission by a cookie-cutter shark. Do you know what a cookie-cutter shark is? It's a real shark. They really exist. They have about a six-inch mouth and they feed on whales so they'll go attach themselves to a whale and they can just keep eating and they go around in a circle and they leave a perfect circle of no skin on the whale. Well, it bit into the nuclear submarine right on the top and it put a perfect six-inch circle on there. They couldn't figure out what it was, but apparently it left a tooth there and they were able to figure out that it was put out of	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>commission by a cookie-cutter shark. So that's all I have to say.</p> <p>I was talking about the cookie-cutter shark. I just wanted to mention where I heard that and it was on the ten most extreme animals. It's a series that you can -- but if you search for "the ten most," it will come up. If you put the cookie-cutter shark then they would be able to see exactly what I saw, that very program. And I didn't mention this in front of the whole room because they might totally think I'm whacked, but I mean I actually think that there's mermaids out there and there was a body found where the Navy actually -- there was a mass of beached whales everywhere, they beached themselves, and I believe it was in Washington, up here north in Washington. And they took that mermaid off of -- it was a man mermaid I guess. Yeah, a merman. The Navy took him off the beach and I don't know whatever happened to him but, you know, they've never mentioned it. But there's people that have visual proof that they didn't know about and they made a program about it. So it would be kind of interesting if they did. And it was a sonar test that knocked that supposed merman out of the water, if it was there. I don't know, just thought I'd put that in there for the record. Because it's a myth, but they've got proof and "The Body Found" is the name of the program that I saw that on. Okay. Thank you.</p>	
<p>Chickman (Electronic)</p>	<p>Dear Commander of the Pacific Fleet, Congressman Kilmer, Senators Murray and Cantwell: The Navy's draft environmental impact statement for the NW Training Range, a vast area stretching from Puget Sound to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is preparing to kill and injure thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. This is unconscionable. Weapons testing should not be done in marine sanctuaries anywhere. This area includes the Olympic Coast National Marine Sanctuary. Our west coast waters have some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, threatened and endangered species of rockfish, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. In all of North America, the state of Washington, in particular, has</p> <ul style="list-style-type: none"> • The greatest number of endangered marine species of any state or province in North America • The most depressed fisheries of any state or province (according to the American Fisheries Society) • The least amount of habitat designated and protected as marine reserves or sanctuaries for the restoration of fisheries of any state or province • The most closed or restricted fisheries for recreational fishing of any state or province in North America. <p>The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable especially in any marine sanctuaries —particularly because the Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The analysis is applicable to all species. The Navy has consulted with NMFS and USFWS on Federally protected species.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>should put all critical marine habitats and sanctuaries off-limits to sonar and explosives, something it is not now willing to do despite the scientific community's view that this would be the most effective means of reducing harm and simultaneously restoring our marine fisheries. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change, human-caused pollution, and overfishing. The Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>A. Chouteau (Electronic)</p>	<p>We wish to object as strongly as possible to the navy's future weapons testing, sonar use, war games with explosives and any other activities that will harm marine life, including our fisheries, sea turtles, mammals, birdlife, and all sea life, especially those on the Endangered Species list. The Navy is guilty of previously violating the Endangered</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Species Act, and this must not be allowed to continue. The Navy can use technology to accomplish their aims, without endangering our vast oceans' resources. The Chouteau family of six registered voters	to protect the marine environment while training and testing for nearly a decade. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Z. Chouteau (Electronic)	I'm strongly opposed to the Navy using our Pacific Coast for any kind of war game training, use of explosives or any other potentially harmful activity. These exercises should not be held in a place where they can do damage to the environment, this is absolutely abusive to American land and our nation's well-being.	Thank you for participating in the NEPA process.
B. Clark (Electronic)	This section outlines many potential dangers to cephalopods, including the use of sonar. It seems unfitting that the regulations for using sonar refer only to marine mammals. I would also like to comment that, while I will not argue with the fact that the protection of endangered species must be a priority, many species not yet on that list are also vulnerable. The goal should be to protect the ecosystem as a whole. Studies suggest that in order for any species to survive, they must interact with a delicate balance of resources. Unfortunately, we may not know the exact interactions until it is too late. As indicated in this section, there are many unknowns when it comes to invertebrates. I fear that the lack of concern for the impacts on these creatures has more to do with lack of information than reality.	<p>The Navy did not limit its analysis of sonar to marine mammals, but did also consider marine invertebrate species as described in Section 3.8.2.2 (Invertebrate Hearing and Vocalization) of the EIS/OEIS. Some species, such as cephalopods and crustaceans, may be sensitive to water particle movements associated with sound. Because any acoustic sensory capabilities, if present at all, are limited to detecting water motion, and water particle motion near a sound source falls off rapidly with distance, aquatic invertebrates are probably limited to detecting nearby sound sources rather than sound caused by pressure waves from distant sources. Current research indicates that cephalopods are not susceptible to impacts from sonar. Also, all potential stressors to cephalopods (as well as other invertebrates) were analyzed in Section 3.8 (Marine Invertebrates).</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
K. Clark – 01 (Electronic)	Dear Commander of the Pacific Fleet, Congressman Kilmer, Senators Murray and Cantwell: Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. The Navy's draft environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area of Washington to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to injure and possibly kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, Murrelet, are also at risk. The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable. The Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet its legal obligations to protect and not harm our endangered and threatened marine species. Sincerely, Dr. Kevin C. Clark	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
K. Clark – 02 (Electronic)	The Navy's failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area is both unacceptable and unconscionable--particularly because the Navy's draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH; this change has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>R. Clark (Electronic)</p>	<p>The anticipated loss of marine life due to sonic sound and explosions is unacceptable in a civil society. Estimated losses do not include long term impairment and ecosystem level negative effects. The concept that activities are stopped by a person with binoculars watching for aquatic creatures is laughable, and further reinforces the Navy's willingness to cover up the true impacts and extent of their activities. In this age, the amount of testing this type of weaponry could be simulated in other ways and need not destroy the very life that the Navy is supposed to be protecting. The Salish Sea is the economic driver of our community, and should not be used for testing of harmful sounds or explosions. Additionally, my tax dollars fund this activity, and in our situation the Navy should be reducing these activities, not increasing them. Thank you for the opportunity to comment.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex.</p> <p>Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. Wildlife-dependent recreational activities in the Salish Sea, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Section 3.12.2.3 (Tourism). No negative effects to tourism in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
Clements (Electronic)	<p>As a former weapons mechanic in the U S Air Force I trained and loaded all the munitions carried by the F-4 series tactical fighters of that period (1966-1969). During that time I was trained to handle and load nuclear weapons. The pilots of our aircraft also trained and practiced the procedures for delivering nuclear weapons. While we loaded actual weapons in a training hanger all of the flight line training and practice delivering was conducted with simulators, in the form of a simulation bomb pod and small (about 5 pound) boomlets that mimicked the drop characteristics of an actual nuclear weapon. All of our training, both weapons loading crews and pilots, was done without the necessity of using actual nuclear weapons. Even with the, compared to now, primitive simulation equipment we had we were able to be trained and prepared to use nuclear weapons if the necessity had arisen. Given the advance in simulation capability now existing it seems impossible to believe that the navel weapons systems in question could not be trained without the use to actually use the ocean as a physical testing ground for these weapons. The ocean and its inhabitants are already under enough stress from human activity without further endangering the lives of beings we don't fully understand and who have plied the oceans for millennia without disrupting our lives. It seems inconceivable that we would do anything to further endanger already endangered sea creatures driven to the brink of extinction by our careless actions. My hope is that we are better than to push fellow inhabitants of our more and more fragile home to their end as a species and continue, through careless and unnecessary actions to impoverish even further our world.</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
Cline (Electronic)	<p>Stay the [expletive deleted] out of our waters you war monging oil driven life taking pieces of worthless [expletive deleted]. You are the terrorist [expletive deleted]</p>	<p>Thank you for participating in the NEPA process.</p>
F. Colby (Electronic)	<p>There is no question that military testing must be done. That should not be a matter of debate. What is a matter of debate is where it should be done. I am opposed to endangering wildlife to further the military agenda, just as I am opposed to endangering human life for the same purpose. The area(s) proposed along the western seaboard could result in bad, to serious, to disastrous consequences for much marine life. It has happened, before, in other areas, and there is no reason to assume it would not happen, here. I urge the US Navy to rethink its decisions to engage in these activities in a manner that could seriously disrupt the lives and habitats of defenseless marine life.</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
<p>R. Colby (Electronic)</p>	<p>As a Makah tribal member I feel it is necessary to make comment on this NEPA process for NWTT, EIS/OEIS public review. The Makah tribe should have had the opportunity for comment before this open period for comment to the public. Makah should be given first opportunity for government to government consultation for conducting these exercises within our treaty protected marine area. Our tribe is in a strategic and sentinel geographic location and our fishing U&A is being compromised by these maneuvers for home land security to the point of making it necessary to point out the treaty rights at risk initiative. I feel the need for further review with the tribe and to clearly and openly offer tribal opinion and understanding of what your technical training and impacts will be to our commercial fishing, marine mammal populations and near shore habitats.</p>	<p>Scoping letters for this EIS/OEIS were sent on 23 February 2012 to the Makah Tribe, as well as others. In January 2014, Commanding Officers of Naval Air Station Whidbey Island and Naval Base Kitsap invited American Indian and Alaska Native Tribes with traditional resources in the Study Area to consider the Navy's draft analysis and finding that the Proposed Action does not have the potential to significantly affect protected tribal resources. The Navy invited the Tribes to initiate government-to-government consultation or hold staff level consultations if in disagreement with the Navy's finding.</p>
<p>Cole (Electronic)</p>	<p>The Navy's failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area is both unacceptable and unconscionable—particularly because the Navy's draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH that has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>effects to tourism in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Coleman – 01 (Electronic)</p>	<p>200 estimated yards between the explosive and any given marine mammal seems insufficient when the propagating effects of the explosion are so difficult to measure accurately, given the unpredictable effects of explosions and the uncertainty of presence of marine mammals at any distance from the explosion. Currently proposed monitoring is not likely to be effective even in normal sea-state conditions. These exercises would take place in the midst of multiple ships, sometimes operating unpredictably (for marine mammals) at high speeds, detonating munitions and sonobuoys and deploying high-powered and explosive sonars, often making recognition impossible. Training monitors with visual and audio examples interpreted by experienced cetacean observers would improve reliability, though even that would fail to detect marine mammals in most cases. The Navy should at minimum improve the mitigation measures to include training of monitoring personnel by experienced whale biologists to improve recognition of marine mammals by visual and acoustic monitoring. However, even with the best monitoring by experienced people, the mitigation measures are inadequate due to the elusiveness of the animals. Given that detecting marine mammals reliably enough to assure that no mortalities will take place, as claimed in the Navy’s EIS, is essentially impossible, the long-term challenge is to dial down the need for these training exercises altogether, which is a problem of international relations and diplomacy. President Obama and Sec. of State Clinton can prevent this danger to marine life by fostering improved international communications and reducing hostilities. Environmental organizations from the Pew Charitable Trust to the US Commission on Ocean Policy, mandated by Congress to recommend policy toward oceans, have strongly advocated adopting a new attitude about how we treat the oceans. Disregard of cumulative impacts of everything from spent materiel to engine waste by multiple vessels and aircraft, all simulating wartime decision-making, certainly has a destructive effect on functioning marine ecosystems. In war, military forces can claim the luxury of focusing on short-term results of their decisions, if they are to defeat the enemy. While recognizing that current international relationships are conducive to preparation for war, it is precisely the need to consider the downstream effects of our decisions, down unseen generations, that is called for if we are to hold any hope of passing a livable world to future generations. More creative solutions for the problems now at our doorstep and looming dark on the horizon must be put forth, than to simply prepare for and risk returning to wartime thinking.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>When cetaceans have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Coleman – 02 (Electronic)</p>	<p>Navy's EIS, which deeply affects endangered Southern Resident orca habitat, needs to find another way. This "expansion" needs to NOT expand into THE PUGET SOUND! This is extremely delicate habitat for marine life in general, but especially for the sensitive marine mammals that live here. We are having enough troubles with sea star wasting and losing all our sea stars, not to mention all the pollution that already makes it in the Puget Sound, but we still have to deal with illegal fishing, derelict fishing gear, poaching, boating noise for marine mammals, raw sewage, etc. that already have poor impacts on our precious sound. Find another way! Use simulators and STAY OUT OF THE PUGET SOUND!!!</p>	<p>Impacts) of the EIS/OEIS.</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
<p>Collins – 01 (Electronic)</p>	<p>I would like to bring to your attention that pursuant to the National Environmental Policy Act (NEPA), Agencies shall use a format for environmental impact statements which will encourage good analysis and clear presentation of the alternatives including the proposed action. The following standard format for environmental impact statements should be followed unless the agency determines that there is a compelling reason to do otherwise (a) Cover sheet. (b) Summary. (c) Table of contents. (d) Purpose of and need for action. (e) Alternatives including proposed action (sections 102(2)(C)(iii) and 102(2)(E) of the Act). (f) Affected environment. (g) Environmental consequences (especially sections 102(2)(C)(i), (ii), (iv), and (v) of the Act). (h) List of preparers. (i) List of Agencies, Organizations, and persons to whom copies of the statement are sent. (j) Index. (k) Appendices (if any). (40 C.F.R §1502.10; emphasis added) Of these 11 requirements, I found two to be lacking in the Navy Draft EIS/OIS: an index, and a list of agencies, organizations, and persons to whom copies of the statement are sent. There is a list, in</p>	<p>A list of information repositories, tribes, agencies, and individuals that received a copy of the Draft EIS/OEIS has been included in Appendix I of the Final EIS/OEIS, Section I.3.1.</p> <p>The EIS/OEIS is made available in electronic format with complete search capability, making an index unnecessary.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Appendix E, of agencies, organizations, and Native American tribes to whom the Notice of Intent was sent, but not to whom the EIS had been sent. It would be incorrect of me to assume that the list in Appendix E will be the same recipients of the EIS. For future reference, please provide a distinction. Also, what was the compelling reason for not including an index?	
Collins – 02 (Electronic)	I have reviewed the section on marine vegetation, and find the information thorough and well presented, with two exceptions. There is no mention of native or endemic species (if any) occurring in the Study Area, or whether algal reproductive cycles will be taken in to consideration during training exercises. Damage to reproductive individuals could negatively impact the overall population of that algal species, particularly if it is endemic or native. Decimation of entire populations is possible with continued training and testing activities. This leads me to question the Navy's conclusion that there will be no population impacts on marine vegetation. Monitoring the reproduction of the species to be impacted before, during, and after training and testing in the Study Area is highly recommended.	<p>The Navy shares your concern for the environment and specifically marine vegetation. The analysis and the science show that there is not a significant impact on the environment, including marine vegetation. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to all marine species, to the maximum extent practicable, mitigation measures during its training and testing activities.</p> <p>The Navy does not take algal cycles into consideration when planning training and testing activities. To limit training and testing activities by algal reproductive cycles would negatively impact the flexibility of the Proposed Action. Because activities are widespread throughout time and space, impacts to algae are not expected to occur at the population level.</p>
Collins – 03 (Electronic)	Upon review of the Navy's Draft Environmental Impact Statement/Overseas Environmental Impact Statement for Northwest Training and Testing Activities, I would like to take a moment to reflect on the proficiency of the Navy. Thank you for being thorough and attentive to detail.	Thank you for participating in the NEPA process.
Comer (Electronic)	I am not a scientist. I am simply a United States citizen who is appalled by the statistics I am reading that the Navy has submitted in their EIS. Admittedly, you are saying you WILL kill or seriously injure such a large number of marine mammals that it takes my breath away. The destruction you so offhandedly admit is sickening. If someone else bombed our shores and killed and harmed so much of our marine life, you would be outraged. Why do you feel it is okay for you to do so? I simply don't get it. You are making the Navy and the military in general look like they are working against our own country and the things we care about such as our wildlife and marine life. You have a real public relations problem that is not going to go away if you go forward with these destructive actions. Please consider that we provide the funds for your paycheck. We deserve better treatment than we are receiving from the Navy. The destruction you cause will have a lasting impact on the entire region. It will impact the economy and the quality of life of all	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	who live here.	to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Conklin (Electronic)	Please, I am really begging you to stop doing any type of sonar or explosives that are harmful to Orcas, dolphins, etc. Please, just let them live their lives in peace. They deserve that at the very least. Thank you.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Connor (Electronic)	As a military wife I understand the role you play in protecting our nation, but please consider the effect this has on the marine animals that are killed due to these practices. It's cruel to see them washed up on shore with blood coming out of their ears just to mention one of the many ways that they are being harmed. Thank you for giving me the opportunity to speak for those who can't speak for themselves.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Cornell (Electronic)</p>	<p>I would like to say I could say it better, but the following is an excellent expression of my concerns: I am writing with grave concerns about the Navy’s proposed use of sonar and undersea explosions in the Northwest Training Range. I live in the San Juan Islands – Endangered orca whale country. There are only 80 orcas left off the entire coast of Washington, Oregon, and California. Orcas already face many man-made threats along their migration routes, without more preventable and needless deaths. People come from all over the world to see the whales off the Pacific coast. Many of our coastal economies depend on eco-tourism and fishing, but our concern for the wellbeing of cetaceans goes far deeper – we love, appreciate, and respect these highly intelligent beings. Marine mammals are extremely sensitive to noise. Sonar destroys important habitat and disrupts the essential behavior of killer whales, blue whales, harbor porpoises and other marine wildlife. If you deafen a cetacean, you essentially kill it, destroying their navigational and communication abilities. Has the Navy considered the deafening of whales in its kill estimates? What about other cetaceans affected, and the loss of habitat and food supply caused by sonar and explosion testing? What are the real numbers when it comes to maimings and deaths? In 2004 the Navy’s sonar was implicated in a mass stranding of as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. And in 2003 the USS Shoup exposed a group of endangered orcas to sonar in Washington’s Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound. There is no need for this torture of innocent marine mammals – and it IS torture. Who will be physically and fiscally responsible – the Navy, or the U.S. taxpayers – for cleaning up the carnage of whale and dolphin corpses, or worse, dying cetaceans that we’re powerless to help, washed up on our beaches? And how do we explain to a traumatized population, to our kids and grandchildren, WHY these magnificent creatures died – needlessly – at the hands of our own military? The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on the region’s valuable wildlife. Has it been scientifically proven that the impacts even can be mitigated? Our cetacean populations are sacred to us, and to the many First Nations Tribes and Bands along our coasts – who ultimately have final say in what happens to our waters, under National and Tribal Law. The waters of the United States, including marine environments, belong to First Nations and the people, under the Clean Water Act. What other effects on our waters will sonar testing and explosions have? What else will they kill, and in what estimated numbers? How else will they pollute? How else will they warm and acidify our oceans? What will they do to the marine food chain, and to coastal economies and Aboriginal cultures? Have these questions and many more, been considered, and satisfactorily answered? Have outside, unbiased Academic Marine Biologists weighed in on the EIS? Who really stands to make their fortunes, or increase them, on these weapons tests, against the will of the U.S. taxpayers footing the bill? As you continue to provide for our country’s</p>	<p>mammals from Navy activities.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy fully acknowledged and considered all relevant and applicable research regarding strandings. The reference cited in the comment was evaluated as described in the EIS/OEIS. Regarding additional research, the Marine Mammal Stranding Report is included on the NWTTEIS.com website on the “Documents and References” page, under “NWTTEIS Documents” and “Supporting Technical Documents.” See: http://nwtteis.com/DocumentsandReferences/NWTTEISDocuments/SupportingTechnicalDocuments.aspx</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	defense, please find a way to train that respects and protects our natural resources and our ocean's sensitive wildlife, and the people who see the value in cetaceans	<p>identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>In January 2014, Commanding Officers of Naval Air Station Whidbey Island and Naval Base Kitsap invited American Indian and Alaska Native Tribes with traditional resources in the Study Area to consider the Navy's draft analysis and finding that the Proposed Action does not have the potential to significantly affect protected tribal resources. The Navy invited the Tribes to initiate government-to-government consultation or hold staff level consultations if in disagreement with the Navy's finding. Consultations with the Tribes are anticipated to occur throughout the January to December 2014 time frame.</p>
Corwin (Electronic)	<p>hello, so iv never done any thing like this my first time im just a "normal girl" i read something in our local paper on feb 15 about ideas so..... i like the navy my father was in the service and i love the ocean n its sea creatures so i was randomly browsing and ran across this nifty whale satellite thing n thought hey maybe this could help the uss independence n sea creatures around north humboldt, county ,ca * High-Res Satellites Help Track Whale Populations * New high-resolution satellite imagery now allows researchers to spot and count whales from space, greatly expediting population analyses used in conservation efforts, according to a new report. Traditionally, researchers have counted whales from the bows of ships by searching for blowhole sprays and tail flips, but that method is inherently flawed because it relies on chance encounters and because the field of view is often limited to several miles at a time, even on a clear day. "If you are very skilled, you can judge how far away it is and work out the species from the size and shape of the blow," said Peter Fretwell, a researcher for the British Antarctic Survey. "But it's very difficult, and you have to look in the right place at the right time." (http://www.space.com/24708-count-whales-using-satellites.) THANK YOU FOR YOUR TIME IN READING A IDEA HOPE IT HELPS (if not its fine my feeling wont get hurt) ~ Jennifer Pearl Corwin</p>	<p>The Navy uses the best available science in estimating whale and other marine mammal populations. Satellite tagging is used for research on marine mammal species as described in annual monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Cozby (Electronic)	<p>Regarding the sonar testing proposed for Washington, Oregon and Alaska coastlines...this is a hugely used migration zone. The sonar testing should be in an area more distant and as least harmful to the mammal sea life of the region as well as all other regions of particularly heavy population and migrations.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Craig (Electronic)	Please stop this testing in areas where marine mammals are know to migrate.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Crane (Electronic)	The sonar/explosive tests that you are conducting is seriously injuring or killing whales and dolphins. They are also beaching themselves and bleeding from their orifices. There's positive correlations between tests and beaching activity every time. The tests are harming them and they have no where else to go to evade them. Please stop this practice. I know you have to keep our waters safe, but you are going to have to find another way, you're destroying our ecosystem and killing off our whales and dolphins.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Cratch (Written)	<p>I do not live in an area directly affected by the Study Area. I do, however, live near the flying zone for Fort Lewis helicopters. They are noisy and sometimes shake my home, but these are men and women doing what is needed to insure our safety.</p> <p>We should all do whatever we can, and put up with what we must to support our armed forces in whatever they deem necessary.</p> <p>Good luck in your survey.</p>	<p>mammals from Navy activities.</p> <p>Thank you for participating in the NEPA process.</p>
Crawford (Electronic)	<p>Dear US Navy, I have been educating myself in the past couple of years and I am shocked at the short sightedness of your practices in our oceans. The oceans are an ecosystem that deserves to be protected. The attitude of the greater good does not apply here in the way you may think. Marine mammals are struggling as it is with the lot that humans are giving them through pollution and noise and nets and now this! Each pod of cetacean that is lost is the loss of a culture, a language and millions of years of evolution. Is this a case of needing something to do with your time and money to get next years budget increases? Please preserve our cetacean mammals and do some real research and advanced technology into not practicing in our lively ecosystems. There will be people in a hundred years but there may not be whales and dolphins. The USA has a reputation of doing the humane action and promoting freedom. The EU is now about to ban aquariums because of cruelty. This torture and cruelty towards the life in the oceans has to stop. I have taught children from preschool to high school and all have an excitement and feeling of inspiration to study science through our marine mammals. Please don't let the US have a reputation like Japan or Iceland or worse because we could avoid harming life with a few changes. Each death or disabled whale is one less chance of their survival. Each beached pod is thousands of years of knowledge handed down to the family. Please put marine scientists on your advisory that can help you with this. Please stop and listen before it is too late. I implore you. Sincerely, Lee Moore Crawford</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Cross (Written)	<p>We have ocean front property on the Oregon coast. I only support an option of no training or testing activities within the NWTT Study Area, or anywhere else. No use of active sonar and explosives, and no pierside sonar maintenance and testing.</p> <p>This plan will be damaging to Marine life and should not be carried out. Computer models can be used instead. There should be no activities of these training and testing plans at all.</p> <p>Thank you.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
<p>Culhane (Electronic)</p>	<p>Dear Mr. Ray Mabus, I do not accept the Navy’s argument that our Nation’s security will be significantly compromised if the U.S. Navy is not allowed to conduct the sonar tests and bombing practice in the way s proposed. These tests pose great danger to whale populations. Even at three hundred miles away, sonar can reach a level of one hundred and forty decibels—one hundred times louder than the communications used by marine life. These tests drown out the calls of marine wildlife, make it nearly impossible for whales to find krill. Up close sonar becomes deadly. Mass incidents of whale beaching in the Caribbean have been tied to sonar tests. These animals suffered from trauma including bleeding around the brain and ears and large bubbles in their organs. Scientists say that the sonar tests disrupted the whales’ natural diving patterns, causing them great pain. A 2008 decision by the Supreme Court banned sonar testing off of the California coast, where whales gather to breed. It would not do great harm to postpone sonar tests, not just in California, but along the whales migration routes, in order to give these great mammals time to get out of harm’s way. Please re-examine your sonar testing policies and come up with more reasonable alternatives than those proposed. By rescheduling, taking greater advantage of simulators and conducting sonar exercises in less critical habitat, whale species will not have to be exposed to trauma.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex.</p> <p>Regarding previous strandings, see Section 3.4.3.1.8 (Stranding) and the referenced technical report “Marine Mammal Strandings Associated with U.S. Navy Sonar Activities” (U.S. Department of the Navy 2013c). Please see Section 3.4.3.1 (Acoustic Stressors) to understand how sound and sonar may affect whales and other marine mammals. While the annual strandings in Washington in 2003 had no relation to Navy activities, the Navy does consider all cases simply “coincidence” as the comment asserts and has presented five specific mass stranding events where sonar use had been identified as a contributing cause or factor in a stranding. The fact remains, however, that the Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Study Area.</p> <p>Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
<p>Dalton (Oral)</p>	<p>I grew up in Casper on the coast. My mother lived there since 1968, Margaret Champion. And we have seals, we have sea lions, we have abalone, many fish. Just a remarkable, pristine, precious, wonderful ocean that I and my children have grown up with. And to me it's sacrilege. I'm a Navy brat. Grandpa was 28 years in the Navy, my husband was four years in the Navy. This is not necessary. We can fly to the moon. We can certainly not harm mother earth and the ocean. We can learn how to get along in harmony and balance. This is one of the last places on the planet where we don't have oil offshore. This is pristine. This is fishing. My brother's a fisherman, has been a fisherman out of Fort Bragg. It's a dying industry. It's being over fished. The Gyre, the Pacific plastic debris that's thousands and thousands of acres across, miles, as big as Texas now, that's the real problem that the Navy should be dealing with. We have issues, real issues. Life is greater than death. We don't drop bombs. I'm reading a Whale For the Killing by Farley Mowat, and he talks about how the industry in the past, the Navy, the military have used whales as targets for shooting. This is sick. This is sick. Whatever. It's just sick. We've got better things to do with our time and energy than disrespecting and spoiling what is a treasure and precious resource. Conservation of natural resources means basically underlying respect, number one. You kill the mother we don't have another to take her place. We get a flat tire on mother earth we don't have a spare, so we better start taking care of what we have and that means not despoiling and not -- not like that. I want a future for our children. I want our children to enjoy the beauty and the bounty that we have here that is irreplaceable. I don't know -- people tell you you can't talk to the government, you can't talk. You know what, I care. I'm one of these people that do care. I want you people to become conscious. To put some lights on in your -- oil is not</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/submit/display.asp?template_id=1000) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy has conducted training in these operating areas regularly for</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>everything. We've got wind, sun, tidal power, energy -- turning off the lights maybe, fewer less trees to be thrown into the garbage cans at the Post Office for advertising that we can't deal with, that we don't need. I know that we need Natural Resources Defense Council. We don't need to spend money in courts that we don't have when there are real issues. The fishermen do need to be protected and provided for. The fish and the whales, the babies need to be protected and provided for. That's the real concern to me is what kind of future legacy are we going to leave behind us, heritage. Progress is not our most important product. If we want to have peace on the planet let it begin with me, begin with you. Don't drop bombs. Do no harm. Do no harm. I'm a pacifist; I don't own a gun, I don't believe in guns and violence. We've got to find diplomacy. We've got to find tactfulness. We've got to find our languages, our tongues, our whales, our precious beautiful wildlife, without which the world wouldn't be worth living in. Take care of it.</p>	<p>decades. Though the intensity of live training may increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant. Most commercially important fish species are not believed to hear mid- and high-frequency sound sources that make up the majority of sound producing activities. No impacts to fishing or fisheries are anticipated due to the proposed action as analyzed in Section 3.12 (Socioeconomic Resources).</p>
<p>Dalton (Written)</p>	<p>More time needed extension of input-study Public Hearings – Local No Project. Costs. Stop Navy proposed sonar testing Pacific Ocean California coast significant cumulative & immediate impacts – Environment/Ecology *Sacred Journey*</p> <p>The first law of ecology is what you do to the web of life, you do to yourself. We are not separate. We are in this sacred journey together. DO NO HARM.</p> <p>Earthquakes need to be considered. Values – Peace, love, life, respect #1 Understand consequences, responsibilities. Make Peace #1</p> <p>Small-craft advisory today. Waves 8 ft., 11 seconds winds – 10 knots 30 knot gusts Mendocino Coastline has been my home for all my life. I've raised children here, traveled on coastlines, Highway 1, horseback riding, hiking, fished, abalone dived, shell-searching with my mom, children and grandchildren. It is an honor to have such beauty grace our presence.</p> <p>Caspar, the friendly coast seal colony & lion Save our salmon endangered.</p> <p>The wind-swept, often gale-storms, every winter, have been a nemesis to sailors worldwide. Unpredictable, sometimes treacherous, fishermen take life seriously and are careful when setting sail, taking weather-conditions into account. My brother has been a boat builder & fisherman in Fort Bragg, in years past, no longer able to remain financially viable, due to restrictions, over-fishing (off-shore Japanese factory fishing a reality), age. Still, the Fort Bragg, West Port, Usall, Albion, Caspar (my Mom lived here 35 years – 1968-2002) Elk, Bodega Bay, Bolinis, San Francisco to Eureka to San Diego are Kin/Kindred to my heart, spirit and being. As are the whales, seals, sea-lions, surf-fish, white shark, seaweeds, urchin, abalone, & so much more.</p> <p>Whales migrate through and off our coastline. These ancient denizens/wise ancestors are critically important to the health and viability of our ecology, ocean-fisheries.</p> <p>Storms, rains, fogs, waves, winds, mother nature, father sky, sun “creator” creation, God,</p>	<p>Because of the footprint of the proposed activities, the Navy feels the public meeting locations are appropriate for this project. In addition to the meeting venues, the public can download and review the document and make comments to it on the website, which is available throughout the world.</p> <p>Three press releases were distributed by the Navy Region Northwest Public Affairs Office to media outlets, elected officials and other potentially interested parties. The news releases were distributed on 27 February 2012, 5 March 2012, and 15 March 2012, respectively, and announced the intent to prepare an EIS/OEIS and provided notice of the open house information sessions.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available science and a comprehensive review of past, present, and reasonably</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>moon, stars are a gift to us. We must be respectful and appreciative, humble – honor, on our knees, prayerful to life and its blessings, give thanks and praise to “higher consciousness,” “great spirit,” evolution, “Atua,” God in Samoan, many names, all in all, the commons. Ours to share, enjoy, pass on to our children, legacy in hopefully, as good as or better condition. We have been blessed to have in our lifetime may it be so.</p> <p>3 minutes is not enough time to speak on our many concerns. I attended the public hearing in Fort Bragg, CA this month and noted that a 2000 pg. “EIR” was prepared and put “on line” 2 weeks prior to the meetings. I was unable to read each chapter, page, verse so would like to hereby ask that 1) more time be provided to study, observe, reflect on the Navy’s reasoning. – extension of time for input & more local meetings, better advertised (radio is all I know of – sparsely attended, could/should have been overflowing representation for democracy – people need to know about meetings – not enough publicity. I am a rare and endangered species also – 1027 on my SAT; Navy-Veteran spouse deceased 2 yrs ago. UC graduate 1977. CNR-Conservation of Natural Resources his father Gpa Dalton – 28 yrs Navy vet.</p> <p>Sacred sites are throughout our region. Pomo Tribes Kado Cahto from Laytonville, Sherwood Valley Rancheria, Willits, Point Arena, Maidu, Mibook, Can-arn, Yuki, Hoopa, Yurok, many more have rights to NOT be violated. Noise is air & water borne. Do unto others as you’d have done unto you.</p> <p>Would you like your bedrooms, kitchens, living rooms flooded with high or low pitched noises, making you hurt, deaf &/or dumb/lost?? Homeland scared, terrorized? Who is the terrorist?</p> <p>If we, as a nation are concerned about nuclear submarines, coastal attack, the greater challenge is how to keep the peace. The time we sweat for peace is time we don’t bleed for wars, @ J. Humble KZYX Radio, 2014.</p> <p>Options – Peace a reality.</p> <p>We must make/find alternatives. It will take an evolution to reorder our priorities to put the children, peace, life, respect, God 1st. Do it.</p> <p>No sonar testing. Check out the National Geographic video, on Puget Sound, WA., whales grounding as a direct result of Navy sonar testing. No marine mammals should ever die as a result of military practice. Recommend Luna, DVD, movie on whales. Peter Linebaum, STOP THIEF, the enclosure of the commons and resistance.</p> <p>The path is with us – ecology</p> <p>Greed, capitalism is not God. Collasal wreck, destined to confront itself. Better for the Navy to deal with the gyre, Pacific. Huge plastic “island” garbage debris.</p>	<p>foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Daly (Electronic)</p>	<p>Dear Sir / Madam, I STRONGLY oppose the use of sound in water, including explosives and other equipment that generates sounds that disorients, injures, deafens, and kills marine mammals and other marine life. I urge you to do everything in your power to stop</p>	<p>Your opposition to the Proposed Action is noted; however, the Navy must balance the protection of marine life with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	this from happening, and work to change the laws, and prevent this from continuing in the future. Sincerely, Debra Daly San Jose, CA 95110	Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Dash (Electronic)	I'm very concerned about the impact of underwater sound/sonar/explosives coming from military training, and how this impacts marine mammals, including whales, and especially endangered Southern Puget Sound orcas. I ask that this activity be extremely restricted, with timing away from know orca and whale travel times, even postponed when orcas are anywhere near.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
Davenport (Electronic)	Regarding the proposal to increase training and weapons testing activities – including sonar and explosives – off the coasts of Alaska, Oregon, Washington and Northern California: Multiple studies show that impacts from this sort of testing can cause whales	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>and dolphins to abandon important habitat, halt foraging behavior and forgo critical feeding opportunities they need to survive. Intense sonar and explosives sounds may also disrupt social bonds, and even cause physical harm to these beautiful, highly intelligent creatures, which have no defense against this sort of assault. I believe this testing and training should be done in an environmentally responsible way that eliminates the unnecessary infliction of harm to countless whales, dolphins and other marine species by excluding areas critical to marine mammal foraging and feeding, such as much of the Pacific Northwest coast.</p>	<p>Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities). long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>J. Davis (Electronic)</p>	<p>We are on the brink of irreversibly destroying the ocean's balance. There won't be anything to fight over when our world becomes uninhabitable. There is no need to do this ELF testing - we've been doing it for years. It is time we realize that the human race needs to band together rather than continue to fear and threaten one another - we are all human beings, sharing this planet - it is not for us to destroy. Even common-sense changes, such as testing OUTSIDE the migration and breeding areas, some of which have been set aside already need to be enforced and expanded. Without sharks, whales, dolphin and all the rest of the balancing ecosystem, the land we inhabit will cease to be viable. Then what? We are out of time!</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>T. Davis (Electronic)</p>	<p>The Navy shouldn't be allowed to proceed with sonar training in areas where the marine life is concentrated. Clearly this is hurting them and in some cases killing them.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Dawn (Electronic)	Please give the public more time to respond with concerns about plans that may harm our endangered marine species!	The Navy extended the original 60-day comment period, adding three weeks to allow additional review and comment time for the public.
Dearing (Electronic)	I fully support and approve of all proposed activities occurring within the full designated area. My opinion is that exclusion zones are an unreasonable requirement. I want to be sure that in the public comment process it is clear that not all commentary submitted is in opposition to the proposed training and testing.	Thank you for participating in the NEPA process.
Decker (Written)	I am a coastal resident and native of California. I protest tests done that explode bombs and torpedoes in our ocean. Also the use of sonar because of the ultra sensitivity of whales and other fragile marine life. I am wondering why the test sights are located so close to land and not further out in the vaster ocean areas. Your brochure claims that most of your training is done just below surface levels so why is it important to be so close to shoreline areas where the public might be fishing or recreating and not far away from public influence? It still isn't right to harm precious sea life when we should all be working to protect what we have left. It would seem that technology could come up with some other way of testing destructive warfare than to further damage life and ecosystems on this struggling planet. I think when there is no threat of imminent danger we should not create dangerous practices we may never have to implement. How about using the billions (\$) to Promote Peace!	<p>Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope, and extent of the Study Area of this project. The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Dee, Ph.D. (Electronic)</p>	<p>25 February 2014 To the United States Navy: I would very much like to let you know that I am extremely concerned about your continued use of underwater sounds - sonar - in your military exercises. The reason is that cetaceans - whales, dolphins, and porpoises - rely on echolocation 100 percent of the time to navigate, hunt, socialize, communicate, and avoid predators. Echolocation involves the use of sounds only since the open waters are too murky for cetaceans to see well underwater. As you know, sound travels much faster underwater than light. When you emit moderately to extremely loud sounds, these sounds travel so fast and so far that they would reach cetaceans, no matter where they are and how far they are from the source of the sounds. Cetaceans become so frightened that they'd swim away as far and as fast as possible until they no longer hear such sounds. Deep-diving cetaceans rushing to the surface for air can cause them to have the 'bends'. Cetaceans that are not able to get away from the loud sounds as quickly as possible may experience head trauma, as well as damage to their hearing systems. When cetaceans experience the 'fight-or-flight' by trying to escape from the loud sounds, they can no longer use their echolocation and would end up stressed, disoriented, and lethargic. Some would beach and others would perish at sea. Imagine yourself being exposed to extremely loud sounds that reverberate through your ears. You'd cover your ears and run away from the source of the sounds. However, the source keeps following you, and you would end up suffering from pain to your ears, as well as a painful headache. You'd eventually become deaf or hard of hearing as a result of your hearing system being damaged. Unlike you, cetaceans cannot cover their 'ears' nor can they escape loud sounds altogether since their home waters are already so 'polluted' with loud sounds every which way! As far as being exposed to loud sounds, cetaceans are much worse off than humans! Cetaceans are mammals like us and are completely protected via the Marine Mammal Protection Act. Studies have shown how extremely intelligent, highly sociable, and quite sentient cetaceans are. Besides, cetaceans possess unique characteristics not so unlike that of us, humans. Like us, they have lives to live, as well as families to look after. I know how extremely important security is to you, but all of us - including the military - have a moral responsibility to ensure that all cetaceans are safe and secure in their home waters! After all, cetaceans do have the right to live their lives in peace in their natural oceanic habitats without being disturbed by 'loud foreign noises' that are being forced upon them! As you know, as human population continues to rise in the United States, there has been a steady decline in cetacean populations. Numerous cetacean species are already endangered or critically endangered. The existence of cetaceans in our waters is not what it used to be! For the above reasons, we - cetacean advocates - very strongly urge you to refrain from using sonar in the Pacific Ocean - especially off the coast of California - altogether. Since technology is your forte, you definitely have the ability and the means to develop alternatives that would allow you to carry out your military exercises without disturbing cetaceans by any means! I would very</p>	<p>Simulated Activities).</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>much appreciate your watching the following video so that you'd have an idea of how sonar truly affects cetaceans: http://www.youtube.com/watch?v=j8rZxmCejD0&feature=related I do thank you for taking my message - as well as that of so many others - into extremely serious consideration and doing the right thing for cetaceans so that they'd be completely protected at all times!</p>	
DeGennaro (Electronic)	<p>This is ridiculous! We don't need this kind of practice at the expense of our dolphins and whales! They are in the circle of live and killing them or making them beach themselves is wrong in so many different reasons. We can not survive without our oceans but our oceans can survive without us. And wars that will be fought from this point forward will not be fought with sonar!! This isn't WWI or WWII times anymore! We need to conserve, protect and defend all creatures of the sea or we won't be around anymore. It's as simple as that! But humans seem to want to blow stuff up. Our Earth isn't going to be here anymore if we don't change the way we are doing things! ENOUGH IS ENOUGH!!!</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Delisi (Electronic)	<p>I would like you to extend the comment period for at least another 60 days until June 15, 2014. Thank you</p>	<p>The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the Navy's notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS.</p>
Dellaquila (Electronic)	<p>Hi, I am writing on behalf of my dear friends the dolphins and whales, and I am asking you to stop all of your sonar test and explosions immediately. Zoom out into the universe, look around, how many more planets do you see with beautiful oceans, beaches, palm trees, snow mountains, filled with amazing wildlife, smell of flowers, smiling faces. Where else could you experience love, from your heart to another heart? Do you feel the wind sometimes? Do you feel the universal love that is holding you, making your heart beat everyday? Could you for a moment feel the connection there is between you and these whales?</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
DeLorenzo (Electronic)	I am urging you to halt sonar testing in the Puget Aound area and other areas of the oceans where large cetaceans are found. The tests that are being conducted are causing the animals cerebral hemorrhage and other stressors on their system. These are sentient being that have emotions and use 90% of their brain, which weighs in at 12 pounds. They are said to be able to function on a higher level than humans. We must stop this practice now and realize if our oceans are dead, we will cease to exist.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
DeMartini (Electronic)	Rather than spending millions of dollars on more effective means of killing fellow human beings, we should be spending that money protecting the environment and the creatures that are harmed daily by our stupid greedy selfish activities. Please consider what legacy we will be leaving for future generations. Orcas, other dolphins, whales, polar bears,wolves and many others need us to repent and attempt to repair the damage we have done to their populations. Thank you for your consideration.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Dennis	Greetings: Have the marine biologists identified the noise whales and dolphins make when there is danger? Could this sound be blasted out prior to your tests, so that the	Thank you for your interest and suggestion. There are approximately 130 species of marine mammals. Marine biologists have not identified

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	animals leave the area, or at least are given a fighting chance to protect themselves from the WAY TOO LOUD sonar the Navy will test? It works with wolves in Wyoming. Why wouldn't it work in the ocean? Thank you for considering my solution.	a vocalization that would be equivalent to warning that a loud sound is eminent. Preliminary research at the University of Hawaii is being conducted to understand sound reception in toothed whales for somewhat similar intent.
DeRooy (Electronic)	I am against any continuation of the Navy exercises. The harm to sea mammals that the Navy is in denial about is real and tragic and unacceptable. The toxic garbage that is left in our oceans plus the terrible impact of explosives must be stopped. This has been going on for so many years now and has taken a terrible toll. The majority of citizens do not want this to continue-STOP NOW.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
DeVinney (Electronic)	Please reframe from putting innocent creatures at risk in order to test your sonar and bombing. No one should be physically or mentally in danger over Navy testing. You can recreate similar effects and testing situations in a man-made and controlled environment. Why would you turn your backs on what harm may be done to the orcas and other ocean animals that rely heavily on sonar and living in the area? Do you think its ok to scare and interfere with these creatures lives like that? I think we have evolved much further than this and have the means to do things in a much more humane and respectful manner. No living thing should have to suffer at the hand of man. Live is too precious to us all.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		training and testing activities designed to reduce impacts to marine mammals from Navy activities.
DeVita (Electronic)	Please do not test sonar or other damaging technologies which will certainly harm marine mammals and other animals. The seas are already suffering, please don't add explosive sounds.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Dickie (Electronic)	Hello, Thank you for the opportunity to comment. I would just like to add my voice to the side of caution. Given the tentativeness of many marine species, especially large sea mammals, we must proceed with clear and precise science on our side in order to negate - not minimize - the effects of the US and other militaries around the world. Sound and it's effects on all species is an area we are only starting understand and until we can really understand the effects of hi power sonar and the inter-relationships between species, we must curtail it's use and seek other options. The US Navy does not have a convincing argument to continue such reckless procedures. I would also add that 1960's style propaganda info videos don't support the Navy's attempt to massage public opinion. What we need in these times are transparent educated conversations by key scientist that show a real willingness by the Navy and it's partners to address a significant marine health threat. Sincerely, Ed Dickie Naturalist Photographer Nature Recordist/Sound designer	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>DiFiore (Electronic)</p>	<p>To: U.S. Naval Command, Northwest 1101 Tautog Circle, Suite 203 Silverdale, WA 98315 -1101 From: Tomas DiFiore POB 612 Little River, CA 95456 April 15, 2014 Dear United States Navy, Public comments on the Navy's proposed Training and Testing in the Pacific Northwest http://nwtteis.com/GetInvolved/OnlineCommentForm.aspx I am writing to say that I think your EIS claiming zero (0) mortalities for marine mammals and other species of birds and fish from proposed Naval Training and Testing activities in the Pacific Northwest region is not only inaccurate, but also extremely dishonest. It is disingenuous at best that the U.S. Navy would produce such a short-sighted and deceitful report which seems to show complete disrespect for the natural world and the public. Whales, dolphins, porpoises, and other marine mammals are particularly vulnerable. Mortality and slight lung injury, onset of gastrointestinal tract injury, permanent threshold shift for sonar and other active acoustic sources, Behavioral Responses; an indecent litany of the approaching undeserved death. The Navy's select science compartmentalizes the nature of causality. Without any degree of follow-up Section 6.4.2. simply states: "behavioral response criteria are used to estimate the number of animals that may exhibit a behavioral response. In this analysis, animals may be behaviorally harassed in each modeled scenario (using the NAEMO) or within each 24-hour period, whichever is shorter. Therefore, the same animal could have a behavioral reaction multiple times over the course of a year." Section 6.5.2. states:"These are not the same as the values used to calculate weighting curves, but exceed the demonstrated or anatomy-based hypothetical upper and lower limits of hearing within each group." Of course not. "Since marine mammal PTS data from impulse exposures do not exist, onset PTS levels for these animals are estimated by adding 15 dB to the SEL-based TTS threshold and by adding 6 dB to the peak pressure based thresholds. These relationships were derived by Southall et al. (2007) from impulse noise TTS growth rates in chinchillas." How does the U.S. Navy scale up the Chincilla audible range impacts to determine decibel level of impacts of a particular frequency and duration period for a Blue Whale? And then the same question applies regarding all the Mysticeti. It is quite a stretch, is it not? A small terrestrial rodent (considered a pet by some) and a Blue whale in the wild marine environment. I have read several studies, only the Navy is using this metric. The explanation in the document does not in any way, cover the Navy's aft. The whales are classified into the group Mysticeti, which is a suborder in the Order Cetacea. The cetacea are all the whales, dolphins and porpoises. Mysticeti is a suborder including baleen whales: right whales; rorquals; blue whales; and humpbacks. Examples of mysticetes: Blue Whale, Fin Whale, Sei Whale, North Atlantic Right Whale, Southern Right Whale, Humpback Whale, and the Minke Whale. It has become plainly evident that the first beings to suffer from expanded naval warfare will be the whales, dolphins and marine mammals. They simply are not able to withstand this constant onslaught of an arms race of silent submarines, and the super high-powered sonar and other weapons that are used to detect them and destroy them. As a Vietnam era veteran I implore you to cease this war on our ocean.</p>	<p>See the EIS/OEIS Section 3.4.3 (Environmental Consequences) regarding the analysis leading to the conclusions mentioned in your comment. Regarding development of the mortality, injury, and behavioral thresholds and criteria, see Section 3.4.3.1.10 (Thresholds and Criteria for Predicting Acoustic and Explosive Impacts on Marine Mammals) and the referenced Finneran and Jenkins (2012). Regarding the conclusions reached by the analysis, see in particular Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities) for a clear understanding of the expected impacts to marine mammals. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Dittman – 01 (Electronic)	The area proposed for this testing is directly in the habitat of the endangered Southern Resident Orcas. This testing is not only irresponsible but unethical. We have a responsibility to this planet that we SHARE with all other living beings. Please reconsider the area of testing that will surely result in thousands of deaths of an endangered species. God bless our military.	Thank you for participating in the NEPA process.
Dittman – 02 (Electronic)	The area proposed for this testing is directly in the habitat of the endangered Southern Resident Orcas. This testing is not only irresponsible but unethical. We have a responsibility to this planet that we SHARE with all other living beings. Please reconsider the area of testing that will surely result in thousands of deaths of an endangered species. God bless.	Thank you for participating in the NEPA process.
Dixon (Electronic)	Please do not proceed with your sonar tests off the west coast of the USA. That area is known to have high densities of marine mammals, notably grey and humpback whales who use that area as a migration corridor. Please find a more suitable area to test your equipment - hopefully one that won't injure or kill such incredible creatures. How about the "dead zone" of the South Pacific, for instance, where nothing is living any more.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
Dominey (Written)	A future look? Two Chinook salmon (Ole & Lena) are trying to return to the Columbia River. Ole says to Lena "Knock-knock" Lena says "Who's there?"	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Ole says – “An LNG export terminal LNG tankers destroying fish Dredged out fish habitat Pollution from oil and coal trains A “gazillion” sport fishermen and The United States Navy Testing Explosives” Lena says “I give up!” The end</p>	
Dominguez (Electronic)	<p>I am writing in opposition to the Navy’s proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. “Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: “Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation’s military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy’s Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event”. All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It’s time to end the Navy’s war on whales.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Doran (Written)	<p>This letter is to inform you I am requesting the Navy put sensitive whale and marine mammal habitat off limits to testing and training operations. In your draft statement the Navy admits it could kill and or maim even protected and endangered species. They could be injured, suffer hearing loss, lung damage. They already suffer from exposure to fishing nets, pollution, ship strikes. Their food would also be devastated. And all this bombing runs, earsplitting blasts, underwater explosion, mine sweeping is unnecessary. I realize the Navy does marine mammal research. Surely you realize what a sensitive environment this is and the struggle to save species. I have been a advocate since early 1970’s when we boycotted Japanese products to stop the slaughter of whales by Japan.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>I am also a volunteer with Oregon State Parks whale watch program for the gray whales as they migrate Alaska to Mexico and back – This should not be disturbed.</p> <p>I am also Certified Marine Mammal Naturalist with the ACS. I do a great deal of whale watching from shore and boat for the last 30 yrs. Many times you are not aware of how many marine mammals are around you unless you see a blow. So the Navy having observers watch for marine mammals will not see all. Some of large whale dive deep and cannot be seen heard or observed.</p> <p>There are marine mammals world wide so there is no where it can be safe for the ocean environment to do your testing. Also, Oregon strongly protects these waters due to all above mentioned and tourism. I am compassionate about saving the marine environment worldwide and PNW.</p>	<p>EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
Dow (Electronic)	I am strongly opposed to further sonar, bombing and live ammunition testing. Our sea life is facing grave risk of die off without further assistance from the Navy.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
M. Doyle (Electronic)	Please consider that our defense depends upon a healthy environment and underwater testing and explosions is known to kill marine animals, large and small. Don't kill life; it doesn't protect us. Margaret Doyle	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
P. Doyle (Electronic)	The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. Protect our countries waters above and below the surface of the waters.	Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Dunham (Electronic)	It's time to stop doing things that are harming our environment! Our wildlife in the oceans is deeply effected by doing sonar tests! Money should never trump the environment.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Dunsmore – 01 (Electronic)	Harming marine animals for the purpose of simply testing your equipment is a violation of international laws protecting these animals and will be subject to legal reprisals which are already being organized. Please consider alternatives for your maneuvers in order to avoid the upcoming public spectacle which will only further weaken your persona as protectors of the free world.	The Navy is committed to protecting the marine environment and marine life during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment and marine life while training and testing for nearly a decade.
Dunsmore – 02 (Electronic)	Please discontinue destroying your credibility as a protector of the free world by harming our brethren.	Thank you for participating in the NEPA process.
Durheim (Oral)	I was disturbed by the charges that you're planning to set in the ocean and perhaps in Puget Sound, too, with the repercussion, the noise from it. And also how are you going to make sure that there aren't any mammals, turtles, you know, other wildlife in there where you set the charges? I'd like you really to look at that in the Draft EIS and Final EIS. And I think sticking with what you have now would be, would be best unless you can really assure the public and the people that care for the animals that you are doing everything you can. I'm not against the Navy. I think we need the military, but there has to be a point where destroying the environment or and the creatures living in the environment versus someone that maybe someday might attack us, that we have to do it to coincide together, to work together, you know, not one or the other. And a lot of people in the public feel like the Navy just will do whatever they can do, no matter what, and don't trust some of the agencies and not telling the truth. And we've been so conditioned to this, I hate to say it, but I want to get it out in the public, that, that we hope that you will do everything you can that you have said you will to protect the animals. And, you know, I just, that's what I hope that you will do and really do it. Thank you.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>(www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>When cetaceans have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p>
<p>Durston (Electronic)</p>	<p>Please do not kill any more endangered species, whales, dolphins. Please go do your exercises someplace where all the wildlife is dead already, like the Gulf of Mexico. Our ocean wildlife is already getting 300 million gallons of radioactive water daily from the Fukushima Radioactive plants. The Gulf of Mexico water is all poisoned by BP Oil Company. With global warming, the population of the sea life is uncertain. Please do not kill anymore. When they die, we are next. Sonar damages and disorients the whales, dolphins, etc. You are killing endangered species here. We have fisherman who rely on fishing. Naval warfare disrupts the schools of fish, if there are any left. We need to preserve our natural resources to pass them on to our children. They are more important than any weapons testing. Please go to the Bermuda Triangle to practice your tests. The sea life is just trying to survive. Please leave them alone.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Eastland (Electronic)	I object to the planned active sonar exercise in the Northwest Training and Testing Area. Testing right up to the Washington coast is very likely to impact on marine mammal life.	Thank you for participating in the NEPA process.
Eccles (Electronic)	Please do not test weapons along the most beautiful coast in the world!	Thank you for participating in the NEPA process.
Echols (Electronic)	The U.S. Navy has other options than to use sonar testing over and over which threatens whales, dolphins and other ocean life. The U.S. Airforce uses simulators therefore sonar simulators should be implemented with actual (water) testing cut down to a minimum. The USA is suppose to be a powerful armed nation with the technology (NOT to HARM OCEAN LIFE). Do we have to kill off ocn life to achieve this? I can only think of the saying, " The one with the most toys wins ". Now, stop your testing and find other ways.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
D. Edwards	I am absolutely opposed to any of these activities being conducted in the Pacific Ocean that could potentially cause harm to ANY marine mammals. We humans DO NOT have rights over all other creatures on this planet. We do not have the right to invade THEIR territory (habitat) and conduct activities that will, in all likelihood, cause them harm. I think this proposal is horrific, and sinful. I do not want one single penny of my tax dollars to be spent on this testing and training!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
F. Edwards (Electronic)	I would like to express my vehement opposition to the proposed naval bombing of marine mammals -- yes, I know they are not TARGETED, but if they end up getting HIT/INJURED, it makes no difference. Endangered orcas and many other whales forage and travel in the training range. It is IMPOSSIBLE to detect their presence in time to stop the exercises, and you have NO IDEA what distances are safe for them -- given how well water transmits sound, and given their fine hearing, it would be a LONG, LONG way. If these training exercises HAVE to be carried out (which I would never agree is the case) at LEAST do so much further westward beyond the continental shelf. The rock-bottom act of decency would be to time the training when there are the fewest orcas, May-Oct -- ALTHOUGH I would like to remind you that there are year-round resident pods. This whole matter makes me sick to my stomach.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
Egger (Electronic)	Please find another place to test your weapons rather than on the open ocean where there's precious marine animals living!	Thank you for participating in the NEPA process.
Eisenberg (Electronic)	The Navy is supposed to protect life, and therefore the Navy should be discerning in its use to technology, and assess whether each type of technology is adding long-term benefit or harm. People cannot survive without intact, diverse and healthy ecosystems. Sonar is harmful to these ecosystems and therefore harmful to humanity. National security is not as important as ecological health, period. "It is becoming increasingly apparent that we shall not have the benefits of this world for much longer. The imminent and expected destruction of the life cycle of world ecology can only be prevented by a	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	radical shift in outlook from our present naive conception of this world as a testing ground to a more mature view of the universe as a comprehensive matrix of life forms.” --Vine Deloria Jr	<p>EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Ellsworth (Electronic)	Please do not do this, we need to preserve our natural areas. Especially the Ocean. The military can afford private lakes and private property especially for testing. Please stop destroying our oceans!	Thank you for participating in the NEPA process.
Emery (Electronic)	What good are all your “war” efforts if we are left with a dead planet? We MUST stop before it's too late!!! “I am writing in opposition to the Navy’s proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Engelmeyer-01 (Written)	I have worked on watershed and ocean conservation issues for over 25 years and it is clear to me that past policy and management practices have severely impacted the health of our land and ocean scape. As such I continue to find myself leaning toward the need to take a precautionary approach when dealing with uncertainty. I am very concerned about the adequacy of the Draft EIS for a number of reasons;	As stated in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, in addition to evaluating mitigation zones based on marine mammals and sea turtles, the Navy also evaluated ranges for specific effects to the marbled murrelet. This evaluation included explosive ranges to TTS and the onset of auditory injury, non-auditory injury, slight lung injury, and mortality. For every

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	1) If there is insufficient information you should take a precautionary approach – the ESA listed Marbled Murrelet should be researched before such claims are made about no impacts – there is no evidence to support the elimination of the mitigation measures – you cannot rely on absence of data to say there is no impact.	source proposed for use by the Navy, the recommended mitigation zones included in Table 5.3-2 exceed each of these ranges. See Chapter 5 for specific exclusion zones for the Marbled Murrelet and other seabirds.
Engelmeyer-02	2) Audubon and other seabird experts have been working on a Pacific Flyway Seabird conservation strategy that includes marine Important Bird Areas from California to Alaska – here on the central coast we have a number coastal marine IBAs including one in the near-shore to 3 miles for the marbled Murrelet. This information is not included in your analysis and should be.	The Pacific Flyway Seabird conservation strategy is discussed in Section 3.6 Birds of the EIS/OEIS. It is shown in Figure 3.6-4: Pacific Flyway.
Engelmeyer-03	3) Oregon has worked for over 10 years on an ocean conservation program which includes Marine Reserves, Marine Protected Areas and Seabird Protected Areas and the Ocean Policy Advisory Council has recently updated the Territorial Sea Plan / Chapter 5 which relates to Marine Renewable Energy. It is essential that this information is included in your EIS – There are a number of designations within the Territorial Sea that are relevant to any activities that may impact the ecological integrity of the site. I urge you to truly protect and cooperate with the direction and spirit of the Marine Reserves, and MPAs around the region. Your refusal to follow NEPA when reviewing their potential impacts to fish, birds, marine mammals as well as recreational and commercial fishing fleet is unacceptable.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. The Navy is not proposing to conduct training or testing activities in or near the Oregon state waters. The proposed Study Area begins 12 nautical miles off the coast of Oregon, so the closest that any activities would occur to Oregon state waters is at least 12 nautical miles. Historically, activities within 50 nautical miles of the coast of Oregon are extremely rare, and that pattern is expected to continue under this Proposed Action.
Engelmeyer-04	4) Recently NOAA has listed under the ESA a forage fish Eulachon – while there are number of issues that have led to the decline of this species I am concerned with the DEIS adequacy to truly protect this and all other ESA listed species.	Pacific eulachon and potential effects on them are discussed in Section 3.9 (Fish). As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.
Engelmeyer-05	5) Many coastal residents and students have worked on beach clean-up activities multiple times throughout the year. There is a commitment to improve health of our near-shore waters – the direction to discard hazardous materials overboard is totally unacceptable – this information should be made available to the public and the policy direction needs to change – no overboard discharge of hazardous materials. We know there are significant problems and challenges related to bioaccumulation in our orcas and other species –	Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>given the extreme toxicity of many of toxic metals how can the Navy willfully omit the amounts, practices of this management direction. I believe there should be full disclosure of actions that may impact humans and the ocean environment.</p>	<p>water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
<p>Engelmeyer-06</p>	<p>6) It is known that visual detection rates for marine mammals are incredibly low - around 5%. In relation to the existing monitoring efforts I would urge to review other technologies that would have an increased likelihood of detecting migrating species – there are acoustic monitoring efforts now underway on the east coast at the Stellwagen National Marine Sanctuary and adjacent waters that has shown to reduce strike impacts to migrating whales. This protocol should be incorporated into a more robust and credible monitoring program.</p> <p>For the above reason I join NRDC in their efforts to force the Navy to withdraw its 2014 NWTTS EIS/OEIS and initiate the NEPA process again.</p>	<p>Your opposition to the Proposed Action is noted; however, the Navy must balance the need to protect the marine environment with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. There are critical differences between the detection of a marine mammal made in a single pass during a line transect survey and the ability of the Navy to detect marine mammals in the general area of training or testing event. Please see the discussion of this topic in the EIS/OEIS Section 3.4.3.1.16 (Implementing Mitigation to Reduce Sound Exposures). Furthermore, the mitigation measures detailed in Chapter 5 involve much more than just visual detection of marine mammals by a single vessel. Also note that the 8 years of reporting by the Navy shows the mitigation is effective; see the reports available at the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental/). Please see Section 3.4.4.1 (Summary of Observations During Previous Navy Activities) where there is a summary of the current acoustic monitoring and other research Navy is funding. Note that the acoustic monitoring at Stellwagen is for the purpose of deconflicting commercial shipping lanes with the presence of marine mammals, which is not part of the Navy mission and is not part of the proposed action.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
Engler (Oral)	<p>My comment is that I hope the Navy will do everything it can to minimize acoustic emissions in the -- into the ocean and look for alternatives to the active sonar because I think there's a lot we don't know about the impact of that on the marine mammals and other creatures in the ocean. So I really hope they try to minimize any acoustic emissions and thank you for coming to Newport and taking public input.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Epijano (Written)	<p>The NWTT EIS/OEIS project in my opinion needs to be either totally eradicated or greatly altered!!</p> <p>Documented damages to sea wildlife, including endangered species, has been filed in the legal system.</p> <p>Any group of individuals that believes we, as humans, have the right to disturb, mutate or destroy the environment, and the creatures that inhabit it, are misled.</p> <p>The United States can set an example for the entire world. We stand for PEACE, JUSTICE and SUSTAINABILITY, that must be the intelligence that is followed.</p> <p>Might is not right, it produces improper communication and actions. There is no need to pollute and harm to prove a point. Please, stop this behavior before our NEST is completely fouled and our cohabitators, of this planet, are weakened and totally annihilated.</p> <p>No hefty contract are worth the shame and guilt that will ensue. Actions for the sake of war will never reap positive results.</p> <p>Heed this outcry.</p>	<p>Your opposition to the Proposed Action is noted; however, the Navy must balance the need to protect marine life with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Eppstein (Electronic)	I have concerns with the NWTT EIS/OEIS regarding marine mammals. While the EIS/OEIS does a reasonable job of summarizing available research data, it glosses over the huge number of unknowns regarding these beings. My particular concerns are: 1) The Navy's attitude (expressed, for example, in 5.2.2.1) that privileges administrative and personnel convenience over the risk of killing or maiming marine beings, many of them already endangered. 2) The acknowledged (5.3.1.2.5.3) ineffectiveness of lookouts, who are expected to perform other duties while on lookout, e.g. navigation (5.3.1). All values in the EIS/OEIS Sightability Table (5.3.1) are less than 1 (a marine mammal if present is always sighted), and in a significant number of cases close to 0. The sighting data themselves are based on estimates of probabilities. Mammals are often difficult to see. It is noted in 5.2.3.1.2, for instance, that "...[w]hen viewed in windless conditions," a gray whale's blow is up to 15 ft. Conditions along the Pacific Coast are rarely windless. Rough water, fog, and sun dazzle can hide marine mammals from even the most conscientious eyes. To sum up: if the training and testing of the sort envisioned by the Navy were conducted on land, and equivalent numbers of human civilians were at risk of death, injury, or significant disruption of their livelihoods as a result, this would be unacceptable. It is equally unacceptable for humans to play havoc with the lives of marine beings through anthropogenic noise, habitat degradation, pollution, and vessel disturbance.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS.
K. Evans (Electronic)	What a mess.	Thank you for participating in the NEPA process.
S. Evans (Electronic)	Because it fails to take into account the most recent science showing the harms of sonar and explosives testing to threatened and endangered marine mammals, the Navy's draft EIS in the Northwest Training and Testing (NWTT) Study Area is both unacceptable and unconscionable, and should be sent back to the drawing board. The Navy is legally obliged to protect, or at the very least not to harm, our endangered and threatened marine	The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>species. Instead, in this draft EIS the Navy casually dismisses the harms caused by its disruptive activities by pointing out that other un-permitted harms such as ship strikes or entanglement in nets theoretically cause greater harm. In fact, these unrelated harms are only relevant in that the fact of such accidental and perhaps unpreventable perils only reinforces the need to strictly limit those harms that can be controlled—such as the Navy’s in-water testing activities. The Navy’s failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing—particularly because the Navy’s draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community’s view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean’s absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH that has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. Thank you for your consideration.</p>	<p>in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Marilyn Evenson (Electronic)</p>	<p>Please do not allow the Navy to continue sonar & explosive exercises in the Pacific Northwest’s waters. It risks the well-being & lives of marine animals & fish (some of which are endangered) that swim & live within the Navy’s training range. Not only do the blasts cause deafness & injuries, it can cause deaths. Sea mammals use their ears to locate food & their families. They would be lost & helpless. Wherever these tests are conducted in other waters, the animals are affected horribly. Please do not issue any permits to the Navy for the Pacific Northwest without weighing in all comments & scientific data. Thank you.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Michael Evenson (Oral)</p>	<p>I'm the president of the board of the Matolle Salmon Group. Ali has talked a little bit about some of our efforts to protect our fish. But I just want to say from the outset that this process that you are involved in is rigged. We all know it's rigged. It's not a question of coming up with comments that then can be answered and put in a document. You're here asking to do training on a certain section of the coast. We protested it. It went through with flying colors. And now you're back wanting to expand it. Now you're expanding it to half the coastline of the continental U.S. Five years, two years, you'll be asking to go all the way to San Diego. After all, you have your chief facilities there. So let's – let's not – let's not address the impacts to this kind of small area, which is not small, our confined area, because really what you're asking is to do this anywhere, everywhere, and that's unacceptable. And it's a wrong process, if you're involved in something and then are going to come back and ask for more. Nowhere in these documents is it stated that we will not go beyond this area, this training exercise area. You're really asking for the whole coast. Why don't you come out and be honest about it? We expect from our armed services to be honest with us, and this is not being honest. Now in talking with some of the people out there, it was clear that yes, there will be some animals harmed. No – the studies show that none will be killed. Let's look at this City of Eureka here. There's 30,000 people. But, you know, during the daytime, it's a city of 60,000, because a lot of us who don't live in Eureka are here. Now Eureka is economically just depressed. But it is not acceptable to harm 30 or 50 or 60 people, not kill them, who are in Eureka while some kind of training is going on, and consider that, well, the population isn't impacted, just some individuals are impacted. That's wrong logic. And the whole logic of your process is wrong. It's – perhaps it's not you who are doing the wrong thing, but it's the federal agencies that set up the criteria, the hoops that you are trying to jump through. But I'm asking you, as our military, as the people that we count on, to go and use your common sense. Because the one thing that will make us vulnerable to any enemy is if we don't use common sense. We know it happened in World War II. Our fighters just cleaned the skies of the Germans because our fighters didn't follow a strict plan, but they used their sense. They were playing jazz up there in those planes. This is – this is history. I'm going to conclude by saying that you have two effects: Sonar, and then you have munitions. You cannot put lead in our ocean and say there's no effect. We can't put lead in our gasoline. But since it's my grandson, I'm just going to – our ocean. It will come back to bite you.</p>	<p>mammals from Navy activities.</p> <p>Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
<p>Everett (Electronic)</p>	<p>To Whom It May Concern: I am against the navy performing sonar and explosive exercises in an area rich with marine mammals such as porpoises, gray and fin whales and endangered orcas. I understand the need for the navy to train, but believe it can be done in an area farther off the coast where it will have less impact. Thank you for your consideration.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Ewell (Written)</p>	<p>My name is Tom Ewell and I am a resident of Clinton, Washington, on Whidbey Island. I am writing with citizen input regarding the Environmental Impact Statement relative to proposed sonar and explosive training on our coast and its effect on wildlife species in the Pacific Northwest.</p> <p>I have reviewed the Navy's video on the stated need for sonar and bombing practice in the Pacific Northwest coastal areas. I understand the need to train your naval forces, but I strongly disagree that these trainings need to be conducted in sensitive marine habitats. Your video claims that you are aware of the likely damage to whales and other habitat of your testing and you are therefore committed to protecting them by avoiding them. But I am deeply concerned that you apparently are unwilling to designate areas as no sonar and no testing areas even though those are known to contain vulnerable species' estuaries and habitats. So I write to strongly request that you designate marine habitat in our area off limits to your testing.</p> <p>Our concern is heightened by the difficulty many on Whidbey Island have had in failing to get a response to the strong, repeated requests that the outlying field used by the Growlers in Coupeville be closed. Only after a lawsuit was filed were the trainings temporarily halted. The devastating noise from the Growlers has been shown to be harmful to our health, especially hearing, even to Naval personnel, yet the Navy insisted on its right to subject local citizenry to this abuse. How much less sensitive will you be to the health and welfare of the whales, dolphins and other creatures endangered by your sonar and explosive testing if their habitat is not specifically designated as off limits to your training and testing?</p> <p>We believe that all of us are concerned about our children and grandchildren and the environmental legacy we are leaving them. Please, in the name of our children and generations to come, in addition to the endangered creatures, change your proposed policy and protect our precious wildlife.</p> <p>Thank you for your consideration of this request.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Thank you for participating in the NEPA process. However the request for the closing of Coupeville is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p> <p>The NWTT EIS/OEIS considers the cumulative impacts to the environment from other relevant past, present, and reasonably foreseeable future actions (federal, state, local and private) in addition to the proposed action. Section 4.3.3.17 (Environmental Impact Statement for the EA-18G Growler Airfield Operations) discusses the potential for cumulative impacts from the ongoing Growler homebasing EIS and concludes that the training and testing activities proposed in the NWTT EIS/OEIS adequately account for the potential homebasing activity.</p>
<p>Eyles</p>	<p>By declaring war on whales, dolphins, and other marine creatures, you are dedicating</p>	<p>The Navy is committed to protecting the marine environment during</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	yourself to the destruction of what you should protect: Our oceans and all within them. This is truly war and mass murder. How can you justify this? Stop Eco-cide! Stop terracide! Technology does not give you license to commit mass destruction and torture like this.	the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Fairman (Oral)	I was in Albion and I found out that the Navy was going to blow up the gray whales. I am an activist and a writer. This is my first ever activist meeting. I do not public speak. I have eight pages of questions from reading that Navy book; I have three minutes to ask them. Like getting an academy award. I have cut it down to three questions so you look very official so I'm going to ask you. Is that okay? What is a simulated animal that is listed in the book? Oh, okay. So I have to make my questions into comments then; right? Is that what you're saying? I would like to say that I believe in global warming and that I'm really wondering if the Navy believes in global warming. I think that military corporations don't believe in global warming and I think that all future research is going to only be in global warming. I also believe that pretty much the wars are all going to be over and that there will be peace, but we are going to have global warming like nothing else. And the rest of my questions, which I can't say questions, is just I want to find out who wrote that book. And then I have one more comment, if I'm running out of three minutes. The people you are talking to here cannot help our cause. They are the Navy. We need to get to Obama, not the Navy. I'm taking my eight pages of questions to MSNBC, Rachel "Madcow." Everything will be okay by Spring Equinox. Thank you.	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
Faivre (Written)	I request no sonar/explosives testing in the migratory path of the whales from Mexico to Alaska. The Navy says part of their mission is the protection of the seas and sealife, so please create better safeguards for the sealife off the Calif. Coast to Alaska. Visual sightings do not seem adequate with all the technology available. Any "take" is one too many.	As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable. Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When cetaceans have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).
Faulkner (Electronic)	Please stop plans that will endanger sea mammals. Navy plans to conduct up to 100 mid-range active sonar tests need to be scrapped. These type of sonars have been shown to affect marine mammal behavior. Please, let our military show the world that it is strong and compassionate and cares about the effect its activities have on nature and wildlife. Daughter of veteran of 3 foreign wars (Air Force)	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Fay (Written)	I protest the use of the Pacific Coast line as a bombing range for naval exercises. Testing sonar equipment should not be allowed in this area. Many animals would be affected including dolphins and whales use sonar system for their intricate communication systems. The navy equipment would interfere with this. I find it unconscionable that this would even be considered. I have read that within fifty years there will be no free animals left in the world. How regrettable, that we cannot leave a few spaces for them. I would not feel one bit safer if this were done.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Fay (Electronic)	Incalculable distress, suffering, and many deaths have been caused to whales and dolphins worldwide by the profligate use of sonar devices and explosions. The suffering and deaths of these magnificent, intelligent creatures could be greatly lessened if all navies of the world would curtail these highly destructive activities. Oh, but we need to	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>defend ourselves! I hear you say. Please read on with an open mind and, more importantly, a compassionate and humane heart. Although human interest in the use of sonar began with a reasonable need to detect and avoid icebergs, it was soon put to use in the waging of war. Sonar was invaluable for submarine, torpedo, and mine location during World War I. One early “passive”sonar system, used in 1916, consisted of a towed line of microphones, which merely picked up the sound waves of approaching vessels, etc. This method did no real harm to marine mammals. Later, “active” systems, however, used the now-familiar methods of “bouncing” sonic waves off of underwater objects. This method does very real harm and it is used in every large body of water on earth, by national navies and merchant marine alike. Sonic waves are the chief form of communication among whales and dolphins. Their auditory skills are well-documented, and far superior to our own. All these members of the Cetacean order are also known to be highly social creatures, who interact and talk to one another routinely. They also use sound waves to navigate and find food resources. Given their finely tuned sensitivity to sonic waves, imagine the torture it causes them when they hear/feel the innumerable and diverse sonar signals emanating from thousands of ships around the world. It is simply logical that they would be confused and upset by conflicting “communications,” as they reasonably interpret them to be. What must they think? (And please remember that we self-exalted beings are not the only creatures who do think!) How can they discern that the sonic waves they sense are not meant for them, are not directional signals or distress signals from another sea mammal? Are we not intelligent enough to imagine their anxiety as they attempt to figure out what the multiplicitous signals are trying to impart? It is clear that the cacophony of sonar from ships causes extreme mental anguish and suffering to a degree that groups of whales and dolphins are either misdirected by the erroneous signals, and thus beach themselves through simple error - perhaps even looking for some other animal that isn’t there to be found; or are literally driven mad by the noise, depressed by the confusion and frustration, even as we humans can be, and kill themselves to escape the agony. This sad state of affairs does not even take into account the explosions that navies carry out, and the drilling and blasting by commercial ventures when exploiting the seas for oil or gas or whatever. These activities cause outright deaths and again, more insanity and confusion to the stressed sea mammals and others. How can we humans, who think we are so intelligent and superior to other animals, simply not care about the cruel suffering we are inflicting on these sentient beings? Whales and dolphins are at least as intelligent as we are. They are social, and they have shown compassion for other creatures, as in the many documented cases of whales and dolphins rescuing drowning humans and even dogs. With our allegedly superior brains, surely we can figure out better ways to defend ourselves than by using the active sonar method, even if it just means going back to the passive one. Or better still, invent a new and harmless method. We have no right to consider ourselves thinking, decent people if we continue to cause such gruesome and painful suffering to our fellow creatures. We do not deserve to live happy lives ourselves when we routinely and uncaringly torture the</p>	<p>training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Currently sonar is the best technology for locating small objects in the water that we possess. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>beautiful, harmless, and blessed beings that were put on this earth with no less right to happiness than ourselves. I do not think it is putting it too strongly to say that we doom ourselves -- and we deserve our doom -- if we do not take action to correct this tragic situation. We need to put ourselves in their place -- in other words, have empathy. Imagine your own family subjected to such cruel suffering, and all unnecessary. Then take steps to correct this. National defense is no excuse for the torture and murder of one single whale or dolphin. And we are killing them in the thousands. Earth will be a sorrier place than ever if this continues.</p>	
<p>Felker (Electronic)</p>	<p>The Southern Resident Killer Whales have only 80 members left when I found them their was 88 in the population. I fell in love with them in the movie Free Willy but after I read about the captured members that took place in the late 60's early 70's. My love for them grew even more like they were all my babies, and I keep track of them through various websites and people in Washington. When Sooke died and I saw the shape that she was in after the navy had been putting sonar blasts in their native area Puget Sound. I knew that is how she died and a few others about the community probably had died from the same thing. The chemicals and the salmon drought for them has an impact on their lives but the sonar blasts kills them quickly. The navy does not need to do sonar blasts in the area that is occupied by the JKL pods and the Transients that also share those waters. They are not just mammals they are a community and they live together, feed each other, they play and interact with each other. They don't deserve this the impact the navy should fine another place that it can do that stupid testing not where it is populated by members that are protected by the endangered species act. I lost my favorite whale last year J8 Spieden and I was depressed for weeks over the loss. So please do not give them permission to do these sonar testings in the Puget Sound. Why do we need these testings anyway this country is messed up already is it really necessary?</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Feltham (Electronic)</p>	<p>I am writing to express my concern for the marine habitats of Puget Sound. The Navy must develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area, and the Navy's draft EIS fails to adopt clear measures that would dramatically reduce injuries and deaths to marine mammals without compromising national security. I believe the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something the scientific community has recommended as the most effective means of reducing harm. I am concerned that the Navy has not addressed the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH; this change has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life.</p> <ul style="list-style-type: none"> • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
<p>Fenton (Electronic)</p>	<p>By the Navy's own admission, marine mammals have been injured and killed, over the course of many years, as a result of Navy sonar exercises. This is not acceptable. The Navy should, at the very least, have trained marine biologists on board vessels that are conducting sonar experiments, to assess the damage done to whales and other marine mammals. Better yet, the Navy should stop these tests. I know that's not going to happen, but that's what I'm requesting. There is no excuse for inundating the already-polluted oceans with life-threatening sounds.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Fernandez (Electronic)	To Whom It May Concern: I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales. Please reconsider. These highly intelligent mammals are also highly emotional and deserve respect to their lives. All The Best, Angel Fernandez	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Please see Section 5.3.1 (Lookout Procedural Measures) and Section 5.3.2 (Mitigation Zone Procedural Measures) for descriptions of the mitigation measures the Navy proposes for the activities mentioned in the comment.</p>
Ferren (Electronic)	Please stop the Navy from sonar testing/ using explosive in marine waters where whales and other marine mammals frequent. This includes the Everett, Wa area during the months of Mar-June when our Gray Whales migrate through our water ways.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Please see Section 5.3.1 (Lookout Procedural Measures) and Section 5.3.2 (Mitigation Zone Procedural Measures) for descriptions of the mitigation measures the Navy proposes for the activities mentioned in the comment. Also, please see Section 5.3.3.2 (Puget Sound and the Strait of Juan de Fuca) for a discussion of additional mitigation measures for activities conducted in Puget Sound.</p>
Fey (Oral)	<p>Hello. My name's Hannah Evelyn Fey. And I notice that our society is heavily reliant on science for policy and procedures. But we are not scientific beings. We're also emotional beings. When do we consider our intuition? Where is our moral compass? If we wanted to protect our country, we'd consider the long term. Do we really want a long-term solution to be war? What will that end in? I think we need to be more focused on sustaining the animals and vertebrates, crustaceans, forms of life other than just humans. How long will we be able to survive if we continue this path of destruction? How do you not see the interconnectedness of life? How do we bomb the ocean and not believe that it's cutting us deep down inside? What I'm asking for is for you to feel those wounds. Feel the wounds that have been cutting us since we were born into this domineering society that has sought to divide and conquer different ways of life and living for hundreds of years. Feel the wounds that tear apart families, communities of living beings who deserve to live in the ocean. It's an invasion of their homes. It is an act of terror and violence against our fellow earthlings, our fellow earthlings, the sea creatures and humans alike. Thank you.</p>	<p>Thank you for participating in the NEPA process.</p>
D. Files (Electronic)	<p>The military surely can find another way to test and improve materials underwater without jeopardizing marine life.</p>	<p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p>
J. Files (Oral)	<p>The first thing I would like to say is the comments about your process tonight I agree with and the process that the one minute, half minute and so on. It's very hurtful for me to see someone like Char Flum, who has devoted so much of her life in protecting the whales, to</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>have someone say you only -- stop, stop, stop. No more. No more. At least have the grace to let the person finish the paragraph they're talking about. I think we're well aware, most of us, that we can finish up our thoughts in a usual manner that we would have in a conversation with anybody. Secondly, I would like to say when I have come to your two other previous presentations and this one tonight it's really a very scary experience for me, because with all this weaponry that you need to test I'm sure there are other countries on the planet who have the same weaponry and are doing the same kind of testing and expecting to use it at some point. And like Janie said, when that happens, your grandchildren, my grandchildren, no one will escape. It will be the end. So you are practicing something that is so terribly, terribly discouraging. The other thing I want to say, and I will finish, is that the marine mammals and the marine life out in this ocean have no one to speak for them, except us. So that's why we're here. Please limit and please find a way that these beautiful, beautiful animals continue to exist in peace and harmony. I do not believe that we have dominion over them. I think they are just as important as we are. Thank you.</p>	<p>Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Firth (Electronic)	<p>I strongly object to the proposed regulations that would allow the testing of certain devices, including explosives and toxic chemicals, that could not only endanger sea life but also the lives of those persons living in the coastal areas in which the tests are to be run. This program must be terminated at all costs for the protection of all life living in those areas in which the tests are to be conducted.</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
Fischer (Written)	<p>I am very concerned about the impact expanded testing by the Navy will have on marine mammals.</p> <p>One idea is to test 100 miles off of the coast. Killing even one of these magnificent animals is intolerable. The suffering caused by sonar is cruel. Please consider ceasing all testing close (12 miles off of the coast).</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Nearly all of the Navy's proposed activities would continue to occur outside 12 nm. To stay outside of a specific distance, such as 100 miles, would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average, ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).</p>
Fishtrom – 01 (Electronic)	Please keep your radiation and chemicals away from my family and me! Do not test your weapons near Humboldt.	Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project. To clarify, under the Proposed Action no nuclear radiation will be used in training or testing materials.
Fishtrom – 02 (Electronic)	I'll eat my fish fresh, and free from radiation, thank you!	Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Fletcher (Electronic)</p>	<p>While I have great respect for the Navy I do not feel the Navy should consider itself unfettered as to laws of this land. Please find below my comments on how even the Navy should behave within our environmental laws and in defense of the regulations that protect wildlife in our waters. That is your job too. The Navy's failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWT) Study Area is both unacceptable and unconscionable--particularly because the Navy's draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH; this change has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. Thank you for the work you do in SUPPORT of our laws and healthy and safe future, which includes protecting the environment on which we depend.</p>	<p>this project. To clarify, under the Proposed Action no nuclear radiation will be used in training or testing materials.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>shore birds, fish, sea turtles, or invertebrate marine life.</p> <ul style="list-style-type: none"> • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>The Navy is completing this EIS/OEIS in compliance with current law, primarily the National Environmental Policy Act (NEPA). In addition to NEPA, the Navy continues to comply with other applicable environmental laws and with a number of regulatory requirements, such as the Marine Mammal Protection Act, the Endangered Species Act, the Coastal Zone Management Act, and the Magnuson-Stevens Fishery Conservation and Management Act.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
Flum (Oral)	Okay. The first thing I'd like to address is how the meeting is structured tonight. We should be able to ask questions and have them answered as a group, not have to be divided and go out and speak to individual people. This is an old way that people have divided and conquered and I don't think it gives any credit to the Navy's ideas. Okay. First	The Navy went to a great amount of effort to coordinate and organize the public meetings to meet the needs of all of the public. The format allowed for ample opportunity for valuable exchange of information between the public and Navy subject matter experts. The meetings

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>of all, I'd like to say that it has been shown that the Navy has little or no regard for abiding by suggestions, limits on their war testing practices in the west coast. Jane Zimmer quotes: "After suing the Navy to limit its killing practices in known whale habitat, the Navy is completely unwilling to accept any of the investigations or mitigations." Now, this is her opinion. I hope that we can change that. The National Oceanic Atmospheric Administration therefore has a responsibility to step in to protect these mammals from Navy war games and sonar bombardment. It has been scientifically shown that sonar disrupts whale behavior that is crucial to the whale's very lives and survival in obtaining food. While they may not die right away from sonar, it can disrupt their lives so that they can no longer survive. Beaked whales, blue whales and others have shown a recent marked decline and may soon reach endangered status. Blue fin whales and other species of whales are also showing signs of deprivation of food and upon autopsies of dead mammals, internal hemorrhaging and destruction is linked to evidence of sonar. The east coast has success with whale buoys provided by the Cornell Institute, and with the Navy's vast resources this could be a productive measure provided by the government to protect the whales. Whale buoys signal whales' presence in the areas and prevent strikes. Takes in war activities by the Navy should not be permitted during the whale migration season. This would be the easiest way for the Navy to prevent whale strikes. Just don't go there during the migration season. It doesn't take a scientist or anybody from the university to tell you that. It is simply irresponsible for the Navy to take whales and have takes among marine mammals. The Navy mitigation plan calls for a person to stand at the bow of the ship and to look for whales. This system is absolutely not functional. We all know that. I have one more quick comment. Recently 400 melon headed whales were driven into Madagascar because of oil exploration -- I'm concluding now. I ask that the Navy consider ceasing all activities in sonar, especially during the great whale migration.</p>	<p>also provided opportunity for individuals to comment publicly or privately, orally or in writing.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>See the EIS/OEIS Section 3.4.3.4.1 (Impacts from Vessel Strike) which deals with the analysis of vessel strikes to whales. See Section 3.4.4.1 regarding the health of marine mammals where Navy training and testing has been occurring for decades. Beaked whales, blue whales and others have NOT shown any recent or marked decline; See the EIS/OEIS Section 3.4.2.8 regarding blue whales and note that blue whale have been listed as endangered for many years. See Sections 3.4.2.25 through 27 for details on beaked whales. See Sections 3.4.2.9 regarding fin whales which have been increasing since 1991. It is not true that blue or fin whales have been found with "internal hemorrhaging and destruction" linked to sonar.</p> <p>The passive acoustic listening devices referred to in the comment as "whale buoys" that signal whales' presence to prevent commercial vessel strikes can only work if a whale is vocalizing. It is a unique environment, species (right whale), and situation as thousands of commercial vessels approach Boston Harbor each year. It is not applicable to the few Navy training and testing activities taking place in the NWTT Study Area.</p>
Flum – 01 (Electronic)	The Navy is not being represented at the Fort Bragg Meeting, rather their contractors are presenting their information. Why is no real representative available at this so called public meeting to tell us about your plans for our area? It is not a valid meeting if the Navy	Two uniformed Navy representatives were present at the Fort Bragg meeting. In addition, 14 Navy employees were present. All Navy representatives were specifically chosen for the subject matter

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	has no real representatives or the public is unable to give their comments to Navy personnel who would be able to either discuss their plan or modify their plans to meet the needs of the public.	expertise and their personal involvement in the development of the EIS/OEIS.
Flum – 02 (Electronic)	February 28,2014 Ms. Kimberly Kler, It has been shown that the Navy has no regard for abiding by suggested limits on their war testing practices on the West coast. Jane Zimmer quotes, after suing the Navy to limit their killing practices in known whale habitat, “The Navy is completely unwilling to accept any of the mitigation's”. The Navy therefore has a responsibility to step in to protect these mammals from the war testing and Sonar bombardment. It has been scientifically shown that Sonar disrupts Whale behavior that is crucial to their very lives and survival and their ability in obtaining food sources. Scientific studies and mammal autopsies have shown internal hemorrhage and damage to organs of whales subjected to Sonar blasts. Beaked Whales and Blue Whales have shown a recent marked decline and may soon reach the endangered status. Blue Fin Whales and other species of Whales are also showing signs of deprivation of food and upon autopsies of dead mammals internal hemorrhaging and destruction linked to Sonar impacts. The East Coast has had very good success with the Whale Buoys provided by the Cornell Institute and with the Navy's vast resources this could be a protective measure provided by the government. Whale Buoys signal Whales presence in the ocean and prevent strikes and takes. War activities should not be permitted during the Whale migrations any where. This is simply irresponsible to allow the Navy to continue their mission during the migration and birthing of whales. The Navy mitigation plan calls for a person with binoculars to stand at the bow of the ship and look for Whales. This system is not only useless for Whales that are underwater feeding or traveling under the surface of the water. Please consider what your actions could do to protect this precious natural resource for generations to come.	See the EIS/OEIS Section 3.4.3.4.1 (Impacts from Vessel Strike) which deals with the analysis of vessel strikes to whales. See Section 3.4.4.1 regarding the health of marine mammals where Navy training and testing has been occurring for decades. Beaked whales, blue whales and others have NOT shown any recent or marked decline; See the EIS/OEIS Section 3.4.2.8 regarding blue whales and note that blue whale have been listed as endangered for many years. See Sections 3.4.2.25 through 27 for details on beaked whales. See Sections 3.4.2.9 regarding fin whales which have been increasing since 1991. It is not true that blue or fin whales have been found with “internal hemorrhaging and destruction” linked to sonar. The passive acoustic listening devices referred to in the comment as “whale buoys” that signal whales’ presence to prevent commercial vessel strikes can only work if a whale is vocalizing. It is a unique environment, species (right whale), and situation as thousands of commercial vessels approach Boston Harbor each year. It is not applicable to the few Navy training and testing activities taking place in the NWTT Study Area.
Flum – 03 (Electronic)	I would like to get a copy of the Navy magazine CURRENTS, Mail it to Char Flum. I would appreciate if you could do this asap. Thank you Char Flum	Currents magazine (latest issue and archived issues) is available for viewing and download from the Navy's Energy, Environment and Climate Change website at: http://greenfleet.dodlive.mil/currents-magazine/ You may also subscribe to Currents from the same website. In the case of this specific comment, the individual making the comment attended a public meeting and received a copy.
Fontaine (Electronic)	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. “Alternative 1 includes some activities that were not analyzed in	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Forjan (Electronic)	Please don't do anymore sonic testing in the water. Don't harm any more sensitive sea animals. work on something different; something that is respectful of life. thanks for listening. david forjan	The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Fox (Electronic)	I am opposed to expanding the NWTT testing range due to the unknown impacts on marine mammals. Thank you.	Thank you for participating in the NEPA process.
Free (Electronic)	I strongly oppose testing sonar and weapons in the ocean. When these animals habitat is so much disturbed that they are disoriented and killed, it is a threat to us all. Our ecosystems are all connected and this warfare testing does not increase our safety, rather it threatens it by destroying important ecosystems. Please leave the ocean and her animals in peace.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Freedlund (Oral)	Hi. I'm Ali Freedlund, and I've worked for the Matolle Restoration Council -- it's a watershed restoration group down south here in the Matolle watershed -- for the past 18 years, on projects that promote not only the health of the watershed but in particular the return of our once abundant salmon runs. The last two times there were hearings here I also came here, so it's kind of difficult to say over and over again my concerns, and -- and they're pretty much the same. Your proposal is in direct conflict with the work that my nonprofit organization has been dedicated to for the past 30 years. Thirty years, we've been trying to bring back the salmon. You might say, "Well, what does salmon have to do with our proposal?" And I kind of went and explained to the environmental person and then to the marine mammal person that we know very little about how salmon track to their natal streams. We know very little about how a sonar wave can actually affect these	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy has conducted training in these operating areas regularly for decades. Though the intensity of live training may increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>migrations. And they were in agreement. So enough said about that. The public investment in our work to bring back the salmon has gone over -- the public investment has gone over \$20 million. If you add the private investment, it's gone over \$25 million. So to propose to spend billions to kind of negate the millions that we have invested in trying to bring back our salmon runs, which I feel like is a threat by your proposal, seems pretty ludicrous. According to the information you provided, the environmental impacts on the salmon migrations are not known. How could you know? Salmon are what stitches our watersheds to the sea. You should not be allowed to take away this vital connection with the humans, with the watershed, and the sea, because the salmon are here for us, and they always have been. Indeed, I'm sure the majority of all the U.S. citizens here and in the country would rather have the Navy deescalate for the safety and future of our life and the life of beings on Earth that continue to carry out what you carry -- what you think are essential military maneuvers. These maneuvers have only escalated military tensions around the globe. We simply have to start representing the highest potential of human beings, that which requires ethical decision making and cultivates empathy; and the only way to do that is to have a cessation of the naval weapons and sonar testing as proposed. Realistic training and testing activities, that will continue to foul our nest, kill our kin, and limit life on this planet. This is what we ask: Stop hurting our marine life. Stop threatening our fisheries. Start investing in our oceans. There's plenty you could do. You could go clean up all the garbage that's out there. All the plastics. All the weapons. Everything that's been degrading the ocean right now. Please.</p>	<p>activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant. Most commercially important fish species are not believed to hear mid- and high-frequency sound sources which make up the majority of sound producing activities. Salmon are discussed in the EIS/OEIS in Section 3.9.2.3.1 (Salmonid Species). The potential impacts to salmon are discussed and analyzed in Section 3.9.3 (Environmental Consequences).</p>
<p>A. Freeman (Oral)</p>	<p>Hi. My name's Andrew Freeman. I live in Arcata. I'm a administrator at Six Rivers Montessori Elementary School. I teach history at North Coast Preparatory and Performing Arts Academy. And interestingly, one of my elementary students just finished a huge research project on sea turtles, and I got to learn a lot about sea turtles and how they live, and the different species around the world, and also the threats to them. And a lot of my students are at that age they're very interested in the animals in particular. They do a lot of research on it. I learn so much. And I came here tonight with a very open mind, as I always do, and I spent a lot of time in the room over there. And I have to say, it was really difficult to learn much of anything, talking about animals and incidental takes, and I didn't understand what the heck they were talking about. And I was thinking about my students and how clear and how passionate they are about life and nature, and I was like, wow. Once again, it taught me how much I can learn from young people. And anyways, I appreciate you all coming, but this was -- it was very confusing in that space. I got here at 4:30 to really try to engage, and, you know, I left really confused inside. But -- you know, so I am in opposition to -- to the training. And I think any -- if there's any possibility of any sea life or marine life being harmed, that we can't go forward with this. And I think the last thing I want to say is just, you know, I see this project as going in two directions. One, there's a chance of harming our oceans, and it's going to harm our oceans, it's going to harm marine life. You know, two, it's also promoting warfare. And those are two</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>directions, harming our environment and more war, why are we going in this direction when all of us don't want to go in that direction, when we're all dedicated to a healthy environment and to a peaceful world? And so some of the speakers here tonight that really spoke of your organization maybe moving in a different direction: Cleaning up, for example, nuclear waste or toxic materials in the oceans. And you have this amazing organization. It's so big in structure and well funded, and it could really do so many amazing things towards protecting the environment and also to promoting peace. And so I would just love to see us go in that direction, because that's what -- it just seems so simple. It's what we all want. So I just really hope, also, you heard and took to heart the voices of my friends and neighbors here. A lot of us have been in this area a long time, or a short time, but we all know a lot about our environment and really care about it. So I just hope you take it to heart. Thanks.</p>	
D. Freeman (Electronic)	<p>The fact that the navy intends to degrade the human environment and kill/harm protected marine mammals is bad enough but the fact that America wastes about a trillion dollars a year on "defense" instead of helping the people and the environment is the real crime. America has been identified as the biggest threat to world peace by a poll conducted in 68 countries speaks volumes about what America has become. The rest of the world has become relegated to hostage status by the Empire Garrisons installed in their countries, either by force or by threat, by the American "defense department." The question I have as a citizen is what, precisely, are we supposedly defending if the rest of the world sees America as the biggest threat to world peace?</p>	Thank you for participating in the NEPA process.
S. Freeman (Electronic)	<p>I am against the Navy's proposed Navy's EIS for expansion of the NW Training Range, which deeply affects endangered Southern Resident orca habitat and many other marine mammals. Many marine mammals use sound to navigate in the ocean and the Navy's proposal will actively interrupt that. The southern resident orca has already seen a decline in its population and we cannot risk ANY harm to this marine mammal. It already faces three other threats: 1) decline in salmon 2) boating in the area and 3) pollution. We are actively involved in trying to get the Southern Resident orca to recover and it has not yet done so. This is a delicate situation and the NAVY needs to find a different way to gather their information WITHOUT threatening an already delicate population!!!! The Southern Resident killer whale population dropped almost 20% from 1996-2001, prompting governments to list them as a threatened species. Today the population is down 13% from its 1995 peak. The video mentioned lookouts, but that does not come close to adequate protection as you CANNOT guarantee the whale is not in that area as they are not "predictable" and they make frequent dives for food. There is NOT enough protection in place for the Southern Resident Orca NOT ONLY TO PROTECT, but also to help safeguard from further loss of life. There is a MUCH NEEDED ATTEMPT at this time to INCREASE the population. So keeping it at status quo is not enough. This proposal is absurd considering the fragile situation at stake. Many other marine mammals would be harmed as well. Once a marine mammal has been harmed, the chance of recovery is</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>slim. The overall success rate at the Marine Mammal Center is only 45 percent. Not only do marine mammals face the threat of the navy's sonar, but they are also facing other threats that have NOT been addressed and should be before another threat is introduced. The ocean is sick - due to pollution, trash and contaminants. The Navy should back off and let the ocean/Southern Resident Orca recover. What the Navy proposes is not urgent. We need to find another way to have it done without threatening to further endanger delicate populations of marine mammals especially the Southern Resident Orca. I am 100 percent AGAINST this proposal. Our fragile marine environment is too important.</p>	<p>Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
Frey (Electronic)	<p>I'm opposed to sonar testing; whales help the earth's biome that supports human lives! Thank you for listening, Daniel Frey</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Frost (Electronic)	<p>I feel like this technique is old school. If it's known that this has the potential to hurt marine mammals why is this even a debate? Why doesn't anyone realize that we need these animals and they have a purpose. This shouldn't be a debate. Plain and simple clear as day. SAVE ALL THE ANIMALS</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Gable (Electronic)	Sonar testing has proven to be devastating to whales, dolphins and other large sea mammals. This testing has been banned on other ocean-front states and the same should be true in Washington and Oregon. I strongly support banning the training and testing of EIS/OEIS. Cate Gable	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Gailliard (Electronic)	"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Gardner	Please stop sonar testing in areas inhabited by dolphin and whale populations. The military is moving away from outdated equipment, why not fewer submarines and VERY	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	<p>limited sonar testing. If these tests must happen then why not move them out beyond the continental shelf, or do them at a time when they do not coincide with fall and spring whale migrations or orca gatherings in the northwest that run between May and October. There are simple and practical limitations on sonar testing that the Navy NEEDS to consider.</p>	<p>as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Garrett (Electronic)</p>	<p>Please stop doing anything that can harm our precious sea life. We have done so much already to make life difficult for marine mammals. I value them in our oceans and the idea of doing anything that could wound or kill marine mammals just makes me sick. Please don't do it. Please put marine mammals and all our ocean life at the front of your concerns.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Garvey (Electronic)	STOP it! Stop the war on our wildlife! Your attention to this most urgent matter would be much appreciated by all present & future generations. Thank you Lydia Garvey Public Health Nurse	Thank you for participating in the NEPA process.
Gass (Electronic)	Estimates are that this action will kill about 1000 whales and it would effectively kill far more whales and cetaceans, by deafening them - thus destroying their navigation and communication methods on which they depend. There are only 80 or so orca whales left on the California, Oregon, and Washington coasts. Cetaceans, other marine mammals, and the entire marine food chain in these areas could be impacted, as well as many other marine life forms. Is it truly necessary to destroy marine life? I understand live testing is always helpful training, but at what cost? If you destroy the world yourself what is left to defend?	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Gates (Electronic)	Just so you know, the project documents provided in the Kitsap library system are inadequate for the Navy's compliance with NEPA. As noted below, the Navy must provide project information in a publicly accessible format. At that time, an adequate public comment period must be provided. Regarding the existing project documents in the Kitsap libraries: a CD is provided, however there is no longer a public CD reader in the Kitsap Library system. In addition, the hard cover project books are bound and cannot be copied. The spine cannot be bent sufficiently to allow copying. If the books had been put together with a post and screw system, the pages could have been separated and then copied. The Navy has used a post and screw system with public documents in the past. I urge you to provide the project documents in a format that is publicly accessible. You will need to re-notice the availability of the documents and re-open the public comment period. Please comply with NEPA in the future from the beginning. The Navy's mission is too important and the public tax monies too limited to commit such errors in the NEPA process. Very truly yours, Deborah Gates, JD, LLM Attorney-at-Law	The Navy is fully compliant with NEPA requirements to make the document available to the public. In addition to the hardcopy and CDs at a number of locations, the document has been available since 24 January, 2014 for download from the project website at NWTTEIS.com . Post and screw systems, while they do have the advantage mentioned in the comment, also allow for the document to be inadvertently reassembled in the wrong order or with pages missing. The Navy weighed the advantages and disadvantages and opted for the permanent binding to ensure the document remained intact and complete.
Gawboy (Oral)	Okay. The human carrying my spirit is named Stephanie Gawboy. To deter aggression, you need to maintain fair intentions. The people creating policy for your military defense must stop manipulating other nations, and your own nation, to take the resources and exploit their people. If your military did not serve the profit interests of multinational corporations and the demented leaders -- and their demented leaders, other nations may not feel so aggressive toward your nation. I am aware that the weapons manufacturers	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>benefit financially from your continued testing of their damaging products. This is not a moral reason to continue testing. Just think about that. Why are you continuing doing this? Okay. Use your intelligence and your heart to create peace through fairly sharing and becoming responsible for your own resources. Stop dumping poisons and intense sonar in the oceans. These things are damaging to the organs, brains, and ears of our people. Stop using so much fossil fuel and shut down all your nuclear power plants now. It is immature as a species to use and test with weapons that destroy the oceans. You too depend upon the survival for your own people. We call for you to train in ways that no longer damage the ocean. This is mandatory. Your poison testing is not protection. It is annihilation. If freedom does not come with equal doses of responsibility, it has no value. It is irresponsible to harm highly intelligent, sentient animals as mere side effects of your exercises. Freedom is valuable only when it comes with responsible actions. Protect the ocean wildlife. That will -- that will create respect. You say you don't predict harm to other creatures like sea turtles. I think it is only because you refuse to think ahead. You say only our marine mammals' behaviors may be affected by the sonar. I heard you say that. Well, I don't think bleeding ears and damaged brains and damaged organs are behaviors. That's damage from your testing. You as a species must retask all your militaries to restore and protect your balance with all species on Earth. This may seem unimaginable to many of you, but a war with the weapons, nuclear filth you use now should not be imagined at all. Not even prepared for. Prepare for peace instead.</p>	<p>(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Gelczis (Electronic)	<p>Naval sonar works like headlights on a car to help submarines identify large objects for up to 100 miles or more. The problem is, those sound waves are deafening to aquatic life with highly sensitive hearing. Even low-frequency sonar can be the equivalent of a human being listening to a fighter jet takeoff. Sonar can be four times louder than a whale call. Blue whales and beaked whales have been observed to stop feeding because of sonar, work that's partially funded by the Navy. Sonar can also cause temporary or permanent hearing loss and, in rare cases, has been connected with whale deaths. Many whales and other marine mammals, like Hawaiian monk seals, are already struggling for survival. Why should we risk hurting these animals any further? They have more right to be in the oceans than we do. Please mitigate this harmful practice and listen to the scientists who have observed the damage that sonar causes to sea life, especially marine mammals.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Geno (Electronic)	<p>Keep our Orcas safe and protected no testing, or destroying their waters.</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Gensaw (Electronic)	<p>My name is Georgianna Gensaw, I am member of the Yurok Tribe. The largest Tribe in California. We are water people, we live next to the Klamath River and along the Pacific Ocean. I gather mussels and seaweed from the Ocean. My husband is a fisherman and we depend on his catch to feed our families throughout the year. Sonar testing could potentially hurt everything we love about our way of life. The salmon I live on...live the majority of their life in the Ocean. We can know salmon stocks are depleting, we know that there are not as many whales as there once was and locally we understand that we should protect the animals who cannot speak for themselves. The Navy has other options and should practice those alternatives, rather than even harm 1 single animal of the Ocean. Our Oceans are constantly under attack, why should the US Navy be allowed to do even more damage to already fragile ecosystem. I understand we, the United States of America, need to practice and test, but can we not figure out a non harmful and nonlethal way? I vote against the sonar testing even if one sea creature is harassed, annoyed or harmed!</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Gentile (Written)	<p>My letter is in response to the US Navy's request for public comment for the Northwest Training and Testing Draft Environmental Impact Statement.</p> <p>Speaking as a resident of Humboldt County and a US Navy veteran, I have serious concerns about the plan to train with sonar and explosives off Northern California and the harm that will be caused to whales and other marine mammals.</p> <p>Please direct the Navy to abandon its courtroom defense of its five-year plan and put vital areas for marine mammals off limits to these tests.</p> <p>I believe the Navy can continue to protect our national security and protect marine mammals at the same time. I urge you to direct the Navy to do so.</p>	Thank you for participating in the NEPA process.
Gerber (Electronic)	We claim to be the smartest species on this planet yet we fail to evolve and to learn from our mistakes. This needs to stop and we need to show respect to creatures that share this space on earth with us.	Thank you for participating in the NEPA process.
Gerhrmann (Oral)	Considering the fact that everyone sitting in the room tonight, everybody's who's standing, everybody in this region and everybody in this country for the most part gets to sleep pretty soundly at night for the fact that we have the greatest economy in the world. We have an incredible military. We have an incredible workforce. We have an incredible ethic. We love our country. We love our people. We love our animals. We love our free space.	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Taking all those things into account, I have to say I think what I am concerned about the most is the attitude of “not in my backyard,” where we decide that we want to have training, but we only want to have it where it doesn't affect us personally or it doesn't affect somebody we know. The fact is is that if we stop doing what it is that's keeping us safe and keeping our families safe and keeping this county strong, making us as good as we are -- we are flawed, I'm not saying here that we're perfect -- but the fact is, we have to have some place to do it whether it's the Pacific Northwest, the California coast, Virginia Beach or New York or Maine, it has to be done. What I would appreciate is if the Department of Defense, the Navy, the Marine Corps, whoever it is that's doing the study, as long as they're doing those things and they have not necessarily their own folks doing it but if they have an outside group that is supporting them and is helping them or it's somebody that doesn't have their own fingers in the pie or have something to gain from it, then I think that all that should be taken into consideration. And if it has to be done here because this is the best place in the world to do it and it's going to help us be better then I say, let's do it. That's all I have. Thanks.</p>	
<p>Geren (Electronic)</p>	<p>I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I seriously oppose pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose an increase in underwater charges, increased war games using sonar, and explosion of underwater mines. “Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: “Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event”. All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It is way past time for our government and our military to have serious concern for the health of our oceans and the animals that live in them.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Gerritsen (Electronic)</p>	<p>This devastation of marine life has to be stopped. The navy has to become more accountable as to how they impact the lives of both animals and humans. The navy jets and sonar testing in the Pacific Northwest are taking its toll on all life forms.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Gertler (Electronic)</p>	<p>I attended the US Navy Open House in Ft. Bragg March 7th...re: plan for increased weapons testing and sonar use from Alaska to Cape Mendocino. What was deeply troubling was the lack of meaningful protective "mitigation measures" for marine mammals from the use of sonar/lazars and bomb blasts. The Navy's reliance on "watch standers" with binoculars is reportedly effective 9% of the time and falls way below reliable safeguards and protection. One way to avoid impacts and "takes" would be to conduct training exercise 100 miles away from the shoreline and heavily restrict Navy activities during whale and fish migration along our coast. There is a plethora of scientific documentation of the consequences of sonar use on Marine mammals which may include temporary and permanent hearing loss, disruption of mating and feeding, abandonment of habitat and death. A deaf whale is a dead whale. Aside from injury and death i am concerned about toxic waste dumping in our ocean from weapons testing. The chemical soup of poisons is astounding.. Please consider revising your weapons testing plans taking into account the potential damage it can render to normal life cycles of marine mammals. respectfully, joy gertler mendocino, CA</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Nearly all of the Navy's proposed activities would continue to occur outside 12 nm. To stay outside of a specific distance, such as 100 miles, would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>(Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average, ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p>
Gianni (Electronic)	Dear Sirs, I am very concerned at the well being and health of the endangered orcas living in the waters in the northwest. Navy testing explosives and sonar could injure and cause confusion and death to these protected animals. Please consider testing somewhere else, that would not harm these already affected pods of animals. Thank you for your consideration on this matter sir. Sincerely, Julie Gianni	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Giansiracusa (Oral)	I want to address the repercussions of if the Navy does do something incorrect. I want to understand where the safeguards are for you, for each individual that's on the ships that are doing this type of work that are out there, that they actually can have a input into the whole process when they see something isn't right, when it's the, on the fleet, like you were saying with the models that are being developed to do this type of work to tell whether things are there and you can go ahead and play your games in these particular waters and then all of the sudden you find out that there was a problem there. There was something there. I'm not seeing anything addressed in your whole presentation about what happens if you have to abort something other than, oops, there's whales. We got to go. Everything stops. Boom. Go back to the ship. And that's what I've heard now with everybody out there. But I'm not seeing it in writing. I'm not seeing it addressed in this right here. So that is what I would like to hear addressed in your final statement of what happens when things don't go the way you expect them to go and who is going to be ultimately available to change it from the ground up instead of waiting for something to come from someone else in the hierarchy of the Navy? Thank you.	Your comment is not clear with regards to the intended meaning of "if the Navy does something incorrect". First of all, please note that the presentations at the public meetings were not intended to cover all the material presented in the Draft EIS/OEIS. Please see Section 5.5 (Monitoring and Reporting) in that document regarding steps Navy takes to track compliance with take authorizations. Also note there are protocols for reporting of a stranding and a vessel strike of a marine should that rare occurrence take place. Navy has been reporting to the National Marine Fisheries Service for approximately 8 years and those reports are available online at a link provided on the GOA EIS/OEIS website. The remainder of Chapter 5 provides the standard operating procedures and mitigation which takes place if a marine species is detected, which we believe will address your question regarding what happens "when they see something". Procedures include potentially ceasing the activity and moving elsewhere or waiting until the animal leaves the area; again please see Chapter 5 for details.
Gilbert (Electronic)	This is the equivalent to torture. There are alternative methods of experimenting and finding ways to protect humankind without torturing sentient creatures.	Thank you for participating in the NEPA process.
Gladstone (Electronic)	Please end this testing.	Thank you for participating in the NEPA process.
Gless (Electronic)	My husband has served in the Navy for more than 10 years and because of that, I am sympathetic to the needs of the Navy and the desire to prepare for combat via extensive realistic training. That said, I do not feel that the use of sonar and explosives is appropriate given the increasing evidence of its effects on marine life. The animals in question are already facing enough challenges in the forms of pollution, over-fishing of food sources, and slow reproductive rates. Because of my husband's military involvement I'm also aware of the grotesque over-spending that occurs within the Navy and I implore you to consider whether or not this training is worth the financial and ecological price. There are other ways to prepare for war that don't involve so much risk.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Goeggel (Electronic)	We oppose any activities that may have a deleterious impact on the animal who inhabit the ocean that surrounds our island home. It is well known that sonar can hurt sea life- therefore we ask that the US Department of Defense cease activities that are harmful or potentially harmful to those animals.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Goldberg (Electronic)	you have enough training area you I need to expand and endanger more animals or humans lives	Thank you for participating in the NEPA process.
Goldner (Written)	<p>I am unable to attend the local public meeting in Fort Bragg, California on March 7, 2014. I am therefore mailing you my opinion about the Naval Warfare Testing Program.</p> <p>The United States Navy requests permissions from the United States Department of Commerce (NOAA), to kill thirty two species of marine mammals over five years in their Pacific Ocean Warfare testing program. The expansion of their area of operation will include the State of Washington, the State of Oregon, part of the state of Idaho, and Northern California. The final date for public comment is March 25, 2014.</p> <p>These designated areas will also include large areas of the Pacific Ocean from California to the State of Washington and areas along the border between the United States and Canada. Once implemented there is no date specified in E.I.S. for this Navy Warfare Testing Program to end although various documents show that thjs is a five-year Navy Warfare Testing program.</p> <p>The United States Navy has also published an application, as an addendum to their program, in the U.S. Federal Register. dated March 11 , 2009. This application from the Navy “ ... requests authorization to take individuals of 32 species of marine mammals during upcoming Navy Warfare testing and training to be conducted in the NWTR areas off the Pacific coasts of Washington, Oregon, and northern California over the course of 5 years.”</p> <p>Your website states: “ ... the Navy is employing protective measures to reduce environmental effects from military training and testing activities.” These “protections seem too limited and still allow for the taking of a large number of marine species. This is unacceptable. Rather than perform sonic experiments in the ocean environment, it seems reasonable to evaluate the efficacy of the sonar with computer modeling. This is exactly what nuclear science does in simulated computer tests.</p> <p>The Pacific and Atlantic Ocean belong to all the people of the world not just the United States. This “taking” of marine mammals negatively impacts the entire ecology of our</p>	<p>As stated in Section 3.1.3.2 (Metals), “Military expended materials such as steel bomb bodies or fins, missile casings, small arms projectiles, and naval gun projectiles may contain small percentages (less than 1 percent by weight) of lead, manganese, phosphorus, sulfur, copper, nickel, tungsten, chromium, molybdenum, vanadium, boron, selenium, columbium, or titanium.” Please review Section 3.1 (Sediments and Water Quality) for a full discussion of the effects of the Navy’s proposed activities on sediments and water quality.</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>oceans and the life in them which feeds large numbers of people and other species around the world. Now the United States government has decided that California, Oregon, Washington, and Idaho, and the Pacific Ocean marine life in those areas, are expendable in order to test more war weapons of mass destruction. It should be noted that the list of toxic chemicals is a long one as noted in the Navy E.I.S. Depleted uranium, red and white phosphorus, and a whole host of chemicals known to be toxic not only to man, but to marine life, are being served up on the “Navy Warfare Chemical Menu” that will contaminate our air, water, and soil.</p> <p>White Phosphorus is just one of the chemicals on Navy Toxic Menu: Berkowitz et.al (1981), in assessing the potential hazards associated with the use of phosphorus smoke munitions, reported that White Phosphorus residues in aquatic systems can be extremely toxic. Berkowitz stated that the deposition of washout of ... White Phosphorus, especially in water bodies may create exposure risks to resident finfish, invertebrates and waterfowl, even if resultant White Phosphorus concentrations are in the low ppb range. 1996)</p> <p>The ocean areas off the coast of Northern California are not a suitable venue for the use of chemical tests, nor is it efficacious to test live ammunition, explosions of aerial or underwater ordnance. Aquatic mammals, fish, invertebrates and birds are resident and migratory animals in these waters that likely will be negatively impacted. Furthermore, the possible resulting damage to downwind human population seems highly suspect and may be the subject of future litigation.</p> <p>I therefore implore you to stop these tests or at least to not expand the Navy's test areas to Northern California.</p>	<p>Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy does not propose the use of ordnance containing depleted uranium or phosphorus. Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
<p>Gomez (Electronic)</p>	<p>The health, welfare and well being of marine mammals, MUST be protected at all cost. It was suggested that maybe drones could be used to spot cetaceans in the ocean before testing. Their breeding and feeding grounds cannot be abused by sonar. Instances of beaching have found to be the fault of sonar testing. Sonar causes trauma, torturous pain, death and will, ultimately, cause the extinction of marine mammals. With the onset of radiation poisoning due to Fukushima, great care and major steps should be taken to guard and protect marine mammals. They rely on their hearing to guide them. Disabling, handicapping and killing these mammals cannot occur. Thank you for allowing public comments</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Gompertz (Electronic)	I want to add my voice to those who question the navy's process & decision here. There really is no need to damage our frail environment for the sake of a war that will not, and should not, happen. There are ways to use our resources to engage peace, not war.	Thank you for participating in the NEPA process.
Gorle (Electronic)	I've spent my entire life living in the Puget sound area. I raced sailboats out of Shilshole and Edmonds, and my husband's family were avid scuba divers in the San Juans. We have a unique Eco-system, with beautiful wildlife, and a protected whale population the appears to be on the mend. Do not extend OR continue these tests in this delicately balanced waterway. Be heroes, not the enemy, by changing your policy. Blackfish has been a great educational tool for the public, and hopefully we are closer to shutting down all SeaWorld type attractions. Your sonar and explosions do affect the mammals in our waters. Make our world better by being better members.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
M. Graham – 01 (Electronic)	February 3, 2014 Because this email concerns the NEPA process and public participation and because I am making recommendations for your action during this public comment period (ending March 25, 2014) I ask you to evaluate and act on this comment right away. Do not leave this until March 25 to evaluate and act on because by then it will be too late. This is part 1 of my public comments. I will send you more comments at a later date. With all due respect to the Navy you should hold public comment meetings in San Francisco (or the Bay area) and Sacramento. You should also have meetings in Seattle, Portland and Anchorage. Why? These are large cities. There are many people in these cities who want to protect and want the government, including the Navy, to protect marine life. This afternoon I spoke with your public affairs officer Mark Matsunaga and said this. He said that if enough people had asked for public comment meetings in these cities you might have them. He also said most of the training will take place near Seattle. That is another reason to hold a public comment meeting in Seattle. Also, as I said to Mr. Matsunaga you are the United States Navy, not the Seattle Washington Navy. There are many (millions of) Americans in the United States who do not live in or near Seattle and have an interest in conservation / protection of marine life. They should be able to have a public comment period near them. As you know the Navy has 12 training ranges. Of all 12, the one closest to the San Francisco bay area and Sacramento is the Northwest region. That is another reason to have a public comment meeting in the SF bay area. Another is that Sacramento is the capital of the biggest state. There are people in Moline Illinois, Tuscaloosa	The Navy went to a great amount of effort to coordinate and organize the public meetings to meet the needs of all of the public. The format allowed for ample opportunity for valuable exchange of information between the public and Navy subject matter experts. The meetings also provided opportunity for individuals to comment publicly or privately, orally or in writing. Because of the large size of the NWTT Study Area for this EIS/OEIS, it is not feasible to hold a public meeting in every location where there may be public interest. Generally, the Navy has tried to locate public meetings in locations central to training or testing areas and potentially affected communities. Meeting locations were also identified based partially on suggestions received from the public, feedback from elected officials and other stakeholders, attendance levels of previous public meetings for similar projects, and the number of public comments received during the scoping phase. The majority of comments received during the scoping phase from Washington came from Whidbey Island (Clinton, Freeland, Oak Harbor, Coupeville, Greenbank) and Friday Harbor, with Seattle following after that. No public comments were received from Portland, Oregon, and only one comment each was received from San

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Alabama, Kalamazoo Michigan and East Seacaucus New Jersey who want to protect and want the Navy to protect marine wildlife. Just because they don't live on the Northwest range (or any of the 12 testing and training ranges) doesn't mean they don't have an interest in this. The Navy is funded, and in theory works for, every person from every state in the United States. Furthermore people in these cities may visit the Northwest range and go whale hunting or otherwise enjoy the marine wildlife on land or on sea. Furthermore even if these people never go to the Pacific Northwest and the Northwest range they want to know that the marine wildlife there is being protected. It is a valid and legitimate interest and one that should you should base your decisions on. The same basic argument applies to your scoping process. According to your Executive Summary, page ES-6, ES.4.1 SCOPING PROCESS of your draft EIS, volume I: "Nine scoping meetings were held on March 13, 14, 15, 16, 19, 20, 22, 23, and 27, 2012, in the cities of Oak Harbor, WA; Quilcene, WA; Silverdale, WA; Aberdeen, WA; Tillamook, OR; Newport, OR; Eureka, CA; Fort Bragg, CA; and Ketchikan, AK, respectively." All of the arguments I made about holding public comment meetings in large cities apply to this scoping process. Next comment.</p>	<p>Francisco and Sacramento, California. Of note, Portland, San Francisco, and Sacramento are all very distant from the area where the proposed activities would take place, making them poor choices.</p> <p>Previous Navy experience with other Northwest projects is that meetings held in larger population centers are often poorly attended. The Navy held one public meeting for this project in a large population center (Everett, Washington, near Seattle), and that meeting was the least attended of all eight public meetings. In addition to the meeting venues, the public could download and review the document, and make comments to it, on the website, which is available throughout the world.</p>
<p>M. Graham – 02 (Electronic)</p>	<p>February 3, 2014 Subject: Meetings in small cities vs large cities It appears that the Navy has deliberately chosen to hold scoping meetings and public comment meetings in small cities and not in big cities to minimize the amount of public participation, minimize the number of people making comments and minimize the number of comments. You don't want people to tell you that this is a bad plan, your draft EIS, that you have written it poorly, that you have given misleading analyses of the options for action, that you have omitted key information, etc. You know that the more people find out about this draft EIS and your Northwest region plan for taking (killing) not thousands but MILLIONS of marine animals and birds over a 5 year period (and the next 5 year period and the next) the more people will object, based on all the available information including alternatives for action and "no action". This is an inherently violent and deadly plan. You know that you cannot justify these actions; that they are not necessary and you have not justified them. Americans once we become informed about an issue can often figure out the truth from the propaganda and obfuscation. Some of us, a significant majority, stand up in opposition to the latest government fiasco in the subject areas that are near and dear to our hearts. You know that the environmental movement has many thousands of members. You know that many Americans who do not consider themselves to be environmentalists or conservationists will stand up to oppose a plan that they know about and they consider a bad plan. To avoid hearing from these people, to make them have to drive hundreds of miles to your public comment meetings, you schedule them in small cities and not in big cities. It appears this is your intention. What you should know is that President Obama promised all Americans, in the Memorandum on Transparency and Open Government, issued on January 21, 2009, a government that was open and transparent and accountable. The President instructed the Director of the Office of</p>	<p>The Navy went to a great amount of effort to coordinate and organize the public meetings to meet the needs of all of the public. The format allowed for ample opportunity for valuable exchange of information between the public and Navy subject matter experts. The meetings also provided opportunity for individuals to comment publicly or privately, orally or in writing.</p> <p>Because of the large size of the NWTT Study Area for this EIS/OEIS, it is not feasible to hold a public meeting in every location where there may be public interest. Generally, the Navy has tried to locate public meetings in locations central to training or testing areas and potentially affected communities. Meeting locations were also identified based partially on suggestions received from the public, feedback from elected officials and other stakeholders, attendance levels of previous public meetings for similar projects, and the number of public comments received during the scoping phase.</p> <p>The majority of comments received during the scoping phase from Washington came from Whidbey Island (Clinton, Freeland, Oak Harbor, Coupeville, Greenbank) and Friday Harbor, with Seattle following after that. No public comments were received from Portland, Oregon, and only one comment each was received from San Francisco and Sacramento, California. Of note, Portland, San Francisco, and Sacramento are all very distant from the area where the proposed activities would take place, making them poor choices.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Management and Budget (OMB) to issue an Open Government Directive. http://www.whitehouse.gov/open/documents/open-government-directive He issued an open government directive and his attorney general issued an open government memorandum to the heads of all executive branch agencies describing in detail how the agencies are supposed to comply with the open government directive. That was focused on FOIA, the Freedom of Information Act specifically. But the principle is the same here. The President promised an open government. Yet the Navy is doing all you can to minimize public input and openness, transparency and accountability. Yes of course a person living in any city of any state who has access to the internet can write and submit public comments on line through the Navy's website. But that does not replace the public comment meeting in terms of really informing the public. As you know the Navy does presentations at the public comment meetings, answers questions, etc. Also, people can learn from each other by talking to each other at these public comment meetings. None of that happens when writing an submitting public comments online.</p>	<p>Previous Navy experience with other Northwest projects is that meetings held in larger population centers are often poorly attended. The Navy held one public meeting for this project in a large population center (Everett, Washington, near Seattle), and that meeting was the least attended of all eight public meetings. In addition to the meeting venues, the public could download and review the document, and make comments to it, on the website, which is available throughout the world. Also, it is important to correct an error in the comment. The comment implies that the Navy's Proposed Action would result in killing marine mammals. As shown in Section 3.4.3.2, the Navy is predicting no mortalities from its proposed activities.</p>
<p>M. Graham – 03 (Electronic)</p>	<p>February 20, 2014 To the Navy, I just received an email from you from the email address do-not-reply@nwtteis.com DO NOT REPLY TO THIS AUTOMATED EMAIL Mark Graham Public involvement is a fundamental part of the development of the Northwest Training and Testing Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). Public meetings will be held from Feb. 26, 2014, through March 12, 2014, throughout Washington, Oregon, Northern California and Alaska. To accommodate interested members of the public, the project fact sheets and posters to be used at the public meetings have been uploaded to the project website at www.NWTTEIS.com. Public meetings will be held from 5-8 p.m. at the following locations and dates: Wednesday, Feb. 26, 2014: Oak Harbor High School, Student Union Building, 1 Wildcat Way, Oak Harbor, WA Thursday, Feb. 27, 2014: Cascade High School Student Commons, 801 E. Casino Road, Everett, WA Friday, Feb. 28, 2014: North Kitsap High School Commons, 1780 NE Hostmark St., Poulsbo, WA Monday, March 3, 2014: Astoria High School Student Commons, 1001 W. Marine Drive, Astoria, OR Tuesday, March 4, 2014: Isaac Newton Magnet School Gym, 825 NE 7th St., Newport, OR Thursday, March 6, 2014: Red Lion Hotel Redwood Ballroom, 1929 4th St., Eureka, CA Friday, March 7, 2014: Redwood Coast Senior Center West Room, 490 N. Harold St., Fort Bragg, CA Tuesday, March 11, 2014: Southeast Alaska Discovery Center Lobby, 50 Main St., Ketchikan, AK The Navy is accepting comments throughout the 60-day public comment period, from Jan. 24, 2014, to March 25, 2014. All comments must be postmarked or received online by March 25, 2014, for consideration in the Final EIS/OEIS. Written comments may be submitted via the project website at www.NWTTEIS.com, in person at the public meetings, or by mail to: Naval Facilities Engineering Command Northwest Attention: Ms. Kimberly Kler – NWTTEIS Project Manager 1101 Tautog Circle, Suite 203 Silverdale, WA 98315-1101 Click here to view the project meeting materials. Northwest Training and Testing EIS/OEIS www.NWTTEIS.com (End of the text of the</p>	<p>Because of the large size of the NWTT Study Area for this EIS/OEIS, it is not feasible to hold a public meeting in every location where there may be public interest. Generally, the Navy has tried to locate public meetings in locations central to training or testing areas and potentially affected communities. Meeting locations were also identified based partially on suggestions received from the public, feedback from elected officials and other stakeholders, attendance levels of previous public meetings for similar projects, and the number of public comments received during the scoping phase.</p> <p>The majority of comments received during the scoping phase from Washington came from Whidbey Island (Clinton, Freeland, Oak Harbor, Coupeville, Greenbank) and Friday Harbor, with Seattle following after that. No public comments were received from Portland, Oregon, and only one comment each was received from San Francisco and Sacramento, California. Previous Navy experience with other Northwest projects is that meetings held in larger population centers are often poorly attended. The Navy held one public meeting for this project in a large population center (Everett, Washington, near Seattle), and that meeting was the least attended of all eight public meetings.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>email you sent me today.) In case I did not mention this earlier you should have at least one public comment meeting in Sacramento and at least one in the San Francisco Bay Area. Sacramento is the capital of California with a population of over 600,000. San Francisco and the Bay area are home to millions including Silicon Valley and several conservation groups. Both places are home to thousands of people who have an interest in the Navy's proposal and DEIS regarding the Northwest Training Range. By failing to have a public comment meeting in these places you are either forcing people to drive long hours to reach your faraway locations in Northern California or to submit comments on line. If you held a meeting in Sacramento I would be there. Many things can happen at a public comment meeting that cannot happen when submitting public comments on line. The Navy gives presentations and answers questions at these meetings. Individuals can meet and connect with other interested individuals and conservation groups. For these reasons you should hold at least one public comment meeting in each of the places I described. Thank you. Cordially, Mark Graham</p>	
<p>M. Graham – 04 (Electronic)</p>	<p>February 20, 2014 The draft EIS on the Northwest Training Range is 940 + 878 = 1,818 pages long. This is an enormous amount of information to have to read and digest. Very few people are actually going to read the entire DEIS because of its length. I suspect that was the Navy's intention. Regardless of your intention I respectfully request that you extend the public comment period on this matter by 60 days. This will give interested parties sufficient time to be able to understand the complex proposal, your data on the impact on marine life, and your analysis of each of the alternatives. Thank you.</p>	<p>The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the Navy's notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS.</p>
<p>M. Graham – 05 (Electronic)</p>	<p>Do a much better job protecting marine life. Do the best job you possibly can.</p>	<p>Thank you for participating in the NEPA process.</p>
<p>M. Graham – 06 (Electronic)</p>	<p>Limit the scope of its testing and size of the Northwest Training and Testing Range to only what is really necessary for military readiness.</p>	<p>Thank you for participating in the NEPA process. The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The alternatives carried forward meet the Navy's purpose and need (presented in Chapter 1) to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>M. Graham – 07 (Electronic)</p>	<p>Extend the public comment period again. The Navy produced a draft EIS over 1,800 pages long. Upon request of many individuals and organizations the Navy extended the public comment period (or the NMFS did) but only by 20 days. More time is needed to</p>	<p>The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	fully study this complex issue and the enormous DEIS.	2012. Sections I.2.1 and I.2.2 describe the Navy's notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS.
M. Graham – 08 (Electronic)	The Navy has not justified its request. Why is it essential that the Navy do what it proposes to do, including the use of sonar and explosives and toxic pollutants dumped into the ocean? The Navy has 12 training and testing ranges covering all coasts of the U.S. The Navy has been training and testing in all 12 ranges non stop for decades. By now it should have achieved or accomplished everything it wanted to do and more specifically everything it really needs to do. The Navy has not stated specifically what it intends to achieve / accomplish by this next 5 year period of training and testing in the Northwest TT Range.	Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
M. Graham – 09 (Electronic)	The Navy has not stated where and when it will NOT test. Ask the Navy to produce maps of areas where the U.S. Navy has agreed not to conduct exercises in the NWTT Range and a listing of those areas, with dates, times, and restrictions during whale and salmon migrations. Please produce a map and list from the U.S. Navy showing all areas in the new expanded NWTT Range that includes designated areas where the U.S. Navy has agreed not to conduct warfare exercises, bombing missions, use sonar, or test new weapons system in National Marine Sanctuaries, Marine Reserves, Breeding, Birthing, and Feeding Habitats or other biologically sensitive areas, and during times of marine mammal migrations. Since the Navy has been operating in our area since 2010, this information should be readily available from the Navy. It is my understanding that the Navy does not stop their warfare practice in any of these areas or during times of whale and salmon migrations along our coast.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.
M. Graham – 10 (Electronic)	I may have said this earlier but it is worth repeating. The Navy has done a very poor job of making this DEIS available and facilitating public input. First, all your public comment meetings have been held in remote, small cities. There was no public comment meeting in San Francisco or the San Francisco Bay Area, nor in the capitals of California, Oregon, Washington or Alaska. Second, at your meeting in northern California a couple of weeks ago you refused to have your staff (actually a contractor) answer questions to the entire group. Instead you told everybody that anybody with a question should go to the station for that issue and ask their question and have an individual answer from the contractor at	The Navy went to a great amount of effort to coordinate and organize the public meetings to meet the needs of all of the public. The format allowed for ample opportunity for valuable exchange of information between the public and Navy subject matter experts. The meetings also provided opportunity for individuals to comment publicly or privately, orally or in writing. Because of the large size of the NWTT Study Area for this EIS/OEIS, it is not feasible to hold a public meeting in every location where there

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>that station. This is a game of deception. When you answer questions for everybody in attendance at your already remote and inaccessible meetings you give everybody the chance to learn. This is a way of keeping information from people, the way you did it. Typically one question may raise other questions in people’s minds. Overall it was a very poor job. You deliberately set up the process so as to minimize public input, probably because you know this is a terrible policy for the states affected and you did not want people to know what you are doing because they would object.</p>	<p>may be public interest. Generally, the Navy has tried to locate public meetings in locations central to training or testing areas and potentially affected communities. Meeting locations were also identified based partially on suggestions received from the public, feedback from elected officials and other stakeholders, attendance levels of previous public meetings for similar projects, and the number of public comments received during the scoping phase.</p> <p>The majority of comments received during the scoping phase from Washington came from Whidbey Island (Clinton, Freeland, Oak Harbor, Coupeville, Greenbank) and Friday Harbor, with Seattle following after that. No public comments were received from Portland, Oregon, and only one comment each was received from San Francisco and Sacramento, California. Of note, Portland, San Francisco, and Sacramento are all very distant from the area where the proposed activities would take place, making them poor choices.</p> <p>Previous Navy experience with other Northwest projects is that meetings held in larger population centers are often poorly attended. The Navy held one public meeting for this project in a large population center (Everett, Washington, near Seattle), and that meeting was the least attended of all eight public meetings. In addition to the meeting venues, the public could download and review the document, and make comments to it, on the website, which is available throughout the world.</p>
<p>M. Graham – 11 (Electronic)</p>	<p>There is evidence that the Navy’s ongoing training and testing, including the use of extremely loud sonar, explosives and toxic pollutants dumped into the Pacific Ocean, are harming marine life. Yet the Navy claims, every time they produce a new DEIS and apply for a new “take” permit from the NMFS, that there is negligible impact. This is not true. The Navy should be required to conduct a thorough assessment of the impact of their past training and testing on marine life. Navy Warfare Testing is a picture of unremitting harm: more than 500,000 instances of marine mammal “take” (behavioral impacts, harassment, injury) over five years (from 2015 to 2020), including almost 275,000 instances of temporary hearing loss, and more than 600 instances of permanent hearing loss from the use of sonar and explosives. While these predictions of injury are shocking—and, we believe, they still underestimate the harm to marine mammals from the Navy’s activities—they confirm what stranding events have evidenced, scientists have studied, and the public has believed for years: Navy training and testing activities endanger whales and dolphins at intolerable levels. It is important that this assessment be done by marine biologists and other scientists who are NOT paid or working for the Navy, directly or indirectly. This is to avoid the appearance and the reality of a conflict of interest; in other words bias that would cause certain evidence to be omitted,</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	downplayed, or distorted. This is the only way for the Navy to really be accountable for the ongoing damage, death and destruction they are causing.	<p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
M. Graham – 12 (Electronic)	To the best of my knowledge the Navy has not stated what they have achieved or accomplished through their past training and testing in the Northwest Range. What exercises specifically led to what achievement? Without this we cannot tell if there has been any benefit to the United States of their deadly games. It is not enough for the Navy to say, in response to this, that “We achieved military readiness”. That is a “national security” type of excuse and it lacks details. What about military readiness? Given that there are 12 ranges on all U.S. coasts and the Navy has been training and testing nonstop in all 12 ranges for decades, what specifically did the specific exercises in the Northwest range in the last 5 years enable the Navy to achieve?	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
M. Graham – 13 (Electronic)	The U.S. Navy and NOAA/MNFS mitigation measures to protect marine life, visual sightings, are unacceptable since they are effective only 9% of the time, according to U.S. Congressman Thompson (See his letter to NOAA dated May 28, 2009).	<p>First of all, the mitigation measures to protect marine life presented in Chapter 5 involve much more than just visual detection from Lookouts on vessels using sonar. There is no reasonable basis for the claim that Navy Lookout visual sightings are effective only 9 percent of the time; please see the discussion of this topic in the EIS/OEIS Section 3.4.3.1.16 (Implementing Mitigation to Reduce Sound Exposures).</p> <p>Furthermore, in the 8 years of reporting by the Navy shows the mitigation is effective; see the reports available at the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental/).</p>
W. Graham (Electronic)	It is your morale responsibilities not to harm marine life during exercises. Please keep this in mind.	Thank you for participating in the NEPA process.
Granata (Electronic)	Letter to: U.S Navy Stop using Sonar and explosives Sonar causes Many of these beached whales have suffered physical trauma, including bleeding around the brain, ears and other tissues and large bubbles in their organs. These symptoms are akin to a severe case of “the bends” – the illness that can kill scuba divers who surface quickly from deep	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>water. Scientists believe that the mid-frequency sonar blasts may drive certain whales to change their dive patterns in ways their bodies cannot handle, causing debilitating and even fatal injuries. http://news.discovery.com/animals/navy-sonar-scares-whales-110323.html , Copyright © 2012 Discovery Communications, LLC. The number-one nonfiction media company, Analysis by Kieran Mulvaney Wed Mar 23, 2011 07:21 AM ET Sincerely, John Granata</p>	<p>training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Graner (Electronic)</p>	<p>I am strongly opposing the Navy's EIS-plans to expand the NW Training Range. I hold a PhD in marine biology and have professionally worked in the field with both orcas and harbor porpoises. The frequency and the pulse strength of the EIS is capable of damaging the hearing of these cetaceans both short and long term often resulting in disorientation and death of the animals. I see that the proposed action to expand the training range of the EIS thus greatly conflicts with the governments implementation of the marine Mammal Protection Act. Law suits will be inevitable. I have also personally witnessed the use of EIS during NATO exercises in the North Atlantic in the Vestfjord area in Arctic Norway. The response of the many hundred killer whales in the area at the time feeding on the abundance of Norwegian Spring Spawning Herring was immediate. They left the areas for several days until the NATO exercise was terminated. This event clearly showed, that the use of these SONARS is not only capable of causing physical damage to cetaceans at close range but also impacts the distribution of these animals in their feeding habitat, i.e. they are forced to leave essential feeding habitat, stop any socializing and/or resting activity to avoid this kind of noise pollution. I therefore urge the NAVY to re-consider their plans and to find ways to minimize the use of such equipment in know orca habitat.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Grant (Electronic)</p>	<p>Please don't do this. I'm afraid it will have harmful effects on our environment. I'm a sailor and I love the San Juan Islands. Their beauty and resources are not expendable. Please don't follow through with this testing. Cheryl Grant</p>	<p>Thank you for participating in the NEPA process.</p>
<p>Gratz (Electronic)</p>	<p>This does not seem like an emergency triggered action. Navy should conduct migration and feeding habit studies before proceeding. Marine life is already under much stress from human activity. Our civilization will be gone long before they are. Live with respect</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>and consciousness. Our ecosystem provides a huge amount of economic infrastructure that cannot be rebuilt quickly. I respect the navy and your need to do your job. However you need to respect the actual economy that provides the tax dollars to fund your programs. Fishing and Eco tourism are a huge part of pacific northwestern commerce. The navy needs to build good will in the communities you serve in order to receive our continued support. Do your best to balance the different interests in your sphere of influence for the long term prosperity of our culture. Don't do a rush job. Thanks Rowan</p>	<p>Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, and recreational fishing, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
<p>Green (Electronic)</p>	<p>I understand the importance for our service men and women to get the proper training needed to be able to protect our country safely and properly. With that being said, I think that the harm that this training is going to bring to our marine life outweighs this particular way that the training is going to be carried out. There has to be an alternative that won't be harmful to wildlife; wildlife that is already at risk of becoming endangered. We as humans do enough to the planet and its creatures, if we can avoid doing even more damage, we should avoid it at all costs. There are 100,000 marine mammals that will be affected by your sonar and explosives training, of those 100,000, 29 different species are protected under the Marine Mammal Act. Similar testing has caused mass I-368eaching of whales and dolphins. Please, I ask of you as a fellow American, protect our wildlife that doesn't have a voice. Use technology and simulations to perform the training. We need to leave as many marine mammals as we can for our future generations. It's the right thing to do.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Greene (Electronic)	I'm sickened by the thought of the Navy's practices along the west (and east) coast of this great nation. The ocean is a part of the eco system that's so important to our well being. We should be cleaning it up instead of disrupting it's inhabitants. Take your wars indoors! Stop poisoning the earth! You make me sick!	Thank you for participating in the NEPA process.
Greenwood (Electronic)	STOP! Enough waging WAR on marine mammals, our oceans and our ecosystems. Why can't you people get it? You murder and maim in the name of freedom. Whose freedom? The innocent beings you kill? Enough War already, stop the slaughter, the destruction. You are hypocritical and liars. The oceans are dying, all scientists scream the alarm, yet YOU decide that killing more is important. Intelligence lives in our oceans, not on your ships or command centers. How can you be so damn ignorant? How can you love being at sea and then KILL everything that makes the sea alive? Justify it. I know from other comment periods that this will do NOTHING. Can YOU get that? This is what you work for, a government that does not care. Does not represent the wishes of its people. We are citizens, not subjects. All life is valuable, all life is sacred. Who are you to play GOD? Enough is enough. Some one of you have a heart and stand up against this slaughter, of both sea creatures and our Mother Ocean. Soon, because of your actions, we will have neither. STOP!	Thank you for participating in the NEPA process.
Gressett (Oral)	I'm not talking to them. There's one guy here who we really need to hear from, our district supervisor. He doesn't have anything to say. Well, there's a couple of misstatements. One, we don't spend more than the next three countries. We spend more than all other countries on earth combined. We spend 700 billion dollars a year. I don't think it's that easy. I think they might have some reason, people might come off our coast. I think these guys do a job and I think it's a tough job and I think we do need to be defended, but we know it's out of control. 700 billion dollars a year, more than all other nations on earth and we spend it and we spend it on toys. If we have to fight I'll be the first one to go up, but if we don't have to fight I don't think we should let a bunch of rich people destroy our earth. And I think we all agree. It's a very simple proposition. It's not that big of a deal. We know what they're doing to us. They're doing it for money. They're doing it for power, careers. And I'll tell you something, if we did it right now, if this is an issue that we care enough about as a community, that we all know it, if we draw the line here, we can stop them. I'm not talking to them. I'm talking to us. I'm saying that if we decide that this is not going to happen, if we organize, if we fight... You know what you call this thing we're at here? You know what this is technically? It's called a dog and pony show. That's the technical. That means they get up here and they toss you a couple of balls and they bat things around. The deadline's almost up. You're not going to be able to get it together. They know that perfectly well. That's why they timed it that way. They've got two giant documents. I don't know, they're not at the library. So they're going to slam it past us. They're going to put one over on us and what they're going to take away from us is our ocean. They're going to blow up high explosives in the migratory route of whales and what they're going to do	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>about this is they're going to watch and see if there's any whales around when they're dropping their damned bombs. That is bull. If we have to take a risk as a people, if we have to defend ourselves with our hands. If we have to go out there and fight for our own freedom, we should do it, but we should not allow a bunch of rich guys and their paid operatives -- I don't say flunkies. I think these guys have a good heart and I think they want to defend us, but that's the effective thing that they are. Effectively they're operatives for rich people who are making billions and billions of dollars while we have our back turned. This is the time to draw the line. Why isn't Dan Gjerde saying anything? Why is our district supervisor not getting up here, telling us what he thinks about it? Don't have an opinion, Dan? Haven't made up your mind yet? How much thinking does it take to not want them to drop bombs in the migratory route of the gray whales? We could organize, we could stop them and we could connect with the people in Washington and we could stop them up there. These guys have got to go. We're not living in a safe world and we probably have to have a Navy, but that Navy should not be allowed to destroy our earth.</p>	
Gretz (Electronic)	<p>It is vital that the Navy do the utmost to protect the highly endangered Southern Resident Killer Whales of Washington state. The Navy has the flexibility to do sonar testing where ever they want, whereas the whales live in the Puget Sound area and are dependent on this habitat to survive. There is enough evidence throughout the years that sonar and other types of blasting sounds are harmful, and sometimes fatal to the whales. While we all understand the need for national security, it behooves the Navy, as representatives of the people, to proceed with utmost caution, and DO NO HARM to the animals that live in the ocean. It is their home, and we as humans do not have the right to destroy them and their livelihoods. Thanks you.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Griffin (Electronic)	<p>It is imperative we consider the habitat of the resident marine mammals and their welfare when testing sonar or explosives. We have done quite enough to disturb these mammals with pollution and reckless disregard in harvesting them and removing them to Sea World and the like. Please reconsider the position of the navy that they will test sonar and explosives in whale habitat. There has to be a better way. Thank you</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Grim (Electronic)	I believe that every thought and consideration should be given to the cetaceans that inhabit the NWTT. This area encompasses crucial habitat for the Northwest Pacific resident and transient orca populations, some of these species are endangered. I believe that if the Navy devised a way to deter orcas from an area prior to testing, that the public would be sympathetic to its need. With the strength and resources of our Navy I believe that this can be accomplished.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
L. Grinnell (Oral)	I'm concerned with calling the mammals, the birds, the fish, the sea turtles, a stable population at this point. Fukushima's going to be being cooled for 60 years, the reactors. The radioactive water is now in British Columbia. They expect it to be here at our shores in April. So we have a whole area of this sea of ours, this ocean, that is going to be the depository of radioactive water for how -- we don't know how long, but at minimum, at least 60 years. Japan does not have any way to contain that much water. They released 300 tons, and that was couple of weeks ago. I assume it's just going on. Global warming and the oceans is a factor. We do have the garbage dump here, the -- in the Pacific Northwest. And so I think to add five years of weapons, bombing the ocean, sonar, is another assault that really needs to be taken into account as far as how much we can do to our oceans and keep them healthy.	Thank you for participating in the NEPA process.
L. Grinnell – 01 (Electronic)	To say I am disturbed with the Navy's proposed training and testing for the next 5 years off the coasts of California, Oregon and Washington hardly covers my extreme concern. That area is contains many species of marine mammals, turtles, fish and other forms of life. The Navy has no true regard for the destruction to which they will submit the oceanic area. At the meeting in Eureka on March 6, 2014 one of the members of the Navy team	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>called the population of the whales “stable”. I looked up the whales mentioned in the area, and almost all are threatened, endangered or depleted. The Navy’s attempt to protect the large mammals with look-outs on the ships with binoculars is laughable, ineffective and tragic. Whales and the Leatherback turtles can stay underwater for up to an hours and dive deeply. The amount of ordnance and high frequency sonar is completely uncalled for and should not be permitted in such a sensitive area. Fukushima and the level of radioactive ocean water reaching our shores for decades also puts our marine life at a huge risk. I ask the Navy, (knowing you are going to do it anyway and this comment makes no difference) to completely abandon warfare on our ocean. This for the sake of all the life in our waters that is already under assault from so many other factors including the warming of the oceans, the plastic garbage dumped in the area and now the Navy. Sincerely, Laure Grinnell</p>	<p>Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
L. Grinnell - 02 (Electronic)	<p>This is my second comment. Reading about the Letters of Authorization required as regarding “incidental take”, you, the Navy, have no real control over how many marine mammals and other life you will actually kill or maim. I have to say how strenuously I object and how angry it makes me that you can just come in and do this with no real regard to such destruction. And with no real protection from the government agencies created to protect marine life. Sincerely, Laure Grinnell</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
R. Grinnell (Electronic)	<p>Bombs are designed to disrupt and kill, that is their function. Underwater explosions affect no only all marine life around the world but humans as well. The ocean is under attack from nuclear waste caused by Japan, human garbage dumps covering large areas of the ocean and other environment issues which contaminate the fish we eat. We can no longer consume certain species of fish due to high levels of mercury. It is imperative for the Navy to take a stand against bombing and sonar activities which would forever change the structure and habitat of the ocean. Using scientific knowledge and intelligent</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>solutions would begin a new era of environmental compassion. We ALL occupy this earth and we need to solve problems with a view to the future. The Navy must be a leader in the forefront of humanitarian ideology.</p>	
<p>Grogan (Electronic)</p>	<p>Naha Conservation group founded in 2005 represents individuals from Loring Alaska on Naha Bay and individuals from Ketchikan Alaska. Our group provides a voice for our area. Some individuals such as myself have had a family presence in the Naha Bay area for over 125 years. Naha conservation does not favor the Navy's proposed use of sonar and missile testing at the Back Island site in Behm Canal. The pristine waters of Behm Canal and Clover Pass area are vitally important as a habitat for fish and wildlife populations. Many individuals make their living off the sea and it's resources. Many individuals make their living off of sharing our unique area to visitors who come and see the pristine wilderness of Southeast Alaska. The use of underwater sonar and missile testing will jeopardize this. We are not scientists or lawyers but a group of individuals who simply care about what goes on around Naha Bay and the impacts it may have to us living today and to our future generations. Common sense tells us that there will be a price to pay for the Navy's actions in using sonar and explosives in the waters and around Behm Canal. Geographically Naha Bay is located about 4 miles from Back Island, where the Navy's Southeast Alaska Acoustic Measurement Facility is located. The Navy has been conducting submarine testing for years in Behm Canal, as far as we know it has had little impact to our area fish and wildlife. The new proposal for pier side missile and sonar testing at Back Island completely changes the scope of their work and its' impact. The missile and sonar testing will have an impact of some kind to the entire environment of Behm Canal, Clover Pass and Naha Bay area. The group most impacted will be to local marine life in the area. Fish of any kind and marine mammals will be impacted in some way. A thorough survey needs to be done of the area and all the marine life that lives year round in Behm Canal and Clover Pass and the marine life that migrates seasonally through it. This creates a baseline of data for the Navy to compare results against. Only then will we all know what impact the testing is having on our local fish and wildlife populations. In mid January 2012, Inside Clover Pass just on the East Side of Back Island, late afternoon traveling North bound to Naha bay from Knudson Cove Marina. We spotted a group of Killer Whales; 3 in total swimming toward Jo Island. We stopped the boat and watched the small group of whales. They turned around and swam toward our boat. Two large adults swam around either side of our 16 foot C-Dory, while the smaller juvenile whale swam right under our boat. Looking into the gray water that winter day and seeing that magnificent creature swim under us felt like a blessing from my ancestors and a call from mother nature. In the dead of winter the waters of Southeast Alaska are more alive then we will ever know. Many more stories of humpback whales catching mouthfuls of herring in Knudson cove, seals and sea lions following the salmon in Behm Canal are just a few of reasons why sonar and missile testing on Back Island should never take place. Visitors from all over the world treasure Southeast Alaska for all it's wild unspoiled</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. To clarify the proposed action includes pierside testing only occurring at Naval base locations when ships are docked there. Currently, there is no missile testing proposed in the Behm Canal portion of the Study Area.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	beauty and abundance of nature. Behm Canal is not the location for Sonar or Missile testing. Thank you for taking our comments.	
Gross (Oral)	I'm sure that there are people who are more knowledgeable and more articulate than I am. I just want to say something very briefly. I brought a little artifact with me. I don't know how many people remember, approximately four years ago, all of the computers and electricity got knocked out here from Trinidad to Eureka. And 12 hours later the same thing happened in Fort Bragg. They may or may not have been fussing around with their toys to cause that, but, in addition, I think it had something to do with sonar because when I came in from my shower -- barely able to get the soap out of my hair because our computer that runs our water system had stopped in the middle of my shower -- sitting on the back of my sink was this vase -- it wasn't knocked over by the cat -- with this complete split in it. Still fits together. I think maybe one of your toys did that. And I'd rather not have to endure that anymore, but it's a small thing -- it's a small inconvenience for me to wind up with soap in my hair for however long it takes to get out, and it's a small inconvenience to lose a vase, but it is not a small inconvenience to the living creatures that you're going to be ruining and harming the way -- I have to put up with all kinds of racket. Listen to these microphones, how much they bother us, just sitting here with these microphones, and zapping us with their failures. Okay? This is an inconvenience to me, but it's deadly to the innocent animals that are in our seas.	Thank you for participating in the NEPA process.
Grove (Oral)	Hi. I'm a marine biology major at HSU. And the low-frequency sonar, what you're calling active sonar, is 235 decibels. The average rock band is about 150 decibels. Three hundred miles away, you can find it at 140 decibels. This is ridiculous. As -- I have been a member of the Humboldt County community, but I've also lived in Alaska, I lived in Alaska for six years, and I have lived here for four years, and I have to say, we don't want this to happen. I have also been in calculus classes and statistics classes and been able to run models and simulations, and I can tell you that you can do all of what you're proposing in simulations. You can do all of what you are thinking of doing in simulations. It is unnecessary and it can affect the marine ecosystem in ways that may never be able to return. This isn't just a problem on the national level. This is a problem on the world level. What do you think the world will look like if all of the world goes out and starts using these same methods all over the planet? Do you really think the human population will be able to -- be able to sustain this kind of impact? Do you really think that if we start damaging whales and dolphins and all of these things that are vital to those ecosystems, that are vital to us, that -- that -- that this is a precedent that we should be exploring or even talking about? I mean, this just astounds me that this is considered a realistic idea and what you're proposing is good for our nation because it increases national security. How many nations are we in right now? How many nations -- how -- how big is our military? This is a joke. You're talking about a minuscule threat, a minuscule threat, and then you're going to threaten all of the ocean life over that small percentage that -- that some people may die because of that? It's ridiculous to me, and I think it sets the wrong idea for the	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. The Navy does not propose to use low-frequency sonar in the Proposed Action. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>nation; I think it sets the wrong idea for the planet; and I think it is sets the wrong idea for our children. I have a nephew sitting over there. I want him to see whales someday. I want him to see dolphins. I want him to see -- see stars. I want him to see everything that the ocean offers us. The planet is only covered with -- 30 percent of the planet is land. That's 70 percent of the planet is ocean. We need to be protecting our ocean. We can't just be sitting here idle and let these things go by. And as a member of Humboldt County and a member of this world, I think we all need to stand up here and say, "No. This is not okay, we do not agree with what you're doing, and you need to reevaluate your way of doing this. You need to look at it." And lastly, I was looking in Scientific America. It was estimated that 170,000 marine mammals could be killed or -- or at least damaged in this process. And that was including 8,000 others and 500 whales. And this is just an estimate. But it's based off your naval documents. Thank you for your time.</p>	<p>Simulated Activities).</p>
<p>Grupp (Electronic)</p>	<p>"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event".</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Guerrero (Electronic)</p>	<p>The Navy's failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area is both unacceptable and unconscionable—particularly because the Navy's draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH that has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>biological resources, the Navy does not use explosives within the OCNMS.</p> <ul style="list-style-type: none"> • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Gurney (Electronic & Written)</p>	<p>I am writing to say that I think your EIS claiming zero (0) mortalities for marine mammals and other species of birds and fish from proposed Naval Training and Testing activities in the Pacific Northwest region is not only inaccurate, but also extremely dishonest. It is disheartening that the U.S. Navy so disrespects both the public and the natural world, they would produce such a short-sighted and deceitful report. As you are well aware, the Navy has more honestly predicted huge destruction and harm to all forms of marine life resulting from similar activities in other regions. Whales, dolphins, porpoises, and other marine mammals are particularly vulnerable. Though I know it probably seems outside the realm of possibility for the self-interest of the Navy, I want to propose the idea of establishing an international treaty banning submarine warfare entirely. It has become plainly evident that the first beings to suffer from mankind's madness for constant naval warfare will be the whales, dolphins and marine mammals. They simply are not able to withstand this constant onslaught of an arms race of silent submarines, and the super high-powered sonar and other weapons that are used to detect and destroy them. We either continue on the course towards the annihilation and extinction of the whales, or we come to our senses and ban submarine warfare entirely. The Navy could take a proactive role in enforcing such a treaty, by making sure no nation continues on the path of</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	using submarines to patrol the oceans in the name of war. I hope you will seriously consider this idea, and that such a treaty will be enacted while there are still whales and dolphins to share our oceans. Respectfully, David R. Gurney ***	presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Guss (Electronic)	I am very concerned about the proposed increase in the amount of military testing activity in the Puget Sound, particularly in the Admiralty Inlet. Noises from human shipping and warfare related activity stresses many species and alters their ability to survive well. We humans have an obligation to use our technology to be forces for life -- and that includes non-human life. We have no right to affect marine mammals so grievously with our activities. PLEASE! I beg you to consider their long-term needs as equally important to security and US citizens' long-term needs. We humans have done much damage to the natural systems and should learn from our terrible legacy to follow some form of the oath that medical doctors take. "First of all, do no harm." We KNOW that sonar and explosives testing causes great harm to those species who depend on sound in the water for their life and safety. Let us use that knowledge and be respectful of others. Thank you.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Gustaveson (Electronic)	Please dont use sonar in the water off the coast of northern california.	Thank you for participating in the NEPA process.
H (Electronic)	As a resident of the North Coast I am strongly opposed to more military testing that will potentially harm the already struggling marine life and coastal people who rely on a healthy ocean for their livelihood and food source. There is no reason good enough to put yet another stress on the marine life and overall ocean health. The Pacific ocean needs our assistance and help, not more damage. Please reconsider this choice, it's unwanted from my perspective and the Salmon and migratory whales will be living here during parts of this testing or will at least try to live here. The Ocean is such an important Eco-system, we need to respect it's right as much as our own. If we have a sick ocean, we will eventually have sick people.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Haapala (Electronic)	I oppose the use of pierside sonar testing on the North Coast Pacific Ocean site and all other sites. The effect it has had on Mammal life is unacceptable. I am opposed to weapon training on the coast. With todays technology and compputer involvement I would think that similated training would be adequate.	Thank you for participating in the NEPA process. To clarify the proposed action includes pierside testing only occurring at Naval base locations when ships are docked there. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Haapanen (Oral)	Hello. I'm Elizabeth Haapanen and I would like to welcome the Navy here today and I would like to respect the Navy and I hope that in my life I will actually be able to do that. It seems to me that what you're doing is you're destroying or potentially destroying what you're trying to protect, and I don't understand how you can go forward and think that at some point -- I don't know if you even think this -- that we'll create peace if we're always moving toward war. How do we know we need to escalate if we can't even see another paradigm? We saw this with nuclear weapons when we were escalating nuclear weapons, everybody had to have more and the reason that was used perpetually was testing. We needed to test. We needed to test. And I submit that we don't need to test and that we don't need to have these exercises as you proposed. I submit that the Navy really is here to protect us and our oceans and that that's where we need to go. The paradigm is not war and bombing and escalation and destroying our marine life, but finding a way not to do that. And so I think everything here is kind of moving in the wrong direction. If we are not, in fact, escalating war then we should -- we actually may be -- I mean I believe that you're trying to protect us from these submarines and that may well be the case. I have a few questions though that haven't been answered and one of them is a minor question of what is a qualified lookout? I know that people's eyes don't -- anyway, what's a qualified lookout? Also, what kind of disbursements and monitoring of toxic waste will these exercises use? Or in other words, will you ever stop polluting the ocean and we could go back in history and I could give examples, but time limits that. Also, what new technologies will be needed -- do you need to install? What new technologies are not maybe available yet? What exactly are these? Because I talked to your tech guy who was the sonar expert and he said sonar is pretty much what we've got. We're not looking at other types of technology and maybe he doesn't know or maybe you don't know here either, but I don't really understand what new technologies need to be installed. And thank you for listening to me and thank you for coming.	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When cetaceans have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
<p>Haapanen (Electronic)</p>	<p>To: Kimberly Kler NWTT/EIS/OEIS Project Manager of Naval Facilities Engineering Command Northwest I am writing in response to the latest Northwest Training and Testing Draft Environmental Statement/Overseas Environmental Impact Statement Public Meeting with the Navy in Fort Bragg, California, which I attended to learn what the Navy is intending for its 2015-2020 cycle. After reviewing some of the material, it seems that there is a conflict of interest, with the Navy requesting their permit approval from NOAA, while the two already share a website, and NOAA getting funding from the Navy. Recently I read about a new fleet of Naval ships being prepared with all kinds of new technologies. These were not a part of the presentation. Perhaps they are outside of the venue of discussion, but I doubt it. I asked one of your reps what new technologies, besides SONAR, were going to be used. He said he didn't know, and that SONAR was about it. I felt like he was pushing aside larger questions that were not helpful for the Navy, should they arise in public debate. I found your brochure less than earnest. It presented potential environmental damage in such a cavalier manner, explaining how the Navy's SONAR, bombs, chemical and disturbances of the oceans floor, danger to marine life and such, would hardly be detectable (as they are not, if they are not measured after the fact). The repeated predictions of such neutral outcomes alarmed me. I was not informed about any dispersal rates or amounts of toxins that will be used during Naval "exercises" and there is no indication of responsible clean-up. I find the use of the word "take" bothersome as well, and the fact that marine life itself is at stake, but is considered far less important than naval efforts. And, in fact, a huge vessel just missed wiping out some migrating gray whales, because a nearby ship saw the disaster about the occur and notified the naval vessel. I understand that the Navy uses eyesight to detect whale activity, and this is only accurate 9% of the time. Visual sightings are not effective, and the Navy is still using these method. What gives? I want to know exactly where the Navy does NOT intend to deploy its war techniques. Please tell me what identification and mitigation measures will be used to protect marine species? How is the Navy going to improve on killing fewer marine species, rather than more? Does SONAR harm other marine species besides whales? Although I do think that the Navy accepts and trains smart, well-intended individuals who are doing their best, I want my Navy to be stalwart stewards of the sea, protecting our continental boundaries and the sea life as well, and not harming what they are out there intending to protect. I really hope the Navy can rise above their fears and be our protectors, not our warriors. Finally, I want to remind you that the nuclear weapons</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS.</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>build-up was also done with the need to test as a justification. Please step into the new paradigm where we work hard to clean up what messes we've made, and to preserve the planet and all its inhabitants for a future we will want. Thank you Sincerely, Elizabeth Helen Haapanen Caspar, California</p>	<p>technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. The Navy funds monitoring and research that can include dedicated Marine Mammal Observers (see the reports available at the Navy website (www.navy.mil/speciesmonitors)) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Haas (Written)</p>	<p>Please, please, please—Try to realize and comprehend that the offshore testing in the north pacific coast area has and will continue to harm and destroy the natural balance and harmony of most sea life, especially whales and dolphins. We are all interconnected! When this damage and harm is done to our sealife, it affects (negative influence) all living things on our planet!</p> <p>Please provide more time to examine the Navy's research data on this testing and be willing to listen to more people's opinions, including oceanographers and whale experts' research, on the affects of your planned testing. This is extremely important to the future of all living things!!! Much of the damage that has been done to our planet and its inhabitants, in the past is not repairable!! Think of our children's future! Most Mendocino County residents do not support the Navy's testing!</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Hadley (Electronic)</p>	<p>No,no,no,no,NO testing in Puget Sound. NO testing whatsoever that can even possibly harm the wild Orcas!!! To knowingly do this to any marine mammal is unforgivable and unthinkable. It is EVERYONE'S responsibility including the NAVY'S to be good stewards of this planet. Please remember that.</p>	<p>Thank you for participating in the NEPA process.</p>
<p>Hales (Electronic)</p>	<p>I am strongly opposed to sonar experiments and activities that harm or disrupt the lives of cetaceans and other sea life. I believe the ocean is a priceless and irreplaceable resource and that disrupting the life in it is highly destructive in both the short and long run. Please respect the health of the ocean and it's life forms! Many whales and dolphins and other creatures appear to be having major problems dealing with your highly intrusive and disruptive sonar activities and experiments.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
A. Hall (Electronic)	Please do not renew the Navy permits to continue conducting sonar and explosives exercises in a large area of the Pacific Ocean . The military must reconsider its role and look beyond warfare to survival through conservation of our seas. The navy's massive sonar budget could be transformed from killing whales to constructive conservation. Limit military sonar and make it off-limits in biologically sensitive marine areas. Thank you	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
M. Hall (Electronic)	I OPPOSE Sonar testing, Naval weapons testing, and increased naval presence off the Oregon coast and the Pacific Northwest. My concerns are environmental. I worked with Ocean Futures in 2000 and Jean Michel Cousteau at that time worked with top researchers who made the link between increased marine mammal fatalities and Naval weapons testing. The research has been available for at least 14 years. There should be no debate. The proposal to perform weapons testing in the Pacific Ocean during a time when the ocean and sealife is overtaxed and going through massive die offs because of increased acidification and nuclear waste exposure from Fukushima is not securing our future. We need to rethink what the word security means and who and what we are securing. We should be securing our future and the sustainability of future generations depends upon reversing the effects of acidification and protecting all marine life. I think we should cut back on all military spending and naval testing should be at the top of the list of budget cuts!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Hanlon (Electronic)	To whom it may concern, Thank you for extending the comment period so that I am able to offer a comment. I object with everything in me, to the Navy's proposal to training with sonar and explosives in the Pacific Ocean (or any ocean). There is no doubt in my mind	Thank you for participating in the NEPA process. The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	that the harm done to ocean health, marine life and especially mammals will be tragic. Already our ocean suffers from garbage, and now radiation. If your plan to go through with this comes to be, I will protest. Thank you for your time and consideration. Noel Hanlon	Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Hansen (Electronic)	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Hargrove (Electronic)	Stop the invasion of our precious waters with the Navy's activities that are killing the orcas and effecting the natural ways of the world of the ocean. We must respect and preserve all life and habitats. What if the invasion were upon you?	The Navy is committed to protecting the marine environment and life during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment and life while training and testing for nearly a decade.
Harmon (Electronic)	As someone who appreciates the unique and very special character of the San Juan Islands, and participates in citizen science projects in the marine environment, I strongly urge the limitation or cessation of sonar in the Salish Sea. The orca in these waters need absolutely every break they can get in order to survive. Respectfully, K Harmon	The Navy is committed to protecting the marine environment and life during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment and life while training and testing for nearly a decade.
Harper	The military must reconsider its role and look beyond warfare to survival through	The Navy shares your concern for marine life, but this concern must

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	<p>conservation of our seas. The navy's massive sonar budget could be transformed from killing whales to constructive conservation. Instead of blasting sonar along our coasts, the navy could build mangrove forests to protect our shorelines from flooding. Instead of deafening whales and the ocean habitat they help balance, the Navy could spend its bloated sonar budget on creating marine reserves where fish and coral reefs have been proven to thrive. When Defense Secretary, Chuck Hagel, announced cutbacks in military spending, many of us who have studied whales for decades hoped he might at last listen to public outcry and marine scientists who protest their lethal sonar. We're getting rid of defunct and outdated airplanes and even aircraft carriers. Why not fewer submarines and much more limited sonar tests? Why not move their sonar training ranges westward out beyond the continental shelf; or time their trainings when they do not coincide with fall and spring gray whale migrations or orca gatherings here in the Northwest May-October? These are simple safeguards and practical limitations that the Navy has yet to even consider.</p>	<p>be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
Harrison (Electronic)	<p>There is no room for sonar or explosives use in the oceans. They do not belong to humans, nor do we have the right to mindlessly destroy the precious animals and ecosystems that exist there. The US military has one of the largest budgets available to them in the world! Find less- harmful alternatives!</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Hawks- Johnson (Electronic)	<p>Dear persons, I am writing in opposition to the proposed sonar testing off the west coast. As a marine mammal educator and scientist, I am aware that testing of this magnitude can severely impair and kill marine mammals. I strongly urge that the United States Navy reconsider this proposal, Regards, Stefanie Hawks-Johnson, M.Sci</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Hays (Electronic)	It is not sufficient to manually and visually site whales in order to protect them from injury. This is not a 100% effective technique for whale protection and therefore this project should not go forward.	<p>Thank you for participating in the NEPA process. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
Hecht (Electronic)	Please discontinue operations that hurt marine life, especially whales and dolphins, in any way. Military sonar hurts, tortures, and kills marine life. The sonar and underwater explosives used by the US Navy routinely leave a trail of destruction in their wake. This unnecessary death, destruction, and suffering must not continue!	Your opposition to the Proposed Action is noted; however, the Navy must balance the need to protect marine life with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Heis (Oral)	My name is Roberta Heis, and what I want to know is who are we defending ourselves against anyway? We have become the biggest bullies on the planet. We hold ourselves up as this great beacon of democracy and it's a crock of bloody B.S. Like that guy said, we spend more than all other countries and it's just -- it's shameful and it's sinful and it makes me want to throw up and it makes me want to organize a massive tax, income tax revolt. If we all stop paying our taxes, folks, that's really what we need to do. Thank you.	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
Henderson (Electronic)	I do not support the continued practice of bombing and sonar use in a critical NW Pacific marine habitat. It is irresponsible, and unethical to carry on with these activities considering the damage being done.	Thank you for participating in the NEPA process.
Hennings (Electronic)	Dear Mr. Kimberly Kler: I want to submit my strong objection to using the planned North Coast region to test sonar explosives! As the term implies, explosives are disruptive and harmful to marine life! Our fishing industry has already been severely devastated by environmental and ecological factors! Our tourist trade depends upon clean, safe beaches and fishing and whale watching opportunities. Also, we have a profound responsibility as citizens of this planet to protect marine mammals and other ocean life from harmful human actions. I have reviewed the proposed "safe guards" the Navy will implement, and it simply isn't enough! Why test a system that has already been tested to death? To train personnel? How much training is enough? How many sea mammals will be killed in an effort to "train personnel"? Can't training take place in an area not rich with marine wildlife? Do we train police in high speed chases on the LA freeway during rush hour? My tax dollars are being spent on this "training"! I do NOT approve of such a waste of money! Please reconsider these proposed tests in the pristine waters of the Pacific Northwest! NO on harming my community to "protect my community"! How insane that sounds!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
Herbelin (Electronic)	Testing in our ocean waters that will affect many species negatively must be avoided. These species have no other home to go to, we must protect their habitat if we are to keep the balance of nature functioning to provide for the future of our planet. Disturbing marine life during any time of the year is not acceptable.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Heyd (Electronic)	I have carefully read your studies here related to the Navy's Proposed Action. I am writing with serious concerns about the Navy's proposed use of sonar and undersea explosions in the Northwest Training Range. I live in the San Juan Islands – Endangered orca whale country. There are only 80 orcas left off the entire coast of Washington, Oregon, and California. Orcas already face many man-made threats along their migration routes, without more preventable and needless deaths. People come from all over the world to see the whales off the Pacific coast. Many of our coastal economies depend on eco-tourism and fishing, but our concern for the wellbeing of cetaceans goes far deeper – we love, appreciate, and respect these highly intelligent beings. Marine mammals are extremely sensitive to noise. Sonar destroys important habitat and disrupts the essential behavior of killer whales, blue whales, harbor porpoises and other marine wildlife. If you deafen a cetacean, you essentially kill it, destroying their navigational and communication abilities. Has the Navy considered the deafening of whales in its kill estimates? What about other cetaceans affected, and the loss of habitat and food supply caused by sonar and explosion testing? What are the real numbers when it comes to maimings and deaths? In 2004 the Navy's sonar was implicated in a mass stranding of as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. And in 2003 the USS Shoup exposed	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>a group of endangered orcas to sonar in Washington’s Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound. There is no need for this torture of innocent marine mammals – and it IS torture. Who will be physically and fiscally responsible – the Navy, or the U.S. taxpayers – for cleaning up the carnage of whale and dolphin corpses, or worse, dying cetaceans that we’re powerless to help, washed up on our beaches? And how do we explain to a traumatized population, to our kids and grandchildren, WHY these magnificent creatures died – needlessly – at the hands of our own military? The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on the region’s valuable wildlife. Has it been scientifically proven that the impacts even can be mitigated? Our cetacean populations are sacred to us, and to the many First Nations Tribes and Bands along our coasts – who ultimately have final say in what happens to our waters, under National and Tribal Law. The waters of the United States, including marine environments, belong to First Nations and the people, under the Clean Water Act. What other effects on our waters will sonar testing and explosions have? What else will they kill, and in what estimated numbers? How else will they pollute? How else will they warm and acidify our oceans? What will they do to the marine food chain, and to coastal economies and Aboriginal cultures? Have these questions and many more, been considered, and satisfactorily answered? Have outside, unbiased Academic Marine Biologists weighed in on the EIS? Who really stands to make their fortunes, or increase them, on these weapons tests, against the will of the U.S. taxpayers footing the bill? As you continue to provide for our country’s defense, please find a way to train that respects and protects our natural resources and our ocean’s sensitive wildlife, and the people who see the value in cetaceans.</p>	<p>presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
D. Higgins (Electronic)	The sonar you use is killing whales and dolphins. That is it pure and simple. Humans have a responsibility to not harm the animals who also live on this planet. They are more important than testing sonar. You must not use the sonar where they can be hurt. Sonar is torture and slow death for them. The oceans belong to them. They have nowhere else to go and neither do we. Look after the ocean dwellers and be their protectors-not killers.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
T. Higgins (Electronic)	The Navy's failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>is both unacceptable and unconscionable—particularly because the Navy’s EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community’s view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean’s absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH; this change has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy’s deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy’s plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life.</p> <ul style="list-style-type: none"> • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Hioward (Electronic)</p>	<p>Under Supreme Court precedent, the U.S. Navy may only harm whales if absolutely necessary to defend the United States from a credible national security threat. The U.S. Navy has failed to demonstrate that such an immediate national security threat exists anywhere within the proposed Northwest Training Complex on the Pacific Coast. The U.S. Navy’s proposed monitoring plan for whales using visual observers is completely inadequate. Clearly, the Navy has the technology to detect whales through sound in the ocean, as that’s how whales communicate, and how they are studied by whale researchers. Background: Whales and other marine mammals rely on their hearing for life’s most basic functions, such as orientation and communication. Sound is how they find food, friends, mates, and their way through the under water world. So when a sound many thousands of times more powerful than a jet engine fills their ears, the results can be deadly. This is the reality that whales and other marine mammals face because of human-caused noise in the ocean. Active sonar systems produce intense sound waves that sweep the ocean like a floodlight, revealing objects in their path. Some systems</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>operate at more than 235 decibels, producing sound waves that can travel across tens or even hundreds of miles of ocean. During testing off the California coast, noise from the Navy's main low-frequency sonar system was detected across the breadth of the northern Pacific Ocean. By the Navy's own estimates, even 300 miles from the source, these sonic waves can retain an intensity of 140 decibels — a hundred times more intense than the level known to alter the behavior of large whales. The Navy's most widely used sonar systems operate in the mid-frequency range. Evidence of the danger caused by these systems surfaced dramatically in 2000, when whales of four different species stranded themselves on beaches in the Bahamas. The mass stranding of whales has occurred in the Canary Islands, Spain, Greece, Madeira, the U.S. Virgin Islands, Hawaii and other sites around the globe. Many of these beached whales have suffered physical trauma, including bleeding around the brain, ears and other tissues and large bubbles in their organs. These symptoms are akin to a severe case of "the bends" — the illness that can kill scuba divers who surface quickly from deep water. Scientists believe that the mid-frequency sonar blasts may drive certain whales to change their dive patterns in ways their bodies cannot handle, causing debilitating and even fatal injuries. Stranded whales are only the most visible symptom of a problem affecting much larger numbers of marine-life. Naval sonar has been shown to disrupt feeding and other vital behavior and to cause a wide range of species to panic and flee. Scientists are concerned about the cumulative effect of all of these impacts on marine animals. The Navy estimates that increased sonar training will significantly harm marine mammals more than 10 million times during the next five years off the U.S. coast alone.</p>	<p>been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When cetaceans have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
Ho (Electronic)	<p>As a citizen of the Puget Sound who is concerned about the health of cetaceans, I hope you will do your best to prioritize the well being of marine mammals and to consider their sensitivity throughout your training. Thank you.</p>	<p>The Navy shares your concern for marine life. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities.</p>
Hobbs (Electronic)	<p>Killer whales have been know to respond to human induced sounds at 16 miles, so that needs to be acknowledged and considered in the EIS when setting limits on acoustic production by the Navy. We can assume that other dolphin species are equally sensitive and it is possible that other whale species are equally sensitive. So the proposed distances from marine mammals is entirely inadequate.</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Hoey (Electronic)</p>	<p>do not test sonar and damage marine mammals. Rather relocate such tests somewhere else like another planet. These marine mammals are sentient and have suffered enough already.</p>	<p>Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Hoffman (Electronic)</p>	<p>I strongly disapprove of the U.S Navy’s blatant disregard for the well being of Whales and Dolphins through the use of it sonar testing along the west coast of the US. Simply having Watchers out for whales and dolphins well not adequately protect them from the dangers of these sonar waves. I strongly urge the US Navy to find different ways to test systems rather than harming our fragile ocean wildlife. When a nation is constantly in preparation for war war is what it gets!</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar’s detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
<p>Hojnacki (Electronic)</p>	<p>This comment is in regards to the Navy’s proposed sonar and explosive weapons testing that would take place in the Pacific Ocean, 4 miles from my home here in Loleta, CA. I am writing this comment to the ask the Navy to please use “exclusion zones” to avoid areas known to be critical habitat and feeding/foraging grounds for whales and dolphins. These are areas of critical habitat, foraging and feeding have been identified and should be avoided. Please avoid these protested areas of proposed sonar and explosive weapons testing.</p>	<p>The Navy is not proposing to conduct training or testing activities in or near Loleta, California. The proposed Study Area begins 12 nautical miles off the coast of California, so the closest that any activities would occur to Loleta is at least 12 nautical miles. Historically, activities within 50 nautical miles of the coast of California are extremely rare, and that pattern is expected to continue under this Proposed Action.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy’s specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.
Hollinger (Electronic)	Please do not allow the Navy to test sonar/explosives/ other sounds in the water near the Southern Resident Orcas. These animals are on the endangered species list and are on the brink of extinction. These test interfere with the animals normal activities and cause them harm. Please do not let these tests continue. Thank you for you consideration.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Holtz (Electronic)	Stop killing whales!	Thank you for participating in the NEPA process.
Hopf (Oral)	Well, that was quite a presentation you put on there. You left out a few things, like the war to end all wars or all the bunk that comes from your typical Army recruiter who promises the moon, the sky and the sun and then just leaves somebody to live a terrible life under contract now, under fear of prison. The truth is that the military has been lying and lying and lying. You've left this country in bankruptcy. You spend more than the next 30 countries in war and it still isn't enough. It still isn't enough. Take, take, take. And we all know this, but I have a special message for you. You may be under -- you may have a good job. You may be under the influence of group think and live in an echo chamber, but what you do today is going to make the world that your grandkids grow up in and if you've ever enjoyed playing ball with them or listening to your kids talk for the first time or any of that, I hope you take into consideration what real ecological damage, what kind of world you're going to live in and take a look at civilizations like the Aztecs, who destroyed their ecology and destroyed their civilization. It's happened in history before. The Romans cut down all their trees, lost their defensive capabilities and put everybody in cities where the life was just no good. You better look at the future that you're creating because nobody believes -- nobody in this audience believes you, but you're going to end up making -- if your numbers are as wrong as we think it is, you're going to end up making -- damaging	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the ecology and making this world a worse place for your grandkids. Thanks.	
Hornung (Electronic)	Regarding the Northwest Training and Testing (NWTT) Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS): I am very familiar with whale and dolphin behavior after 10 years as a writer and editor of marine mammal studies and as a marine mammal naturalist. I thoroughly oppose the Navy's desire to continue its sonar testing where marine mammals are present. With global climate change upon us, we need to do everything possible to protect threatened and endangered species -- not cause them further harm. Following are some other reasons I oppose this proposal: The Navy estimates that its activities could inadvertently kill 186 whales and dolphins off the East Coast and 155 off Hawaii and Southern California, mostly from explosives. It calculates more than 11,000 serious injuries off the East Coast and 2,000 off Hawaii and Southern California, along with nearly 2 million minor injuries, such as temporary hearing loss, off each coast. It also predicts marine mammals might change their behavior — such as swimming in a different direction — in 27 million instances. Death and injury due to sonar blasts have to be extremely painful to the animal experiencing them. In short, the Navy needs to find a more humane way to conduct its sonar testing.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
House (Electronic)	I am glad that you are doing such a good job looking out for the marine mammals in the area of your operations. I attended a previous meeting with the public event in Eureka, and will plan on being there for the March 6 public presentation.	Thank you for participating in the NEPA process.
Hubbard (Written)	I am dismayed that the Navy is planning to use sonar, electromagnetic waves and explosions at the expense of whales, dolphins, & other marine mammals, exposing them and causing harm, plus even death. No one is invading us. We should have peace. You forget – marine mammals are not birds, although birds would be affected too through disruption to the eco-system. These mammals depend on sounds for survival – you plan to harass them and kill them with sound. I would think the Navy would not fail to protect the habitat for all species in our West Coast waters. Please identify where you need to NOT TRAIN, and agree to leave them as healthy areas.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Huber (Electronic)	I want to express my concern about the habitat of protected marine life in the proposed testing area. It is vital to create exclusion zones in vital feeding areas and take more precautions to avoid disturbing crucial marine animal behavior.	<p>training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p> <p>The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas.</p>
Huddleston (Electronic)	My father was a Naval officer who survived the attack on Pearl Harbor. I have a deep knowledge of and affection for the United States Navy. Yet I continue to feel great frustration, and shame, in truth, for the Navy's continuing testing of explosives in our oceans. Surely by this time, it is clear the damage that is done to sea mammals, i.e. whales and dolphins, by this type of testing. The United States Navy has a duty, an obligation, to listen and take the advice of scientist and concerned citizens, and desist this testing, and protect these highly intelligent, sentient beings. Sincerely Yours, Dr. Cheryldee Huddleston	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Humphrey (Electronic)	Do not test sonar or explode bombs in the testing area off the northwest coast of the US. The marine ecosystems in this area will be damaged by your proposed activity. Find another way to accomplish your goal.	Thank you for participating in the NEPA process.
Hundley (Electronic)	Please do not allow sonar testing in our oceans in our whale breeding, feeding and migration routes. They are being destroyed for your tests which are totally unnecessary. If you must practice do so without killing our marine mammals. stop sonar testing.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Hunnicutt (Written)	Thank you for extending the comment period and please have an open mind. The oceans are in peril. Within our lifetime we could see nothing alive in the ocean but plankton and jellyfish. “Active sonar and explosives” are harmful to sea life, especially large mammals. If you destroy my grandchildren’s planet saving them from “the commies,” we have all lost. The “cold war” is over. Your mission is outdated. The new enemy is climate change and blowing up the ocean is fraternizing with the enemy. Please consider these things.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. The Navy has returned to the analysis in Chapter 4 due to concerns raised in public comments, and the Chapter has been revised in response to those public comments. The literature on ocean acidification has been reviewed, and is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
Ifornia (Electronic)	Stop testing your destructive toys off our coast and killing thousands of marine mammals and fish! Test on yourself	Thank you for participating in the NEPA process.
Infantino (Electronic)	The testing you plan will disrupt the living patterns of many marine mammals and it will impact our lives as well. Why not fins someplace else to do this sound testing? We do not want it here.	The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Irwin (Electronic)	The U.S. Government must take every consideration and precaution in protecting our marine habit and endangered Southern Resident Killer Whale population in particular. National security is important but marine resources and endangered species are just as important and unrecoverable if lost. Noise in the marine environment and physical threats from training operations are deadly to the whales and could lead to the collapse of an entire ecosystem. Please keep Naval training operations out of such vital habitat and far away from the Washington coastline where many whales and our SRKW migrate regularly. There are ways to balance the Navy's objectives while still protecting our marine resources. As an American and native-born Washingtonian, I say it's time to place protecting our valuable and unique marine mammals as the highest priority over military objectives. Too many animal/mammal lives have been lost in the name of "national security." Respectfully, jill itwin	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Isham (Electronic)	I am trying to understand why it is necessary to do sonic testing where it is causing unnecessary suffering and death in intelligent marine mammals. This is destroying them and is devastating to their dwindling population. Please find another way.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
D. Iverson (Oral)	I'm a retired public employee. I spent half of my career as a classroom teacher and the other half as a state and county employee. And what I learned from that six years is government has a hard time collaborating with each other, so when we do collaborate it's a good thing to make better decisions. So I'm just going to put it on the record because I have a suspicion we don't do it, but I would hope that we would. I'm very passionate about the orca whales that still reside in our Puget Sound and they don't have a passport to go to Canada. They just go up there and then come back and they go back and forth weekly or monthly. Do we collaborate around these issues with the Canadians? And if we don't, I hope that we can figure out a way to do so.	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
R. Iverson (Electronic)	Please do not test weapons along the coast. What I'm most concerned about along our coast is that experimental weapon testing won't stop during whale and salmon migrations.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
S. Iverson (Electronic)	<p>I am writing to express my concern about the Navy's proposed use of sonar and undersea explosions in the Northwest Training Range. I live in the San Juan Islands, home to many animals that are sensitive to this underwater noise. I completely object to the pain and suffering imposed upon these animals, and the subsequent deaths that have occurred. I believe the Navy is acting in negligent disregard for all life forms in this area, for the people living here who hold these animals as sacred, for our local economy that depends on the beauty and creatures inhabiting this place, and for the future unknown impacts of this type of testing. I urge you to take your training somewhere where the impact on life is minimal and includes respect for the health of the ocean and it's inhabitants.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
James (Electronic)	<p>I am writing about the proposed renewal of bombing permits and sonar testing in the Northwest. I am very concerned for all sea mammals, but especially for the resident orca population. They are listed as endangered. How can you risk losing more of the dwindling numbers that currently exist? These majestic creatures need protection. They certainly don't need to be put at risk in this manner. Years ago Washington state banned the capture of orca by Seaworld. Today, there is only one survivor from the last capture from Penn Cove. She was stolen from the L pod. Right now the Govt is accepting comments to include her in the endangered species protection. Over 10,000 comments on her behalf have been received, so far. Comments close on March 28, 2014. Along with her being listed as endangered, is the hope of her release from an illegally sized pool in a Marine park. This is where she has lived as a 'slave to entertainment' for over forty years. Her mother Ocean Sun L 25 is still alive. The fact that her family pod still remains, increases her chances for release and re-acclimation to the ocean. The thought of her family being harmed after waiting for her all of these years, would be such an injustice. The thought of her family not being harmed by your testing, then having her reunite with them only for her or any of them to be harmed is a devastating thought. I'm sure you will receive comments</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	by researchers from the Center for Whale Research (CWR), who have followed all the Southern resident whales for years. They will tell you that the resident and transient orca forage in the areas where you plan your testing. The majority of the USA orca population reside from the California coast to Canada. The entire area of the proposed testing and bombing. Please don't put them in harms way, by testing. They already face a dwindling salmon supply and pollution. Thank you for allowing members of the public to be heard. I hope your decision will take into account these Southern Resident Whales, who are members of The Endangered Species Act.	significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Jeanroy (Electronic)	Save and protect the Whales – no sonar testing in our bountiful Northwest waters.	Thank you for participating in the NEPA process.
Jimenez (Electronic)	As a part time resident of Washington and a self proclaim environmental conservationist, I would like to urge the navy and the United States Military to refrain from practices that endanger and kill marine mammals. In particular I am referring to the Navy's use of sonar and bombing zones in the habitat of the southern Resident killer whales. While the navy maintains there have been no deaths due to this many scientists in the region disagree and believe there is evidence that shows several orca deaths have been caused by these practices. These group of animals are highly endangered and we cannot afford even the smallest population lose.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
A. Johnson (Electronic)	STOP!!!! The navy is not gaining anything from the NUWC Keyport Range sonar zone. It won't protect our borders any better than they are today. And, it won't gain us any knowledge that can't be gotten another way that doesn't kill marine life. It will only hurt marine life, especially every whale or dolphin in range of the sonar testing. Stop being part of the problem and become part of the solution.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Carl Johnson (Electronic)	Without wishing to debate the merits of spending tax dollars on this type of testing, whether it is valid or not the US Navy should be governed by the highest standards in protecting and preserving local wildlife –including the Endangered Species Act protected species of L Pod Orca’s residing in this area. The ESA act –the law of the land- prohibits any activity resulting in the potential to further endanger a protected species. The Navy should be seeking alternate sites rather than this one. The law of the United States should also apply to the armed forces.	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy’s specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
Christiana Johnson (Electronic)	This is useless and devastating to our ocean climate. PLEASE STOP!	Thank you for participating in the NEPA process.
Craig Johnson	We have always been supporters of the Navy and understand defense of this nation is complex, but I plead with the Navy to reconsider continuing employment of mid-frequency	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Written)	<p>active sonar in the Gulf of Mexico, Atlantic, and Pacific Oceans. Having 30 million instances of harm to marine mammals, including hundreds of deaths is staggering and very destructive.</p> <p>God has entrusted us to be stewards of His creation, I pray the Navy will honor that.</p>	<p>as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
E. Johnson-01 (Electronic)	<p>I am rather certain that the following article has been included in the reference biological studies that have been conducted & relate to the impact it has on marine mammals. It is my intent to ask questions during the comment period including attendance at your hearing/comment event @ Astoria, OR. March 3. I did appreciate how your event was handled during my first visit to one of your events which was held in Tillamook, Ore 3? Years ago. http://jeb.biologists.org/content/215/21/3856.full</p>	<p>Thank you for participating in the NEPA process. The document you mention and shared a link to was not used as a reference in the NWTT EIS/OEIS.</p>
E. Johnson-02	<p>https://www.facebook.com/ajax/sharer/?s=99&appid=2309869772&p%5B0%5D=100002093867428&p%5B1%5D=619678858111904&profile_id=100002093867428&share_source_type=unknown In this submission I am not certain that the above reference can be accessed therefore will include why it is important. The incident resulted in death to a number of dolphins during a period of active naval training in the Mediterranean off the southeastern shore of Crete, Greece. At this point the specific identity of the vessel/vessels have not been identified, however it was a joint NATO event which included US forces. When specific events occur where clear evidence indicates the likelihood of those at fault, remedies must be enacted preventing future occurrences. I have spent a great deal of time trying to understand why deep-diving beaked whales are most impacted by sonar waves. Basically the presence of fatty acids, wax esters, in the melon & mandible appear to become disrupted influencing the exchange of nitrogen within those areas. The result is nitrogen becoming supersaturated causing what is commonly referred to as Decompression Sickness DCS. When those sources most commonly find that the cause of death for these deep divers is a virus known as Morbilivirus it devalues the credibility of the those responsible. Specifically Dr. Darlene Ketten of Woods Whole Institute, attributed 800 marine mammal deaths to that virus during 2013. I am not accusing the Navy of those 800 deaths but content there is considerable & mounting evidence that dispute her findings.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Regarding previous strandings, see Section 3.4.3.1.8 (Stranding) and the referenced technical report “Marine Mammal Strandings Associated with U.S. Navy Sonar Activities” (U.S. Department of the Navy 2013c). While the annual strandings in Washington in 2003 had no relation to Navy activities, the Navy does consider all cases simply “coincidence” as the comment asserts and has presented five specific mass stranding events where sonar use had been identified as a contributing cause or factor in a stranding. The fact remains, however, that the Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area.</p>
<p>Edward Johnson (Oral)</p>	<p>It looks like it's all downhill from here, baby. This is, my name is Ed Johnson. I'm a sort of an environmental advocate. I come here tonight to speak on behalf of the whales and dolphins, crustaceans and their unheard voices. It's totally disturbing to me that like the first speaker who spoke about, there's been no plan other than monitoring, observing -- Actually is there some government branch available? Closed branch? Sometimes they're utilized effectively. Many times they're to support a contention that already exists as in one man that's almost irrelevant and that is to support continued devastation of the planet through the technologies that homosapiens seem to be perpetuating in what I call futility. One of the advocates for the Navy is Darlene Ketten, Ketten, and she's at Woods Hole. Every time I read something she writes or comes up with relative to another thread that proves that the sonar has no effect, there hasn't been a death. I listened to your representative in the hallway say there have been no deaths in the last, well, I haven't got straight whether there really was deaths in the Navy, especially from the Bahamas. I'm rather certain that there were deaths. Ken Balcomb was there on the shoreline watching the vessels at sea and then he took the specimens. The specimens were taken to Woods Hole, where Dr. Ketten and he were to do a combined necropsy and CIH. And the result of his work of the, of his work, his perpetual involvement in the cause for whales and no more sonar testing, he was denied any access to the scans or necropsies, which were promised in the beginning. Following he had no, the Congress asked for a complete review of this. The Navy complied until it came to the bottom line where things came down to the heavy metal and he said, this is over. We are done. Unfortunately, I am done.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	I thank you for coming. I think this is a very positive way to have dialogue where you really get the sense of the community, which I am a member of. And I appreciate the time you have given me tonight. Thank you.	(www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). Regarding previous strandings, see Section 3.4.3.1.8 (Stranding) and the referenced technical report "Marine Mammal Strandings Associated with U.S. Navy Sonar Activities" (U.S. Department of the Navy 2013c). While the annual strandings in Washington in 2003 had no relation to Navy activities, the Navy does consider all cases simply "coincidence" as the comment asserts and has presented five specific mass stranding events where sonar use had been identified as a contributing cause or factor in a stranding. The fact remains, however, that the Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area.
K. Johnson (Electronic)	I am writing this letter in order to voice my opposition to the Navy's proposed expansion of their Northwest Training Complex. These activities planned in Puget Sound and the surrounding area pose a direct threat to the lives and well being of sonar dependent marine mammals. These animals deserve to live unmolested and unharmed in a habitat that has been theirs for centuries. Please hear the outcry of humanity begging for these animals to be left in peace and move the naval activities to a place that will not cost them their lives.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Jolley (Electronic)	Previously, I understood that concerns would be accepted until March 25, 2014. Now, I understand the deadline to be April 15th--therefore my concerns will be followed by a written letter. The U.S. Navy is well aware of the results of their sonar blasting. 2004 activities and RESULTS are well known. Sea life, in ALL forms, is in jeopardy. Training is important. Use of blasting or explosives in ANY form is NOT acceptable. One does not	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>need to be in a war to prepare for one. One does not need to be in a crash or disaster of any sort to prepare for one.</p>	
<p>Jolley-01 (Written)</p>	<p>It is with great concern that I am taking this time to submit my comments to you concerning the U.S. Navy’s desire to hold bomb testing and sonar blasting tests along the Pacific Coast. I previously submitted my concerns on this subject, by email, on March 24, 2014.</p> <p>I am but one voice – but, I know I represent the beliefs of many.</p> <p>The U.S. Navy is well aware of the consequences of sonar blasting in 2004. The sound frequencies and vibration literally burst the heads of sealife leaving them to beach along the shore and bleed out – a sure death of torture. It may take 29 species of marine mammals, or so says the Navy...but just how many of each of those species? I’ve see the pictures. Have you? It is devastating and unnecessary.</p> <p>Are you aware of the attempted concealment, on the part of our U.S. Navy, as to what all those tortured species of “marine mammals” might be? Yes, biologists, scientists, and witnesses are breaking their silence; bravely coming forward; and telling the truth. Until more is known – through conscientious discovery, I submit that all sonar testing/bomb testing cease. I do not want this, or the repercussions of it, along the Northwest Pacific Coast, where I reside – nor, for that matter, along any coast.</p> <p>The U.S. Navy needs to be reminded that for every action there will be a reaction. The cost of blasting and bombing for “testing and practice” is much too great. For the good of our planet and all inhabitants their requests need to be denied. Their testing will upset the balance of nature, as it did before, and eventually, we will all suffer because of it.</p> <p>I must ask...Where is our Commander-in-Chief in all of this? Certainly he should be able to execute some humane common sense – to put a halt to this needless proposal.</p> <p>Normally, I am very proud to be an American...loyal and supportive of our country’s Armed Forces. Not in this. Clearly, the U.S. Navy’s mission is to maintain the freedom of the seas; to protect and defend our country. Shouldn’t this include protecting the seas? As the seas Do and WILL affect the present and the future of our nation...and the globe.</p> <p>It is very obvious that bomb and sonar testing cause destruction. It is enough to know that they work – they cause plenty of harm – if needed, to defend our country should we be invaded. It is unnecessary to do more of it in the name of “PRACTICE.”</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Jolley-02</p>	<p>Personally, I spent over thirty years in the Airline Industry. I dealt with many real life emergencies over those years, where teamwork and training were essential prerequisites. The key word, here, is ‘TRAINING.’ If the Navy has a truly good ‘TRAINING’ for all possible, known scenarios...and all members of the Navy have that good training</p>	<p>Thank you for participating in the NEPA process. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>program instilled in them, I can tell you, first hand, that our Navy will be completely prepared and will automatically spring into action—as a team—or if necessary, be able to do it on their own. GOOD TRAINING BECOMES “SECOND NATURE.” YOU DON’T NEED TO BE IN AN ACTUAL PLANE CRASH TO KNOW HOW TO BE PREPARED FOR ONE. Understand? TRAINING WITH REAL EXPLOSIVES IS NOT NECESSARY.</p> <p>I have to question the U.S. Navy. It believes it gives, and I quote, “Humanitarian assistance and disaster relief.” What they are proposing is just the opposite.</p> <p>I propose that the U.S. Navy rescind this testing plan. Training is acceptable. Testing is not acceptable.</p>	
K. Jones (Electronic)	<p>I am writing this comment to oppose all training and testing practices in the Pacific Northwest. These practices would take place in areas that are heavily used by sound-sensitive marine mammals, particularly the endangered population of Southern Resident killer whales. These tests could have a severely negative or fatal impact on marine mammals in the area and should be prohibited. The benefits do not outweigh the multitude of significant negative environmental impacts that testing could force upon the range areas.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
L. Jones (Electronic)	<p>I am against any activities which would hurt marine animals. The proposed sonar testings/mapping/ explorations would harm the hearing of cetaceans. Our oceanside communities of Mendocino coast gain great tourism benefits from whale watching. Please reconsider your activities to use sonar which has been scientifically shown to harm whales and other marine species. Lily Jones</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
N. Jones-01 (Oral)	<p>. I'm representing Sea Lion Defense Brigade. I'm also here just as a human on planet earth to say when we're talking homeland security, destroying our oceans or let's say -- We have a lot bigger security issues than testing sonar on whales. Hanford is leaking. I don't know if you guys are aware of this, but you have got some, you know, really serious environmental problems going on here in the Northwest that could be addressed that really affect homeland security. And we can really put people to work cleaning up this mess. Now, I know this is outside of the scope, but that's the whole insanity of this whole idea of doing these war games on our coasts. I mean, who's the boogie man here, the gray whale? The sea lions? Who are -- I mean, we have serious -- Our star fish are melting. China's not buying our seafood here. Our mussels are melting. You know, no -- China won't eat it. Do you get it? The Northwest here, our iconic coast is being crippled already by acid and dead zones in our oceans. We cannot afford to have any more noise pollution, explosions, chemical weapons of war dumped on our coast. Now, you say you guys, you're going to be doing this 12 miles out. Who's going to be out there watching? Are you going to have citizens onboard? It seems to me you're going to be using a lot of 17th century technology looking for whales when you're testing all this 21st century high-tech Star Wars kind of stuff. So I'm really concerned and I'm here to speak for my whale, turtle bird, sea lion friends who are going to be inflicted and have their eardrums blown out by these tests, by this. I mean, there's, there's serious issues here that you guys could be working on to, to improve our oceans and our security here and I do not think these war games are one of them. So I am for the No Alternative, the top box on your -- top of your list, not expanding, not combining your three, your three tests, your three environmental statements into one. I'm not for that. I'm for keeping it all separate, each ecological sensitive habitat being addressed as their own. Thank you for taking this time to listen to me tonight. And peace on earth.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
N. Jones-02	<p>I have my three minutes. I'm going to use them, by golly. I feel like it's my duty. It is my duty. It's everyone's duty here because we are facing real threats from within and from abroad. And the biggest threat right now, based on our, our iconic Oregon Coast is having dead whales and marine mammals wash up on the beach when there's no marine mammal rescue in place. What's going to happen then? People come to the Oregon</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Coast because there's whale watching here all year around. People come to the Oregon Coast because it's a beautiful environment and people like to be in a beautiful environment with live marine mammals swimming freely in the ocean, not lingering in agony with their eardrums blown out on the beach. This is really bad for business. And who's going to come, who's going to be responsible for the cost of taking all these carcasses off our beach? Is it going to be the public? Because the public has always been left with the clean-up and the casualties of war. We're not even taking care of our service people who are coming back home now where there's no funds for these folks to get the adequate care that they need. What are we doing blowing up things in our oceans 12 meters off the coast of Oregon? What are we doing targeting orcas and gray whales and sea lions? What are we doing in the fishing community when these folks are struggling because the ocean is full of acid? What are we going to do? That's the threat. I'm sorry, sir. People need to go to work and there's real jobs to be done here. We've got a dam on the Columbia with a 70-foot breach in it above Hanford. Fishermen are out of work. They can find jobs there. If people were really talking about solutions and putting people back to work and saving fish, we could save some damn fish instead of targeting sea lions and marine life. And we have alternative forms of energy that do not leave a huge carbon footprint. Mother Nature blessed us with everything we need and it's just this, this drive for money. I mean, what are you guys here to secure us from, this threat? To what? The banks? Well, I tell you, everybody I know is losing their homes and out of work. And, I'm sorry, blowing up whales and dropping chemical warfare -- Are you going to be using phosphorus, sir, in our oceans? Because the public always has to pay the clean-up.</p>	<p>Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The Navy has conducted training in these operating areas regularly for decades. Though the intensity of live training will increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant.</p> <p>Most commercially important fish species are not believed to hear mid- and high-frequency sound sources, which make up the majority of sound producing activities.</p> <p>As stated in Section 3.1.3.2 (Metals), "Military expended materials such as steel bomb bodies or fins, missile casings, small arms projectiles, and naval gun projectiles may contain small percentages (less than 1 percent by weight) of lead, manganese, phosphorus, sulfur, copper, nickel, tungsten, chromium, molybdenum, vanadium, boron, selenium, columbium, or titanium." Please review Section 3.1</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Sediments and Water Quality) for a full discussion of the effects of the Navy's proposed activities on sediments and water quality.
Jordanmaree (Electronic)	I come from a navy family and we love the oceans but in the last 40 years I have seen it destroyed. We need to save ourselves by saving this planet. To do anything else is a slow, sick form of suicide. Stop the sonar anilation!	Thank you for participating in the NEPA process.
Kaimori (Electronic)	I would respectfully request that sonar training cease and desist. We have national security to worry about, but what good is national security if our planet is dying because of ecosystem imbalance? Cetaceans are taking a beating from over fishing, pollution, and degradation of water quality. We are not the only sentient beings on the planet, but we certainly are the most deadly. Stop not only for their sake, but also for our survival.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.
Kaiser (Electronic)	I am dismayed to hear about the Navy's request for renewed permits for bombing and sonar exercises from northern California to the Canadian border. As these exercises have been shown to harm marine mammals, including whales, to continue these exercises is a form of cruelty toward these intelligent animals. Whales are already in trouble across the oceans. Do we want to see them disappear all together?	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Kalinian (Electronic)	The ocean is filled with noise, but its of the natural kind that is a form of communication, much like our chatter. This melodic and sometimes chaotic rhythm of the ocean sounds are created by the symphony created by its many inhabitants, much like our world, theirs is effected and penetrated by sound. But unlike ours, they have no protection from the effects of sonars or blasting, they can't cover their ears, they can't run away (fast enough...the speed of sound is ...fast!) and all their world is reflected in the waves of sound that they create. Without it, they are blind, dumb and will surely die since this is how they find each other, hunt in pods for food, and communicate special values to each	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>other that help their evolutionary development. Can the Navy make sure there aren't any pods around when they blast? yes, I'm sure they already do this. The compelling part is how do we all know how far the range is that they hear? And how this is all effecting them far away beyond your eyes? Beyond your sonar that you learned from them, how could the Navy turn on their muses like this? How do we know how these blasts and sonar effects their reproduction and interaction? Until we do, we cannot be human and say we are a modern civilization yet still intentionally kills millions of fish and marine mammals in the oceans. They possess technology and intelligence we still have not been able to grasp, how can we eradicate them before they teach us beyond math and hunting? Maybe one day we can understand how they truly communicate? And this will help us communicate as sonar has helped ships steer in the misty nights...We owe them this favor to give them a break from the overfishing, illegal poaching, hunting and the always growing threat of living a life in captivity, the worse option for a dolphin, Don't they have enough threats without sonar blasts adding to it? Please do not do this. There must be other ways to attain your goals then to kill the marine life around the area where you will conducting these tests- the Southern resident killer whales will definitely be completely extinct and so will the eco-tourisms in that area that is supported by the free killer whale pod that has been registered as ENDANGERED and therefore protected under the MMPA and AWA.</p>	<p>measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
Kamin (Electronic)	<p>I am very concerned about the proposed Navy testing of weapons in the Pacific Northwest. Firstly, the comment period is not long enough to give people the chance to become aware of the nature and extent of this program. I request that you extend the comment period to 90 days. I am very concerned for the effects of such a testing program on the animals in the area. Sonar, electromagnetic devices and explosives affect humans on land. I fear their effects on the animals can be just as damaging. Thus please allow for the longer comment period and consider not allowing the incidental "taking" of the sea creatures. Thank you.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Navy's notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS. "1:59 AM CST March 26, is equivalent to 11:59 PM, March 25th, in accordance with the public notice. The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in Appendix B – Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements.
Kaplan (Electronic)	Please protect whales, dolphins and other sensitive marine life. Please stop underwater testing and killing fish. Thank you for your consideration.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.
Karaba (Electronic)	Dear Navy, Please STOP harming whales and other sea life with your war games and weapons testing. There is no good reason to take an intelligent sea mammals life. I urge you to protect whales instead of harm them. Thank you, Kelly Karaba	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Kartes	You state that "areas in the Pacific Northwest have historically been used by the Navy for training and testing activities, some dating back to 1856." Just because the Navy did	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	something historically, does not mean it is right thing to do NOW. This is not a valid reason for negatively impacting marine habitats. You state “the proximity of the Navy range complexes to naval homeports is important because the close access allows for efficient execution of training and testing activities and maintenance, which saves time and money, and reduces fuel costs and emissions.” Even if I believed this was an actual concern of the Navy (which I do not), saving time and money is again not a valid reason to negatively impacting marine habitats. I ask that you do no harm and do not negatively affect marine habitats directly, indirectly or cumulatively. These habitats are in peril from past actions as well as climate change and one more blow is too much.	Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Katte (Electronic)	Stop killing marine life with Navy sonar drills. STOP. IT. NOW.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Katter- Jackson (Electronic)	I am strongly opposed to using sound that destroys whales and dolphins hearing. Without their hearing they cannot survive in the ocean because they hear their food, their families, and danger coming. I believe that ignoring the consequences of your practices is causing, and will cause, great damage to oceanic species, including cetaceans. I think that we were put on this earth to share it with all the other species, not to use and destroy them for our own selfish and destructive purposes. It is a wrong thing to do and a wrong way to live as a society. Moreover, it shows a total disrespect for other life on this planet as well a lack of concern or compassion for other living things. We have already brought our beautiful oceans to their knees by overfishing, garbage, toxic runoff and now destroying the hearing of highly intelligent beings (whales and dolphins) that live in the oceans. They can't protect themselves from this. So, don't do it, it is immoral by our global society's standards. And I believe that you can be much greater than this - show it by protecting,	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	not destroying, the oceans. Show it by supporting and protecting the beauty and life on land and sea. That, I believe, is your true higher function. That is what I want my tax dollars spent on - protection of what is most valuable.	(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.
Kaufmann (Electronic)	Please discontinue this practice. The data is clear that it is harming a resource that once gone can never come back. thank you	Thank you for participating in the NEPA process.
Kaul (Electronic)	Please stop the bombing and sonar testing in and near coastal estuaries along the Pacific Coast. Living on WHidbey Island, we have gotten acquainted with these individual orcas over the span of 20+ years. These marvelous creatures live for 50-100 years and much of their survival relies on hearing and communicating by sound. These populations are already so endangered by the decline of salmon, and they swim offshore to their traditional seasonal salmon grounds, off the Columbia and California rivers, which, as recently as 60 years ago, still provided abundantly. As Marcie Keever, Oceans & Vessels Program Director at Friends of the Earth, said, "It is critical that NMFS establish no sonar zones offshore of major coastal estuaries where the 81 remaining endangered Southern Resident orcas seek to find salmon if they are ever to recover." If the Navy's at sea with its blasting sonar and bombs, then it needs to take extra steps to protect the endangered orcas and other marine mammals that swim in those seas," said Miyoko Sakashita, oceans director at the Center for Biological Diversity. "Coming up with a new plan that will protect whales and dolphins from hearing loss, injuries and death by sonar is an urgent priority." The use of deafening noises just does not belong in sensitive areas or marine sanctuaries where whales and dolphins use their acute hearing to feed, navigate, and raise their young.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/submit/display.asp?template_id=1000) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Kavanagh (Electronic)	Please consider using the strictest limits possible when testing sonar in the waters off the West Coast of the U.S. as Navy lookouts are not enough. The Navy must consider the impact of sonar including temporary hearing loss and the impact on feeding and breeding. Please do not test during the orca's seasonal migration (May - Oct in the Georgia Strait) as there is no need to test year round especially as the military considers cuts to its funding. The Navy knows its testing impacts animals and must take its actions seriously.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts)

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
Keeler (Electronic)	Stop killing There is absolutely no reason to do these exercises if it is going to hurt those beautiful creatures this shouldnt even be discussed its simply wrong!! What the hell is wrong with people	Thank you for participating in the NEPA process.
Kerry (Electronic)	The death of our marine mammals is not acceptable collateral damage in the Navy's quest to test it's sonar. There are ocean zones where marine mammal life is minimal. If you must test your war toys, go there. Instead you've chosen areas rich in marine mammal life. Why? Does it really make sense to kill so many to save so few? You have lost the trust of so many Americans. Keep it up, and you'll lose the trust of all the rest.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Ketterer (Electronic)	The Navy must do everything possible to protect ocean mammals from sonar. It is very dangerous to the whales and dolphins that live in the ocean. Please do everything possible to protect these animals. Do not use sonar in areas of migration or where they have been known to swim etc.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
King (Electronic)	We are strongly opposed to the Navy's use of sonar in any form for the purpose of a drilling or training exercise. The evidence of marine mammal damage as a result of Navy training is indisputable. There is sufficient technology available to thoroughly simulate any required training exercise. For many years, we have simulated nuclear bomb detonation via computers, and there is no reason a similar simulation could not be used that both protected marine life and ensured the US can mount an adequate response. Seriously, do you have to mount such destruction just for play?	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
Kirschner (Electronic)	Our Navy needs to exhibit responsibility to the marine life in our most precious waters of Puget Sound and the Pacific Ocean. I cannot believe that legally they should be able to debilitate or kill the abundant species of fish and marine mammals which include the endangered Southern Resident orca whales. At least one juvenile orca exhibiting head trauma from an explosion has died. Please reconsider expanding the NW Training Range for the dire effects that will result.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Klingler (Electronic)</p>	<p>I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event. All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Knipper (Oral)</p>	<p>Hi. I just want to thank the Navy and Navy personnel for coming out. I really appreciate being here. So I appreciate you for showing up, but I don't trust your government nor my own, and it's really sad because it's the same government I served for. So as a former submariner -- oh, my name's Mark Knipper. And as a former submariner who served four years in the Navy, and a fifth-generation Californian who fell in love with nature in Scott Valley, which is here in Northern California, oddly enough I fell in love with marine mammals when I was on a nuclear submarine, because we could hear them through the hull, and I have them on recordings of reel-to-reel. And when we drove through the schools of dolphins, it sounded just like children playing in the school yard. I feel a real connection with these marine mammals, and I also know that it's foolhardy and absolutely useless to be doing the type of testing that you're doing out in the water. You cannot</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	convince me that active sonar can work better than passive sonar when passive sonar works so well. Trying to make a -- trying to put lipstick on a pig so that you can have surface craft find submarines is ridiculous when you have the technology that exists already to locate those submarines. We do not need to live in fear of other nations' submarines at this time in our lives. The earth is in jeopardy; and without dolphins and whales, the rest of us are going to die. We need every entity that exists on the planet, that was put here by some entity more knowledgeable and greater than the rest of us, to still continue to exist. We are decimating the planet at amazing rates, and we're losing hundreds of species on a daily basis. We cannot afford to lose sentient beings such as dolphins and whales because boys want to play with their toys. And that's -- I know that's all it is. Thank you very much.	during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Koch (Electronic)	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales and dolphins. These are highly intelligent and sentient animals with a complex social life that we have just started to understand! These precious creatures and their habitat must be protected!	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Kohut (Electronic)	I never believed how other countries claimed how barbaric an Godless our American military leaders are....until now. I have no clue what "rocket scientist fat ass, no brain wonder is in charge of this..but karma will be the great equalizer	Thank you for participating in the NEPA process.
Kolff (Electronic)	Dear Commander of the Pacific Fleet: As a long-time resident of the Salish Sea, I find the Navy's draft environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area of Washington to Northern California, lacking meaningful alternatives and mitigation strategies. Under this proposal, the Navy is	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>prepared to injure and possibly kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable--particularly because the Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. Please let me know your views on this issue. Sincerely, Helen Kolff</p>	<p>training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent,

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
<p>Komer (Written)</p>	<p>I am unable to attend the local public meeting in Fort Bragg, California on March 7, 2014. I am therefore mailing you my opinion about the Naval Warfare Testing Program.</p> <p>The United States Navy requests permissions from the United States Department of Commerce (NOAA), to kill thirty two species of marine mammals over five years in their Pacific Ocean Warfare testing program. The expansion of their area of operation will include the State of Washington, the State of Oregon, part of the state of Idaho, and Northern California. The final date for public comment is March 25, 2014.</p> <p>These designated areas will also include large areas of the Pacific Ocean from California to the State of Washington and areas along the border between the United States and Canada. Once implemented there is no date specified in E.I.S. for this Navy Warfare Testing Program to end although various documents show that thjs is a five-year Navy Warfare Testing program.</p> <p>The United States Navy has also published an application, as an addendum to their program, in the U.S. Federal Register. dated March 11 , 2009. This application from the Navy “ ... requests authorization to take individuals of 32 species of marine mammals during upcoming Navy Warfare testing and training to be conducted in the NWTR areas off the Pacific coasts of Washington, Oregon, and northern California over the course of 5 years.”</p> <p>Your website states: “ ... the Navy is employing protective measures to reduce environmental effects from military training and testing activities.” These “protections seem too limited and still allow for the taking of a large number of marine species. This is</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy does not propose the use of ordnance containing depleted</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>unacceptable. Rather than perform sonic experiments in the ocean environment, it seems reasonable to evaluate the efficacy of the sonar with computer modeling. This is exactly what nuclear science does in simulated computer tests.</p> <p>The Pacific and Atlantic Ocean belong to all the people of the world not just the United States. This “taking” of marine mammals negatively impacts the entire ecology of our oceans and the life in them which feeds large numbers of people and other species around the world. Now the United States government has decided that California, Oregon, Washington, and Idaho, and the Pacific Ocean marine life in those areas, are expendable in order to test more war weapons of mass destruction. It should be noted that the list of toxic chemicals is a long one as noted in the Navy E.I.S. Depleted uranium, red and white phosphorus, and a whole host of chemicals known to be toxic not only to man, but to marine life, are being served up on the “Navy Warfare Chemical Menu” that will contaminate our air, water, and soil.</p> <p>White Phosphorus is just one of the chemicals on Navy Toxic Menu: Berkowitz et.al (1981), in assessing the potential hazards associated with the use of phosphorus smoke munitions, reported that White Phosphorus residues in aquatic systems can be extremely toxic. Berkowitz stated that the deposition of washout of ... White Phosphorus, especially in water bodies may create exposure risks to resident finfish, invertebrates and waterfowl, even if resultant White Phosphorus concentrations are in the low ppb range. 1996)</p> <p>The ocean areas off the coast of Northern California are not a suitable venue for the use of chemical tests, nor is it efficacious to test live ammunition, explosions of aerial or underwater ordnance. Aquatic mammals, fish, invertebrates and birds are resident and migratory animals in these waters that likely will be negatively impacted. Furthermore, the possible resulting damage to downwind human population seems highly suspect and may be the subject of future litigation.</p> <p>I therefore implore you to stop these tests or at least to not expand the Navy's test areas to Northern California.</p>	<p>uranium or phosphorus. Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
<p>Kostuch (Electronic)</p>	<p>Please limit the navy sonar testing to areas where marine life will not be harmed- to not do so would be highly irresponsible and criminal.</p>	<p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Koutsoudakis (Electronic)</p>	<p>Please significantly lower the decibels in the sonar programs as well as any other programs involving sound in water. Many animals are proven to be extremely affected, damaged and killed from these processes. Whales' and dolphins' keen senses of hearing is vital in every aspect of its life history, including foraging for food, finding mates, bonding with offspring, communicating with other members of their species, navigating through lightless waters and avoiding predators. Experts agree that exposure to sonar blasts can cause serious injury or death from hemorrhages or other tissue trauma. Whales and</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>dolphins as well as others can also suffer from temporary and permanent hearing loss, displacement from preferred habitat, and disruption of feeding, breeding, communication and other behaviors essential to survival. Under the Endangered Species Act, "Take" of a protected species means more than death of a single animal. "Take" also includes actions that harass or harm protected species, and harm includes "significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering." 50 C.F.R. § 222.102." The Marine Mammal Protection Act contains a definition of "Take" that applies to all marine mammals. A take includes actions that cause either "Level A" or "Level B" Harassment. Level A Harassment are acts that injure or could injure a marine mammal. Level B Harassment are acts that disturb or could disturb a marine mammal by causing disruption of natural behavioral patterns, such as migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered" The National Marine Fisheries Service has given the Navy a permit that allows 650,000 takes of marine mammals over a five-year period. This means that the agency believes there will be 650,000 instances when a marine mammal is harmed, and multiple takes of the same animal is specifically anticipated The California Coastal Commission ruled unanimously against the Navy in March 2013 saying that the military did not have adequate information concerning their potential impact and that they were underestimating their figures. There has been a long history of lawsuits and federal intervention.</p>	<p>EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Currently sonar is the best technology for locating small objects in the water that we possess. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. Currently the decibel levels cannot be changed. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. The Navy funds monitoring and research that can include dedicated Marine Mammal Observers (see the reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Krause (Electronic)</p>	<p>Stop sonar testing in all waters. Marine mammals live in a world of acoustics - their life cycles are disrupted by our use of sound blasts in their vicinity- and that area can be very large as sounds travels great distances through the water. I think our use of sonar blasts in whale waters is an unwarranted use of force against other nations of peaceful residents that inhabit our oceans. Stop using sonar blasts in the ocean!</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Krivchenia-01 (Electronic)	Thank you for offering this opportunity for public comment. I appreciate that Federal Government agencies are becoming more and more interested in citizen input. I respect and understand the need of the U.S. Navy to conduct appropriate training exercises. It is important that these exercises are conducted with a minimum of environmental impact.	Thank you for participating in the NEPA process.
Krivchenia-02	Citizens of the San Juan Archipelago take environmental stewardship very seriously. We are particularly protective of our resident whales (Orcinus Orca), which are an environmental, cultural, and economic resource for us. Ample research demonstrates that undersea noise can be disorienting to marine mammals, especially the Orca which uses its own sonar technology to hunt for salmon. Additional threats to the Resident Orcas could be disastrous for their already tenuous existence in the Puget Sound.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Krivchenia-03	Please understand that a drop in the Orca population would be devastating for our local economy (whale watching is big business here, as are sea kayaking and ecological tourism in general).	Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore,

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		loss of revenue or employment associated with tourism is not expected to occur.
Krivchenia-04	<p>My humble request is that you concentrate the use of active sonar and explosives in areas that are already compromised by high human habitation, human development etc. Do your necessary work in places that are not important feeding grounds for our beloved sea mammals. With that in mind, I suggest that no location frequented by Orcinus Orca be included in your testing. The San Juan Islands should be completely off limits for sonar and underwater explosives, along with other critical areas of the Salish Sea. Thank you for taking the time to consider my requests. I look forward to a responsible choice from the US Navy and to continued communication on their use of sonar and underwater explosives. Respectfully, Grisha Krivchenia</p>	<p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species’ entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, “existing density estimates, range-wide distribution data, information on population trends and life history</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>parameters, known threats to the population, and other relevant information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS’ identification of BIAs. The same marine mammal density data present in the Navy’s Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
Kronen (Electronic)	<p>To whom it may concern; I watched the 6 minute video explaining the importance of using sonar for Navy practices. I am not convinced that the safety of the mammal and fish life in these waters are going to be protected. No specific information was given. I am against the use of sonar by the Navy in these waters. It is not ethical to disrupt the life of the sea creatures so we can prepare for wars which are better not fought. We need to become the humanitarians of the world...truly helping in countries where we have terrorist enemies by helping to end poverty and by building schools and hospitals everywhere. We may still have enemies...but they will not have the support. Let us not sacrifice the beautiful beings in the oceans for our own inability to solve world problems with diplomacy and peace. Thank you.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Kunzler – 01 (Electronic)	<p>Why don't you just take this training out to... PADILLA BAY? Off of NW Whidbey Island? Give us some quality entertainment for the entire family. I consider the air quality to go DOWN when I look out and see some flying TUBE instead of a P-3 or P-8. Of course, an EA-18G is GREAT for air quality and Garrett Newkook is BAD, VERY BAD for air quality. There. Keep on kicking ass for this country (Y)!</p>	<p>Thank you for participating in the NEPA process. However, this comment is outside the scope of the NWTT EIS/OEIS.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Kunzler – 02 (Electronic)	<p>My air quality is low. Very low. See I want you guys to LOW FLY ME, DAMMIT. Get that - LOW FLY? As an American taxpayer who is a JET NOISE ENTHUSIAST, I rightfully demand that you put a low-fly training route from Skagit Regional Airport over to Sedro-Woolley and at turn point LINDA (Frees Kunzler, my mom and a retired special needs paraeducator - pretty much a hero) you have your jets turn north and low fly into the Kunzler Valley. At point ANA (Marie Brown, one of our nation's last EA-6B angels), you will be over the town of Saxon (48° 41.259'N, 122° 11.419'W). Aircrew will be low enough when you look up and see nice slabs of foothill. At point ERICA (Burfield Butler, after one of your current servicemembers), you will need to turn hard to port (48° 49.083'N, 122° 11.967'W). At this point you better be cooking with gas because dammit, What-for County needs some global warming. At point KELLY (Siebecke Simthart, one of the heroic civilian defenders of OLF Coupeville) on Kelly Road, you'll want to turn southwest (48° 49.117'N, 122° 22.213'W). You'll really want to decide whether or not Bellingham deserves to be boring or not at this point. At point ERIN (Kurz, one of the action figure heroes who teaches how to fly EA-18Gs), you'll REALLY want to brace yourself for another run through the mountains (48° 43.626'N, 122° 32.726'W). You're going to turn southeast over Bellingham Bay. At point HEATHER ("Fish" O'Donnell, after the haht EA-6B jock who helped liberate the Iraqi people), you better be fishing (48° 39.852'N, 122° 23.126'W). You'll be right over Lake Samish so for G*d's sake if you got afterburner and flares, USE 'EM. At point JILL (Johnson, a great Island County Commish helping defend OLF Coupeville), you may either turn for point LINDA and restart the fun or go home (48° 30.455'N, 122° 18.237'W). Yes, that's on Cook Road. That's about a 60+-mile low-fly route. For G*d's sake, if you're going to subject yourself to the Beyond Stupid from Maryon Attwood and her ilk of environmentalists who don't appreciate who defends our freedom to debate issues then make damn sure you give the FANS of the Navy something to cheer about. Like I don't know, training *IN* our community. Low flying and OLFing where we can give you moral support!! Bombing and strafing ranges like I don't know... where you can charge admission to fully fund the VA! You get the picture, right? These people who put down our Navy, well I have a message for them since they'll FOIA for my comments: LEARN TO BE GRATEFUL WE LIVE IN AMERICA, NOT UKRAINE. LEARN THAT OUR NAVY STRIVES TO PROTECT OUR MOTHERS **AND** MOTHER EARTH. LEARN THAT IN THIS COUNTRY, THE MILITARY ANSWERS TO ALL OF US - AND NOT JUST WHINERS WHO BITCH & MOAN ABOUT SONAR TRAINING TO INTERCEPT ROGUE SUBMARINES TRYING TO SMUGGLE WHO KNOWS WHAT INTO OUR LAND. LEARN THAT TO GUYS LIKE ME, WHEN THE US MILITARY IS KICKING ASS OVER MY HEAD, I WANT TO JOIN THEM SO WE DON'T WAKE UP TO ANOTHER 9/11 BUT ONE DAY TO WORLD PEACE, A CURE FOR CANCER AND COLONIZING MARS. THE FASTEST WAY THERE IS A STRONG US MILITARY SO STOP YOUR BITCHING, YOU LEFTY ENVIROS! THERE. Thanks US Navy :-).</p>	Thank you for participating in the NEPA process.
Lake	the sonar and explosives will kill whales and other marine life, don't do it, please, there is	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	another way to live in harmony and not destroy our seas and planet!!!	
Lalancette (Electronic)	I am unable to attend tonights US Navy public meeting in Poulsbou, WA and wanted to write to voice my deep concern in the Navy dopping bombs and testing sonar along the coasts of CA, OR and WA and in the inland waters of the Salish Sea. Marine mammals in this area are threatened on a daily basis and their habitats are being destroyed. The emphasis should be to spend our tax dollars on protecting their habitats instead of the opposite. If the US Navy's permit is renewed this means more ocean life will be destroyed. It is critical at this stage that we make every effort possible to protect the ocean that so many animals call home in this beautiful area. There are only 80 individuals left in the ENDANGERED Southern Resident Orca Population and each of them will be threatened. These animals need our protection! Please do not renew this permit!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Laliberté (Electronic)	I urge you to put an end to sonar exercises that interfere with, wound or otherwise harm whales and other marine mammals. By your own admission, this exercises will harm these mammals 2.8 million times over 5 years. This is unacceptable and should end - no exercise is worth creating this amount of pain in another species that is sentient and essential to maintaining biodiversity in our oceans. Thank you.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Lane (Electronic)	The military must reconsider its role and look beyond warfare to survival through conservation of our seas. The sonar blasts are damaging to ocean mammals at best and fatal at worst. It's time to wake up and stop this cold war mentality and work towards peace and protection of our planet. We are at a critical juncture here and the time is now. NO MORE SONAR BLASTING and TESTING!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Langworthy (Electronic)	It is unconscionable to cause distress and even death to marine animals! Please do the right, moral thing and cease sonar activities in the oceans! The "safeguard protections" I've read about are laughable. Talk about the fox guarding the henhouse. Respect the habitat of these amazing creatures!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
LaRue (Electronic)	This is disgusting! These animals do not deserve this! Protect them! Your no better than Japan! I can not support the navy! Suffering and killing our animals is not the answer! There has to be another way. I hope you don't get the renewal. This is psychotic behavior! I don't think people are going to feel safe with the "navys protection" If you want to protect someone protect those animals your killing!	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.
Lau (Electronic)	Naval activities that involve sonar testing and explosives have unforeseen consequences on the environment that should be taken seriously. I do not believe that the consequences of such tests have really been fully researched or tested and that seriously negative	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>affects can be and will be attributed to the surrounding marine life. These include large marine mammals such as whales, the local marine life that include a wide variety of fish species and other local aquatic life. Evidence would suggest that such naval testing with sonar and explosives could impact wildlife migratory patterns and cause death whether through impact of the testing. In conclusion, I would strongly be against any naval testing in the waters.</p>	<p>the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Lauritzen (Electronic)</p>	<p>Dear Commander of the Pacific Fleet, The Navy's draft environmental impact statement for the NW Training Range, a vast area stretching from Puget Sound to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to kill and injure thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Weapons testing should not be done in marine sanctuaries anywhere. This area includes the Olympic Coast National Marine Sanctuary. Our west coast waters have some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, threatened and endangered species of rockfish, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. In all of North America, the state of Washington, in particular, has The greatest number of endangered marine species of any state or province in North America The most depressed fisheries of any state or province (according to the American Fisheries Society) The least amount of habitat designated and protected as marine reserves or sanctuaries for the restoration of fisheries of any state or province The most closed or restricted fisheries for recreational fishing of any state or province in North America. The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable especially in any marine sanctuaries — particularly because the Navy's plan fails to adopt common-sense measures that would</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put all critical marine habitats and sanctuaries off-limits to sonar and explosives, something it is not now willing to do despite the scientific community's view that this would be the most effective means of reducing harm and simultaneously restoring our marine fisheries. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. Sincerely, Helen Lauritzen 325-33rd St. Port Townsend, WA 98368</p>	<p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Lazich (Electronic)	I am against any sonar testing that may affect or hurt marine life.	Thank you for participating in the NEPA process.
Lebo (Electronic)	I am against sonar blasting by the U.S. Navy. I'm sure they can find another way to protect our country. My question. Have we ever had to use sonar as a killing tool before? Why now? Life in the ocean is precious. Please consider protecting it, not killing it. Thank you, Diane Lebo	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Lechner (Electronic)	Given that detecting marine mammals reliably enough to assure that no mortalities will take place, as claimed in the Navy's EIS, is essentially impossible, the long-term challenge is to reduce the need for these training exercises altogether, which is a problem of international relations and diplomacy.	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
C. Lee (Electronic)	I have heard that you are going to use sonar in Puget Sound and San Juan Islands. It has been proven this kills marine wildlife. How can you even think of such an offensive action. I thought the navy was here to help and protect, not kill!!!	Thank you for participating in the NEPA process.
K. Lee (Electronic)	I strongly disagree with expanding sonar testing in the pacific northwest. The pacific northwest is vital habitat for a number cetacean species including the endangered resident orca populations and grey whales. Sonar testing in this region is plain irresponsible on the navy's part and puts cetacean populations at risk. Sonar testing should be as restricted as possible and only occur in places with low cetacean occupation.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>P. Lee (Electronic)</p>	<p>Enough already with Navy-sanctioned torture of creatures who have no say in human decisions. The Navy requires training in all seasons, all times, to stay competent at sonar detection? Sounds like the rest of the world (and by that I include all animals and plants) is just supposed to roll over and take it, on the tired old pretext of "defense." I have a different proposal: every Navy representative who claims their method of "mitigating" destruction and injury is acceptable should be held in a sealed room and required to stay there for hours while subjected to blasts that simulate the organ-exploding effects that some marine mammals are exposed to. If that means the human equivalent of 115 dB to a porpoise or whale under water turns out to be much greater than 115 dB to a human on land, OH, WELL. Sorry about that deadness thing. Or maybe it's "just" deafness...you guys don't actually listen well anyway, so why do you need ears?</p>	<p>Your opposition to the Proposed Action is noted; however, the Navy must balance its commitment to protecting the environment and specifically marine life with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Lees (Electronic)</p>	<p>The Southern Resident Orcas are struggling to avoid becoming extinct due to a serious lack of their primary food, King Salmon, and pollution of their environment. Whilst I understand the Navy needs to take part in training exercises, they do not and should not be allowed to do sonar testing & live firing exercises in the Critical Habitat of the SRKW's. The Critical Habitat of the SRKW's, which are listed on the endangered species act, stretches along the entire coast of Oregon, Washington and BC as well as the waters of the Salish Sea. I believe that if testing was conducted further out to sea then both the navy can do its testing and the SRKW's and other important Marine mammals, can be protected.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
Lehde (Electronic)	I am strongly against using the waters of the Pacific NW as testing ground for underwater explosives. It is cruel to all of the marine life that we share this delicate planet with. I'm particular concerned with the impact to marine mammals and their behavior - including the endangered Orca. Find a better way.	Thank you for participating in the NEPA process.
Lemon (Electronic)	Please help save the lives of intelligent and caring beings. Stop hurting them with underwater testing of all sorts. We need to STOP being selfish and share this planet.	Thank you for participating in the NEPA process.
Lemire Brooks	I'll send my formal statement by email or written; but I just wanted to come out here and speak for the voiceless, which are the animals out there and all the marine life that's going	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>(Oral)</p>	<p>to be affected by the training that you intend to engage. I'm a believer in all life -- ours, which you're protecting, and theirs, which they can't come here and speak to you on their behalf. I don't think that you're out to harm them, but there's going to be harm to them and their home. I'm concerned about all of the whales and orcas and dolphins out there. My primary concern or focus tonight is the southern resident killer whales which are an endangered distinct population that you're well aware of, that some people in the room may not be. We had no live births last year in all of 2013. We have the lowest number we've had in 10 or 15 years, I'm not quite sure. They're at a critical point in their recovery and they're not thriving, and where your activities are going to be taking place are in their winter home. They spent an enormous amount of time off the Columbia River last year and we know this through the tagging with NOAA. They all have names. They all have numbers. Our economy, people's livelihoods depend on them. That's not my primary concern for them. I believe that they just have a right to exist. In their world, there's no escape from anything that any of us do to them. If we want to talk economics of our region here, our natural resources are a huge part and they're a huge part and they're an identifier. Young children adopt them. Granny J2 is over a hundred years old. I don't know how much you all know about Granny. They're a family, just like you're a family. They have grandchildren. They stay together for life. They have siblings, aunts, uncles. We might come to different beliefs in who we want to protect, so I'm here to protect them as you're here to protect us. The way you think about our country, me and my community of people think about them. They're intelligent. They're bonded for life. They stay together for life. That has to be taken into account. You wouldn't just go into some area and find it acceptable to just take it out. Can I keep going a little?</p> <p>What I want to speak to is just the rationality of what this means for them and their community. It's important. They have a life just as we do. I don't think you're out to harm the animals; but I'd actually like you to consider them, consider that they have a family and life just as we do. They're bonded. They think. They protect each other. They travel together. Everything that we do as community and as families, they do too. I don't know if everyone's aware of that, but it's really a phenomenal thing that we've come to know through your research, through NOAA's research, from scientific research and marine biologists. We have a phenomenal resource here. They have a right, and I want to see that that continues. The southern residents are declining. There's many other factors besides this but if one of them is taken out, that could mean the end. It could mean no rebound for that natural line or that family. So that's what I'd say to you tonight, and I thank you for your time and consideration. Please utilize any of our networking, you know, Orca Network, any of the hydrophones, you know. Have that be somebody's job. Pay attention to us. You have nerds out here that all we do is sit and listen for them or watch for them. If that could be, you know, implemented. I know you have your own protocols and your own mitigation things, but we're out here and we could help if this is going to go through. I'm sure that some amount of it is going to. I would ask that you not, in their</p>	<p>significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	habitat. Thank you.	
Leon – 01 (Electronic)	I strongly appose the use of sonar testing and all other deadly testing that will impact ALL MARINE LIFE. It is a fact that underwater explosions deafen cetaceans! They rely on their sonar capabilities to survive! Stop these activists in Puget Sound PLEASE!!!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Leon – 02 (Electronic)	I STRONGLY APOPOSE SONAR TESTING AND ALL OTHER DEADLY TESTING THAT WILL IMPACT AL	Thank you for participating in the NEPA process.
Leon – 03 (Electronic)	I strongly APOPOSE ALL sonar and naval testing in Puget Sound as it will definitely have a negative impact on all marine life, especially CETACEANS. They are dying because of your testing..sonar testing/underwater explosions deafen them! They rely on their own solar capabilities to survive..please stop your testing now!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Leszczynski (Electronic)	“I am writing in opposition to the Navy’s proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".</p>	<p>the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Levy-Boyd (Electronic)</p>	<p>My main concern is to have the public informed ahead of time of all the impacts this operation will have on the ocean mammals as well as the faun floor of the ocean and for the people living off the coast. To guarantee that assessments will be regularly done during the time of operation and be supervised or checked by representatives of agencies who are not part of the Navy. To establish a limit of what is being done based on safety for the environment and people, which will imply to have by -laws, agreeing to stop the operation before its completion if enough evidence of destruction is proven. More money and research to create a healthy nation will bring more security and prosperity, than building mass destructive weapons to kill enemies we make by wanting to control the world.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>M. Lewis (Electronic)</p>	<p>The US military should not be exempted from any environmental regulations. The US military has a huge ocean to play war games in and should judiciously select an area for training based on where it will do least harm to the environment and wildlife. All training operations in National Marine Sanctuaries or other legislatively-protected areas and habitats should be prohibited. Training operations scheduled to occur outside of legislatively-protected zones should not proceed if the presence of marine mammals or endangered species is verified. Vessels carrying out these operations should be required to have on board a biological observer from an independent agency (non-military and non-governmental) to ascertain the presence of marine mammals and if necessary cancel the operation.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>any adverse impacts on Sanctuary resources and qualities.</p> <p>Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS.</p>
N. Lewis (Electronic)	Please, there must many other suitable locations to do your testing that does not involve the territory of the orcas!	The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Li (Electronic)	Hello, I understand the Navy has proposed new sonar tests along the West coast. I would like to encourage you to reconsider. These tests will have a horribly destructive result on whales and dolphins in the area, who are integral parts of the ecosystem. This will affect the entire ecosystem, including many endangered species. Please do not conduct these sonar tests. Thankyou, Alan	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Liddle (Electronic)	I am endorsing the following letter to you sent by Sadie Bailey of Orcas Island: "I am writing with grave concerns about the Navy's proposed use of sonar and undersea explosions in the Northwest Training Range. I live in the San Juan Islands – Endangered orca whale country. There are only 80 orcas left off the entire coast of Washington, Oregon, and California. Orcas already face many man-made threats along their migration routes, without more preventable and needless deaths. People come from all over the world to see the whales off the Pacific coast. Many of our coastal economies depend on eco-tourism and fishing, but our concern for the wellbeing of cetaceans goes far deeper – we love, appreciate, and respect these highly intelligent beings. Marine mammals are extremely sensitive to noise. Sonar destroys important habitat and disrupts the essential	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>behavior of killer whales, blue whales, harbor porpoises and other marine wildlife. If you deafen a cetacean, you essentially kill it, destroying their navigational and communication abilities. Has the Navy considered the deafening of whales in its kill estimates? What about other cetaceans affected, and the loss of habitat and food supply caused by sonar and explosion testing? What are the real numbers when it comes to maimings and deaths? In 2004 the Navy’s sonar was implicated in a mass stranding of as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. And in 2003 the USS Shoup exposed a group of endangered orcas to sonar in Washington’s Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound. There is no need for this torture of innocent marine mammals – and it IS torture. Who will be physically and fiscally responsible – the Navy, or the U.S. taxpayers – for cleaning up the carnage of whale and dolphin corpses, or worse, dying cetaceans that we’re powerless to help, washed up on our beaches? And how do we explain to a traumatized population, to our kids and grandchildren, WHY these magnificent creatures died – needlessly – at the hands of our own military? The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on the region’s valuable wildlife. Has it been scientifically proven that the impacts even can be mitigated? Our cetacean populations are sacred to us, and to the many First Nations Tribes and Bands along our coasts – who ultimately have final say in what happens to our waters, under National and Tribal Law. The waters of the United States, including marine environments, belong to First Nations and the people, under the Clean Water Act. What other effects on our waters will sonar testing and explosions have? What else will they kill, and in what estimated numbers? How else will they pollute? How else will they warm and acidify our oceans? What will they do to the marine food chain, and to coastal economies and Aboriginal cultures? Have these questions and many more, been considered, and satisfactorily answered? Have outside, unbiased Academic Marine Biologists weighed in on the EIS? Who really stands to make their fortunes, or increase them, on these weapons tests, against the will of the U.S. taxpayers footing the bill? As you continue to provide for our country’s defense, please find a way to train that respects and protects our natural resources and our ocean’s sensitive wildlife, and the people who see the value in cetaceans.” Sincerely, Lesley Liddle of Orcas Island</p>	<p>impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
Liden (Written)	I wish to add my voice to those calling for no additional activity within the NWTT Study Area. Ongoing or expanded training and testing activity in the study area has significant and detrimental impact on the annual gray whale migration from Mexico to Alaskan waters. Certainly these and other creatures have preeminent right to the ocean	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>environment where this training and testing activities occur. Training and testing must be moved further offshore and away from sensitive marine habitat areas.</p>	<p>testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>Nearly all of the Navy's proposed activities would continue to occur outside 12 nm. To stay outside of a specific distance, such as 100 miles, would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average, ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).
Lindsay (Electronic)	I feel the sonar testing off the north coast of California is essential to our national defense and has minimal impact on creatures of the sea. I see no impact to humans or environmentalist. Lets us some common sense	Thank you for participating in the NEPA process.
Linnea (Electronic)	Training exercises using sonar and explosives will cause irreparable harm to whales and dolphins in the testing area. Numerous studies show this to be the case. No training exercise is so important that innocent sea mammals should be harmed. None.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Lish (Electronic)	Subject: Protect Marine Mammals From Deadly Sonar and War Games -- Northwest Training and Testing (NWTT) Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) Dear Secretary of the Navy Ray Mabus and Commander of the U.S. Pacific Fleet Admiral Harry B. Harris, Jr., I am writing with serious concern about the Navy's proposed use of sonar in the Northwest Training Range. Marine mammals are extremely sensitive to noise, and sonar destroys important habitat and disrupts the essential behavior of killer whales, blue whales, harbor porpoises and other marine wildlife. "It is horrifying that we have to fight our own government to save the environment." -- Ansel Adams In 2004, the Navy's sonar was implicated in a mass stranding of as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. And, in 2003, the USS Shoup exposed a group of endangered orcas to sonar in Washington's Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound. "Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose and method." -- Theodore Roosevelt The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>the impacts of training and testing on the region's valuable wildlife. "Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish--indeed, all the living creatures of prairie and woodland and seashore--from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement." -- Theodore Roosevelt Please, as you continue to provide for our country's defense, find a way to train that respects and protects our natural resources and our ocean's sensitive wildlife. "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." -- Aldo Leopold Thank you for your consideration of my comments. Please do NOT add my name to your mailing list. I will learn about future developments on this issue from other sources. Sincerely, Christopher Lish Olema, CA</p>	<p>Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>effort, were completed and published in March 2015.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Littlefield, West Coast Director (Electronic)	Sonar testing in coastal waters is well-known to damage the habits of many sea creatures, including whales and dolphins. Alteration of normal migration habits effects the larger eco-system which has dangerous consequences for coastal fishing and environmental health of the ocean. Please, do not use sonar testing and explosives off the California coast.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations or damaged habitats or other sea creatures in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
J. Locke (Electronic)	The people do NOT consent to the testing you're doing that harms and kills marine life. Stop it now!	Thank you for participating in the NEPA process.
N. Locke (Electronic)	Navy sponsored and other studies continue to identify the negative impacts of navy training activities and associated underwater noise on orcas and other marine life. I do not support the Navy's choice in continuing these activities and am fearful that these activities are contributing to the decline of the orca population in the pacific northwest and elsewhere.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Loesch (Electronic)	Stop navy's proposed plan!!! It is deadly to the Orcas in Puget Sound! Save the Orcas!	Thank you for participating in the NEPA process.
Lombard (Electronic)	I am a resident of san juan county, and am very much against the sonar testing and underwater explosions planned for the Salish sea/north puget sound area. This area is a haven for Orcas and dolphins, plus the seafood chain that supports their fragile existence here. The Navy's sonar testing is known to have a severe negative impact on our marine life, and I have advised my elected officials that this testing is not appropriate for our area and should be discontinued immediately.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Long (Electronic)	Navy's failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area is both unacceptable and unconscionable--particularly because the Navy's draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>acidification and noise pollution. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH; this change has occurred on average in the global oceans due to anthropogenic carbon dioxide. Also, the draft does not consider the tourism industry and economic loss to the region. Sue Long</p>	<p>(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>given population, and consequently will not result in any adverse changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Loudin (Electronic)</p>	<p>We are writing with grave concerns about the Navy’s proposed use of sonar and undersea explosions in the Northwest Training Range. We live in the San Juan Islands – Endangered orca whale country. There are only 80 orcas left off the entire coast of Washington, Oregon, and California. Orcas already face many man-made threats along their migration routes, without more preventable and needless deaths. People come from all over the world to see the whales off the Pacific coast. Many of our coastal economies depend on eco-tourism and fishing, but our concern for the wellbeing of cetaceans goes far deeper – we love, appreciate, and respect these highly intelligent beings. Marine mammals are extremely sensitive to noise. Sonar destroys important habitat and disrupts the essential behavior of killer whales, blue whales, harbor porpoises and other marine wildlife. If you deafen a cetacean, you essentially kill it, destroying their navigational and communication abilities. Has the Navy considered the deafening of whales in its kill estimates? What about other cetaceans affected, and the loss of habitat and food supply caused by sonar and explosion testing? What are the real numbers when it comes to maimings and deaths? In 2004 the Navy’s sonar was implicated in a mass stranding of as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. And in 2003 the USS Shoup exposed a group of endangered orcas to sonar in Washington’s Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound. There is no need for this torture of innocent marine mammals – and it IS torture. Who will be physically and fiscally responsible – the Navy, or the U.S. taxpayers – for cleaning up the carnage of whale and dolphin corpses, or worse, dying cetaceans that we’re powerless to help, washed up on our beaches? And how do we explain to a traumatized population, to our kids and grandchildren, WHY these magnificent creatures died – needlessly – at the</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>hands of our own military? The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on the region’s valuable wildlife. Has it been scientifically proven that the impacts even can be mitigated? Our cetacean populations are sacred to us, and to the many First Nations Tribes and Bands along our coasts – who ultimately have final say in what happens to our waters, under National and Tribal Law. The waters of the United States, including marine environments, belong to First Nations and the people, under the Clean Water Act. What other effects on our waters will sonar testing and explosions have? What else will they kill, and in what estimated numbers? How else will they pollute? How else will they warm and acidify our oceans? What will they do to the marine food chain, and to coastal economies and Aboriginal cultures? Have these questions and many more, been considered, and satisfactorily answered? Have outside, unbiased Academic Marine Biologists weighed in on the EIS? Who really stands to make their fortunes, or increase them, on these weapons tests, against the will of the U.S. taxpayers footing the bill? As you continue to provide for our country’s defense, please find a way to train that respects and protects our natural resources and our ocean’s sensitive wildlife, and the people who see the value in cetaceans. We await your reply.</p>	<p>Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Lourie (Electronic)</p>	<p>To whom it may concern, Our family is extremely concerned over the US Navy's Sonar Program and how it endangers whales. We request that the Navy find another way to practice military drills than to do them in waters where whales feed, mate and give birth. Orcas are an endangered species and they need every protection. The effects of sound have not been addressed in the Navy's Environmental Impact Statement. Sound waves threaten the health and existence of these great mammals that are so important in our waters. Sound penetrates an orca's body and can cause hemorrhage leading to death. We urge you to reconsider the use of LFA sonar and to consider the cumulative effects of sound on all marine life. Their lives are in your hands. PLEASE, stop the Sonar Program.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. The Navy does not use Low Frequency Active Sonar, it uses Mid Frequency Active Sonar in the training or testing that is included in the Proposed Action. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Lowe (Electronic)</p>	<p>This pertains to the proposed sonar and marine explosives testing off the west coast of the United States. I strongly encourage the Navy to avoid known zones of feeding and other activity, as well as active migration corridors, by a wide berth during this testing. Given the transmission of sound through water, mere visual avoidance is not enough and, in particular, ignores the deep-diving animals that seem to respond the most negatively (die most often) from this sort of testing.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
Lu – 01 (Electronic)	Please do implement testing that will harm or affect marine wildlife. I do not pay hard earned tax dollars for this.	Thank you for participating in the NEPA process.
Lu – 02 (Electronic)	As a tax payer and a human being I do not condone any kind of military, naval, or any type of testing or activity that can cause an adverse effect to the health and well being of marine animals or their ecosystem.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Lundgren (Written)	I attended your presentation in Fort Bragg, CA and spoke to officers in addition to listening to your video and the Q&A. Ultimately, I continue to be concerned about the potentially devastating effects of current & increasing maneuvers on our coast. As a major migration path for gray whales in addition to other marine mammals & pelagic birds, the environmental risks are too high – especially when there are apparently numerous other Pacific & Atlantic sites where testing is already occurring. Although our gray whale count is currently high, there is usually a drastic "plunge" in their counts as soon as a height such as this is achieved. Increased noise and activity may confuse and harm them, in addition to the obvious risk of relying on visual sighting of mammals as a way to avoid encounters with them. I choose "rights of nature" over increased war maneuvers. Stop	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	this proposal before more damage is done.	impacts to marine mammal species or stocks.
Lydgate – 01 (Electronic)	The EIS document is overwhelming in its scope and complexity; Volume one is 878 pages and Volume 2 is 940 pages. It's intimidating. How can the common person without specific expertise provide meaningful comments to this process? The Navy should conduct its operations with no take. At the public hearing in Eureka, not a single person spoke in favor of the proposal. Please use the precautionary principle in this context and do no harm to our environment. The Navy has the responsibility to conduct its operations with zero significant detrimental impacts. I believe that this NEPA process is too inflexible in that it does not allow the public to submit emotional testimony in a way that can be utilized by the Navy in considering the a review of the EIS.	The Navy went to a great amount of effort to coordinate and organize the public meetings to meet the needs of all of the public. The format allowed for ample opportunity for valuable exchange of information between the public and Navy subject matter experts. The meetings also provided opportunity for individuals to comment publicly or privately, orally or in writing.
Lydgate – 02 (Electronic)	The Navy is doing itself a dis-service by threatening marine mammals with this proposal. My logic is that the Navy is going to reduce its ability to achieve its strategic mission by alienating itself from the general public. Let me explain; whales are important to the public. By potentially harming whales, the Navy makes itself unpopular and undermines public support. This may have tragic strategic consequences as this EIS reduces the credibility of the Navy in the public eye. If the public are in emotional opposition to the Navy, they are going to want to reduce the funding the Navy receives. See where I am going with this? Follow through with the insult to whales and watch future Navy funding decrease. This EIS may cause a loss of funding that may compromise the ability of the Navy to achieve its strategic mission. For this reason, I ask that the Navy assure that its operations do not have any “taking” of marine mammals.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Lydgate - 03 (Electronic)	The proposed activities are expected to injure, disturb or kill more than 100,000 individual animals, including 29 different marine mammal species protected under the Marine Mammal Act. This is simply unacceptable. The proposed activities can cause whales and dolphins to abandon important habitat, halt foraging behavior and forgo critical feeding opportunities needed to survive. Once again, not acceptable. Similar testing and training projects have resulted in mass strandings elsewhere, which is not adequately addressed in the Environmental Impact Statement. This proposal does not ensure adequate mitigation of activities to prevent harm to sea life. In particular, on-ship “lookouts” are an insufficient means of detecting nearby marine mammals. Areas of critical habitat, foraging and feeding have been identified and should be avoided. Establishment of “exclusion zones” around these areas would go a long way to protecting endangered species, such as the blue whale. More progressive alternatives to traditional training and testing should be explored; simulations and other non-harmful training methods should be emphasized	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>and utilized to the maximum degree.</p>	<p>been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p> <p>As stated in the Final EIS/OEIS, Section 3.4.2.5 (Marine Mammal As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.
Lydgate – 04 (Electronic)	The Navy is doing itself a dis-service by threatening marine mammals with this proposal. My logic is that the Navy is going to reduce its ability to achieve its strategic mission by alienating itself from the general public. Let me explain; whales are important to the public. By potentially harming whales, the Navy makes itself unpopular and undermines public support. This may have tragic strategic consequences as this EIS reduces the credibility of the Navy in the public eye. If the public are in emotional opposition to the Navy, they are going to want to reduce the funding the Navy receives. See where I am going with this? Follow through with the insult to whales and watch future Navy funding decrease. This EIS may cause a loss of funding that may compromise the ability of the Navy to achieve its strategic mission. For this reason, I ask that the Navy assure that its operations do not have any "taking" of marine mammals. I respectfully submit that this EIS may lead to the reduction of the Navy budget.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Lydgate – 05 (Electronic)	Military sonar may cause whales to panic and surface too rapidly leading to a form of decompression sickness. Trauma caused by rapid changes of pressure is known as barotrauma. The notion of acoustically enhanced bubble formation was covered in a paper published in The Journal of the Acoustical Society of America (1996) and Nature (2003). Acute gas-bubble lesions (indicative of decompression sickness) were discovered in whales that beached shortly after the start of a military exercise off the Canary Islands in September 2002. The Navy should assure that its operations are not associated with any marine mammal strandings.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Lydgate – 06	The No Action Alternative is misleading because this alternative actually defaults to the	The alternatives carried forward meet the Navy's purpose and need to

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	current "baseline" level of testing and training activities. A true No Action Alternative would have no potential impacts on the environment. This Draft document is flawed. How can the public support the Draft EIS if none of the Alternatives are acceptable? I humbly request that the Draft EIS be rejected and revised to allow the public to comment on an Alternative that does no harm to the environment. It is not acceptable for all of the Alternatives to have potential negative impacts. This EIS/OEIS is not in compliance with the spirit of the NEPA process.	ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy is completing this EIS/OEIS in compliance with current law, primarily the National Environmental Policy Act (NEPA). In addition to NEPA, the Navy continues to comply with other applicable environmental laws and with a number of regulatory requirements, such as the Marine Mammal Protection Act, the Endangered Species Act, the Coastal Zone Management Act, and the Magnuson-Stevens Fishery Conservation and Management Act. NEPA requires that an Agency prepare a "No Action Alternative." In the case of on-going activities, that alternative is required to provide a baseline against which to measure proposed changes. Therefore, the Navy has complied with NEPA.
Macbride (Electronic)	Stop this testing! Stop destroying our wildlife! There MUST be a more advanced method of testing then this primitive model. Use our tax money for developing that instead of killing off the life on OUR Planet!!!	Thank you for participating in the NEPA process.
A. Macdonald (Electronic)	Please, please, do not consider the expansion of the Nw training range. The orca population in the region is so fragile and we are so fortunate to have a shred of hope to be caretakers in such a remarkable group of animals. People come from hundreds and thousands of miles (myself included) to witness a moment of the majestic orca. Once these remarkable creatures are gone it is forever which outweighs any benefit that could be achieved with your expansion.	Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.
B. Macdonald - 01 (Electronic)	Navy Comments U.S. Naval Command, Northwest 1101 Tautog Circle, Suite 203 Silverdale, WA 98315 -1101 http://nwtteis.com/GetInvolved/OnlineCommentForm.aspx Dear Commanders and Servants of the American People, I am amazed and concerned about your tentative plans to injure and destroy our marine environment for the sake of "training" in the "arts" of defense against an extremely improbable enemy attacking our shores. Currently we, the American people, are deciding the fate of our planet; the oceans are a super-critical aspect of that effort. We are discovering the limits of damage that our activities are impacting on the ecology of land and sea; early estimates show that our impacts have moved us to a critical place in the disruption of fundamental cycles of ocean ecology. This trend must be reversed IMMEDIATELY by changes in our behavior; claims of insanity are insufficient. Your sonars are foul torture weapons; your high speed craft shrieking demons to an ocean whispering to it's creatures, your bombs horrible weapons of cruel death to quiet peaceful beings, and your continuing presence on the sea an abomination and disrespect of life on the planet. My comment is that you have no moral right to conduct such unethical activity on our oceans and you are endangering the	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	planet itself. My request is that you cease all such unnecessary operations off the West coast of North and South America. Mitigation is insufficient; we are all witness to our mutual responsibilities to protect the planet.	with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
B. Macdonald – 02 (Electronic)	Dear Commanders and Servants of the American People, I am amazed and concerned about your tentative plans to injure and destroy our marine environment for the sake of “training” in the “arts” of defense against an extremely improbable enemy attacking our shores. Currently we, the American people, are deciding the fate of our planet; the oceans are a super-critical aspect of that effort. We are discovering the limits of damage that our activities are impacting on the ecology of land and sea; early estimates show that our impacts have moved us to a critical place in the disruption of fundamental cycles of ocean ecology. This trend must be reversed IMMEDIATELY by changes in our behavior; claims of insanity are insufficient. Your sonars are foul torture weapons; your high speed craft shrieking demons to an ocean whispering to it's creatures, your bombs horrible weapons of cruel death to quiet peaceful beings, and your continuing presence on the sea an abomination and disrespect of life on the planet. My comment is that you have no moral right to conduct such unethical activity on our oceans and you are endangering the planet itself. My request is that you cease all such unnecessary operations off the West coast of North and South America. Mitigation is insufficient; we are all witness to our mutual responsibilities to protect the planet.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Maciejewski (Electronic)	The Navy's failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area is both unacceptable and unconscionable--particularly because the Navy's draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH; this change has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Mack (Electronic)	Please don't do this here or anywhere for that matter. :(animals dying is not worth it!	Thank you for participating in the NEPA process.
Mackey (Electronic)	Navy Sonar and Explosives Testing in NW Waters to Harm Thousands of Endangered Marine Mammals. The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.
MacLeod (Electronic)	I am opposed to using sonar or explosives in the Puget Sound marine environment. A deaf whale is a dead whale. the importance of naval exercises that harm wildlife pales in comparison to a healthy marine ecosystem. Why are we more concerned about being war-ready than we are about respecting the lives of other species? The Navy should immediately cease any activity that harms wildlife.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Maeding (Electronic)</p>	<p>I am very concerned about the use of sonar & explosives in the ocean. I do not agree with the Navy's plans. I recommend weapons testing stop if possible and the use of sonar must not interfere with ocean life. Any testing must be at least 100miles from shore but even then better steps must be taken to ensure that no wildlife is affected. I understand the need to train new Navy recruits but there needs to be more protections in place for wildlife.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Nearly all of the Navy's proposed activities would continue to occur outside 12 nm. To stay outside of a specific distance, such as 100 miles, would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average, ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Magnuson (Electronic)	I object to the proposed Navy testing utilizing sonar and explosives on the grounds that - a) these activities are known to be detrimental to ocean life, and b) with today's technology and simulation capabilities, there is no real need for these destructive, old-fashioned methods of testing. Thank you. J.A. Magnuson, PhD	The Navy shares your concern for marine life. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Mahurin (Electronic)	We are but one species on this planet where billions of species have existed prior to ourselves. If we do not have consideration for the others whose voices are continually silenced, we as a species will not only shorten our trajectory but impede the existence of others. These animals and plants--the various life forms of the ocean-- have the right to live unimpeded in their adaptive habitat without human contact. Please do not "test" in these waters as this is a very harmful action! We are part of the whole, but we act as though we are the pinnacle of creation; this is a grave mistake to be fooled into this perception.	Thank you for participating in the NEPA process.
Maloit (Electronic)	Please please please stop your sonar testing. Too many marine mammals, specifically orcas and dolphins are dying due to the sonar testing. We no longer need to continue this testing knowing how sensitive these creatures are. Americans know that our Navy and other services protect us, please protect the creatures that share our waters and the waters of the world. Stop the testing.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Malone (Oral)	My name's Irene Malone. Our whales and sea life need a clean and healthy ocean. The people along the coast need an ocean that's clean and our earth needs a safe marine environment. Please stop this plan. (Singing song).	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		to protect the marine environment while training and testing for nearly a decade.
Mang (Electronic)	Really...total ignorance you guys have... your killing our mammals in the ocean....your reasons or excuses i don't want to hear it..just use the sense that hopefully you were born with! I will never get freak show humams like you..If you are even considered human!	Thank you for participating in the NEPA process.
Mangan (Electronic)	STOP - PLEASE FIND ANOTHER WAY TO DO WHATEVER TESTING BUT DO NOT DO IT AT THE EXPENSE OF ANY LIVING THING IN THE OCEAN.	Thank you for participating in the NEPA process.
Manning (Electronic)	I'm submitting this comment in protest to naval sonar testing, weapon testing, and increased naval presence on the Oregon coast and Pacific Northwest.	Thank you for participating in the NEPA process.
Manns (Oral)	Good evening. I would just like to point out that living here on the Pacific Coast, we've been aware for a long time that our ocean is already polluted. There is big pods of waste matter floating around in it that are as big as some of the states in our country. There's radiation from Fukushima. My friends don't eat anything that lives in the Pacific Ocean because they fear the radiation. So some of the things we need to consider are cumulative impacts. This is not the only project that's going to be threatening life in the ocean. If every project that had to have an EIS were evaluated this way and allowed to kill off some of the species but not all of them, we'd be -- we'd continue to be headed down the road we're already heading to eliminate them all and ourselves. So I would like to propose that the Navy discuss, as the no-project alternative, moving right out of this area. The no-project alternative is listed as the same as the first project alternative. In other words, the Navy is already doing everything here, and they just want to keep doing it some more. I -- I would suggest that they have not discussed the no-project alternative, and they need to. The no-project alternative should just be using simulation techniques to educate the men. That's already been discussed by several speakers, and I agree with that. That is an alternative. I mean, you don't have to shoot a bazooka to learn how to shoot a bazooka. So -- let's see. Oh. The other thing about our Navy toys. I think it's a matter of toys. I think it's a matter of bullyism. It's a matter of having to show our strength. But the one thing I like to mention is it shows the unhealthy link between government, higher-education institutes and the corporate structure. Because having had two husbands who were in the Navy, I heard plenty of stories about how they do their bidding process and buy from the highest bidder as long as he's a good friend of somebody. And so all of these materials that you want to use for measurements and for blowing things up in your so-called training probably have a hefty price tag and will benefit some of those corporations. Thank you very much.	<p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>The analysis in the EIS/OEIS accounts for cumulative impacts both broadly (see Chapter 4, Cumulative Impacts) and in a resource specific manner in each resource section. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities). Thank you for participating in the NEPA process.</p>
Manns (Grube) (Written)	<p>Irreversible environmental effects would result from the continued and expanded Navy program to train recruits on the North Coast.</p> <p>There are alternatives such as the "No Project Alternative" and simulated exercises.</p>	The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>These alternatives would not have the impacts of the proposed plan.</p> <p>We do not want the Navy harming wildlife and the OCEAN. We fear the loss more than any enemy. Please join us to respect and care for our beautiful coast and fellow creatures. Keep it alive!</p>	<p>on the development of alternatives.</p> <p>The Navy shares your concern for marine life. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities.</p>
Mansfield (Electronic)	<p>Our marine mammals are now threatened at every turn. They die of starvation due to the amount of plastic in our oceans, they are run over by ships, their food sources are being destroyed by the acidification of the oceans and they are killed by the Navy testing sonar and exploding bombs underwater. I am stunned that the Navy wants to be allowed to kill even more of these majestic animals. We should be protecting them, not doing even more to bring about their extinction. My community on Whidbey Island relies on the whales migration through Puget Sound every for tourism and economic stability. If the Navy kills them out in the ocean, we loose an industry. I urge the Navy to find other ways to test its equipment rather than sacrifice the lives of so many marine mammals. What are we fighting for if not to preserve an environment that is worth living in?</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
Marcus (Electronic)	<p>With all due respects to our brave Navy: I am very against the plans to continue sonar and explosive testing on our coast. The disturbances to the whales and other wildlife as well as the damage that will trickle down into every living thing, even to our own health will be a crime against nature.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Marinkovich (Electronic)	Regarding NAVY NORTHWEST TRAINING and TESTING EIS/OEIS: I object to the impact of sonar on marine mammals. The PuGET sound area is already under high impact environmental stress from several things that are degrading the ecosystem. These factors range from toxic runoff from pesticides used commercially and privately; from salmon and shellfish farming that leach biological hazards; and from military use of these waters for testing purposes. The harm of ongoing sonar use to cetaceans like whales and dolphins is documented. And the need for military boys playing with their toys in a world in which these weapons are of questionable value, due to the changing nature of conflict..makes it no longer acceptable. We are beyond a point where we have to make weapons because we can/and test them because we made them. Enough is enough. This planet is on its KNEES from the harm the military industrial complex of the United States Government has inflicted. I say to the Environmental Protection Agency; NO! NO MORE. We, the people of this country have had ENOUGH. Do NOT renew the Navy's license to kill the environment, so as to test its power to OVER kill. Thank you.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Marko (Electronic)	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I oppose pier side sonar testing that would take place in an ESA listed habitat for resident Orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>underwater charges, increased war games using sonar, and explosion of underwater mines. This causes either the immediate death of these animals , or a slow and lingering one. All these animals are endangered, and part of all our collective natural ecosystem. We cannot act with such disregard in the interest of our own activities. these animals are clinging precariously to their very existence as a species , and once gone - we cannot will them back. Please do NOT conduct SONAR activity that is so deadly. Thank you Jana Marko</p>	<p>Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Markowitz (Oral)</p>	<p>This is relatively terrifying. This is hard. In 2012, we had a couple blue whales just a couple miles off of Eureka coast. In 2013, we had a couple blue whales off the Eureka coast just a couple miles. It's not well known because our visitor center in Humboldt County is real slowed up and doesn't use social media for that kind of stuff. 2012, we also had a pod of minke whales. We had two pods of a thousand each of dolphins. And I'm going to use a word that we don't use in California much, but I'm going to use it because I believe this word. I believe that God brought these animals. And I think that we are in the process of destroying a whole bunch of stuff that we were given. And it is incredibly painful. And if there's any way that you guys can do what you need to do without destroying everything that we've been given, I would really appreciate it. Thank you.</p>	<p>The Navy is not proposing to conduct training or testing activities in or near Eureka, California. The proposed Study Area begins 12 nautical miles off the coast of California, so the closest that any activities would occur to Eureka is at least 12 nautical miles. Historically, activities within 50 nautical miles of the coast of California are extremely rare, and that pattern is expected to continue under this Proposed Action.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted (or harmed) marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Marohn</p>	<p>I am a concerned citizen who resides in the Pacific Northwest. I am aware that the Navy</p>	<p>The Navy is committed to protecting the marine environment during</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	currently tests sonar and other defense weapons in the marine environment. Our ecosystem is so fragile with weather pattern changes, increased hazards from humans and corporations and military activity. I urge reconsideration regarding continued testing in marine waters, especially in locations where most marine mammal activity takes place. We have so many species that are at risk, that continuing or increasing the testing of sonar and weapons will continue to endanger them. Please consider alternatives and help support our fragile marine ecosystem and animals. Thank you.	<p>the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
C. Marsh (Electronic)	Your sonar is killing sealife! This isn't defense, it's slaughter. Please stop!	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
K. Marsh (Electronic)	I am writing this communique on behalf of the California Crested (tufted) Puffin that reside on the coast off of the Mendocino county headlands. This is in regards to the U.S. Navy's plans to begin under water testing of some thing that will kill the puffins. On behalf of our adopted Puffins "Bella" and "Opus" I am asking you not to follow through with these plans. Many others are adopting puffins and what you want to do out there will kill them. Please do not do this? Thank you.	<p>The Navy shares your concern for the environment and specifically sea birds. The analysis and the science show that there is not a significant impact on the environment, including sea birds, and specifically puffins as discussed in Section 3.6.2.11.1 (Seabirds). All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.
Marshall (Electronic)	While I understand the need to test defense technology and train naval personnel, I feel it is extremely important to protect sensitive marine mammals in sensitive habitat identified as Marine Life Protection Areas. I also feel that marine mammal detection strategies that are more sophisticated than the Navy currently employs need to be implemented to preserve the lives of marine mammals. Sincerely, Kathleen Marshall	As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species’ entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>information as well as, “existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS’ identification of BIAs. The same marine mammal density data present in the Navy’s Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar’s detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
<p>G. Martin (Oral)</p>	<p>I’m Gillen Martin, and I go to Arcata High School. First of all, coming from a military family, I just want to thank you so much for your service and you know how much I respect you. But secondly, growing up in Humboldt County, I wanted to say that I’m a really avid</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>student of environmental science, and I hope I go into an environmental field. One of the latest principles practiced by environmental scientists to protect terrestrial and aquatic biodiversity is the precautionary principle, which states that when substantial evidence indicates that an activity can harm human health or the environment, we should look before we leap. In this case, it means removing any testing that may harm marine mammals from the proposal. It's the way scientists are saying, "Better safe than sorry," and I think that's the approach we should take when it comes to the dropping species numbers of marine animals such as sea turtles or orca whales, especially, in the Puget Sound, which is one of the testing areas, and dolphins and whales. And the species are so low already, and with Fukushima and all the radiation that's already in our oceans -- some of our seaweed isn't safe to eat anymore -- I think that we can't risk any more radiation or toxic waste going into our oceans. Thank you.</p>	<p>the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The analysis in the EIS/OEIS accounts for cumulative impacts both broadly (see Chapter 4, Cumulative Impacts) and in a resource specific manner in each resource section. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>K. Martin (Electronic)</p>	<p>To whom it May Concern- The Navy's proposed Sonar and explosive weapons testing on the Northern Coast of California seems like a terrible idea. After reviewing the documents, it is evident that the Navy needs to research and implement more progressive alternatives to traditional training and testing, and simulations Non-harmful training methods should be emphasized and utilized to the maximum degree. It appears that similar testing and training projects have resulted in mass strandings elsewhere, which is not adequately addressed in the Environmental Impact Statement. On ship lookouts are not enough to protect nearby marine animals. Please consider halting the project until a better plan is in place that is more environmentally responsible. Thank you, Kara Martin</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Regarding previous strandings, see Section 3.4.3.1.8 (Stranding) and the referenced technical report “Marine Mammal Strandings Associated with U.S. Navy Sonar Activities” (U.S. Department of the Navy 2013c). While the annual strandings in Washington in 2003 had no relation to Navy activities, the Navy does consider all cases simply “coincidence” as the comment asserts and has presented five specific mass stranding events where sonar use had been identified as a contributing cause or factor in a stranding. The fact remains, however, that the Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities). The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>L. Martin, Ph.D. (Electronic)</p>	<p>Protecting marine mammals from suffering caused by human activities is a clear moral imperative. It should require no arguments.</p>	<p>Thank you for participating in the NEPA process.</p>
<p>Marx – 01 (Electronic)</p>	<p>Dear Commander of the Pacific Fleet, Congressman Kilmer, Senators Murray and Cantwell: The Navy’s draft environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area of Washington to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to injure and possibly kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. The</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable--particularly because the Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS’ identification of BIAs. The same marine mammal density data present in the Navy’s Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p>
<p>Marx – 02 (Electronic)</p>	<p>The Navy's draft environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area of Washington to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to injure and possibly kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable--particularly because the Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>The Navy is also in ongoing consultation with USFWS regarding potential impacts to ESA-listed species such as the marbled murrelet. Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p>
<p>Massebeau (Oral)</p>	<p>I was at your previous Navy thing like this down in Tillamook a couple years ago. I remember John. I support the Navy and homeland security. You know what, you guys have kept us safe. And I'm all behind that. But I think that as we move forward, we need to look at some of the choices we're making. And like the testing the dockside sonar when we've got the resident orcas endangered in the Puget Sound to me is not a good idea. I don't agree with increasing your scope. I think that you should scale back. And the one guy out there said, well, we're having a hard time getting the whole thing together and to do it all at once. Well, figure out a way and do it and do it less, not more. It says right in that permit, I've got it right over there printed off. I spent 50 bucks printing that thing off and it says you understand as of 2013 that the technology of today can impact whales and dolphins. There it is. And like that other girl said, is the best we've got lookouts? I mean, we're on the verge of making a computer that can, you know, cause how many illnesses? Let's up the ante on that. When you go back to work on the EIS, I'd support you if we can get more boats out there, more acoustic, passive acoustic sonar. You know, two football fields and you're just going to drop on the four decibels? Shut it down. Let's get</p>	<p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	smart about this and let's lead the way. We lead the way in the rest of the world. I mean, we're Americans. So let's lead the way saving whales and dolphins. And I know the Navy is willing to work on this. So anyway, thanks and that's it.	Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
McClain (Electronic)	Stop the sonar explosives please~	Thank you for participating in the NEPA process.
McConnell (Electronic)	Hello, I would like to express my concern and dismay at the notion of using sonar, explosive devices, and any other means of unnecessary testing in the waters off the western coast of America. There are too many mammals, fish, plants and other living things that will be negatively impacted by this type of disturbance. You know that whales, dolphins, and sharks all use sonar to migrate, hunt and locate one another. To use your devices in their realm seems cruel and inhumane. Please consider any other type of testing if that is at all possible. The damage and loss of life could and would impact our eco system in a very negative manner. Just imagine yourself in a room without any protective gear and someone set off an explosive device. If you lived you most likely would be deaf. If you still had limbs they would most likely be useless. Now look at the terrible toll you are subjecting all the sea creatures to. They cannot defend themselves against your bombs. They cannot turn off their sonar so it doesn't affect their brains and disorient them. Please stop and rethink your plan and really look at the need for more Weapons of Mass Destruction, because that is what they would be. I really don't think we need them. Thank you for your time. Michelle	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
McCormack (Electronic)	Twenty-nine marine mammals are included in the proposal. Possible negative impacts addressed in the EIS include, stress associated with acoustic sonar and vessel noise, vessel strikes, entanglements, ingestion of harmful materials, and indirect effects from decreased water and sediment quality. The Navy has concluded that the training and	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>testing activities proposed would result in Level A and B harassment. They also address the possibility of vessel collisions resulting in increased mortality of large whales. They further concluded that while more individual marine mammals would be impacted if the preferred "Alternative 1", as opposed to the current "No Action" plan, the effects are not likely to decrease the fitness of the overall populations. The negative effects are considered negligible at a population level. I would urge the Navy to consider, particularly for endangered species, even the slightest reduction in survival could jeopardize a species recovery. Many of the large whales included in the proposal do not have a defined critical habitat and therefore are not protected while they travel through the testing area. In addition, in order to confidently say that proposed actions have negligible effects on the population, a basic understanding of the species behavior and population demographics is required. Unfortunately, for many species this baseline data remains unavailable. This is particularly true for beaked whales. Therefore, I would take the generalized statement that effects will not decrease populations overall fitness with caution. The ranges for which potential hearing damage, both temporary threshold shifts (TTS) and Permanent threshold shifts (PTS) for marine mammals are provided in the EIS. However, I these projections inconclusive. I would have preferred to have seen a propagation model of a proposed source overlain with marine mammal sightings, in order to determine, based on the source level and environmental conditions, if the animals would be at risk for TTS or PTS. That being said, even with that information our understating of marine mammal hearing thresholds is poor, and marine mammals show great variability in their behavior towards anthropogenic sound. Therefore, it is difficult to conclude that effects from the input of acoustic energy will be insignificant. My largest concern, however, is in regards to the outlined measures that are to be implemented to reduce risk to marine mammals. The plan relies heavily on visual observation, with very limited use Passive Acoustic Monitoring (PAM). In this case, visual observers would alert officials when marine mammals were in the area to stop sonar activities. I find that this reliance on human observers is not sufficient, even with the models utilized to account for marine mammals missed. I believe that a more elaborate use of PAM should be implemented. A PAM alert system, such as that used in the Atlantic Ocean to limit to vessel strikes with endangered right whales, could be useful in this case. In order for the Navy to continue its valuable work in the Northwest study area, I would urge them to utilize the most advanced technology available to limit negative effects on marine mammal populations. Serving as an example to both the United States and the world, the US Navy should work diligently to minimize its adverse effects on the environment including marine mammals. I would suggest that "Alternative 1," not be passed until further mitigation strategies based on the most advanced scientific knowledge are implemented.</p>	<p>analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Note that the Navy's acoustic analysis and modeling reflect the current best available science, as evident by the National Oceanic and Atmospheric Administration having recently proposed for adoption use the same criteria and thresholds used by the Navy for PTS and TTS after undergoing an internal review and an external peer review (see http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm for more details).</p> <p>Please see Section 3.4.3.1.14.4 (Model Assumptions and Limitations) presenting the reasons why the current analysis is believed to be an overestimate. Also as noted elsewhere, the critique by Dr. Bain is not applicable to the current Proposed Action given it was based on a proposed action in the past at another location using a different acoustic impact model, different thresholds and criteria, and science which has been updated since 2007.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/submit/display.asp?template_id=10000) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p>
McDowell	The U.S. faces many challenges, most recently the realization being the Cold War is not	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	<p>really over considering Russia’s actions under Putin leadership invading portions of Ukraine. It is unknown just how far he plans on pushing Russia’s extension of control over Ukraine and neighboring countries. Also the continued expansion of China’s at sea war fighting capability is certainly a cause for concern. All of this world tension and uncertainty is in addition to our continued war on terrorism. The U.S. government’s number one responsibility is the protection of the U.S. and its citizens. While diplomacy is always good, diplomacy without the ability to have the military strength to back up our statements is like whistling in the wind (not effective). The Navy is our most easily used method to show our resolve without the need to putting soldiers on foreign soil. The proper training for the men and women on our ships and planes is essential to maintain our force structure readiness to say nothing about the training necessary to keep our men and women serving in the military as safe as possible. To not provide the best possible training would be a complete dereliction of duty by our military and civilian leadership. I strongly and whole heartedly support the Navy to train in the most thorough and efficient manner possible. I will always believe that protection of the U.S., its citizens, and the safety of our military is paramount. While our marine environment is important it is secondary to the proper training of the military. To the extent they can coexist – great, but the proper training of the military is still the number one priority for our government to accomplish its number one mission of protection of the U.S. Therefore I strongly recommend the Navy do whatever is required for its proper training in the Pacific northwest. William McDowell</p>	
McGuinness (Electronic)	<p>The US Navy can find another place to practice. Is the Navy deliberately targeting endangered orcas? This is crazy. The navy can go anywhere around the world, they need to find another place that will not threaten either endangered wildlife or people.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average, ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).</p>
<p>McMath Walton (Electronic)</p>	<p>I do not approve of these exercises. They are too damaging to marine mammals. I am sure that you can train on computer simulators and it is no longer necessary to injure and kill marine mammals and other sea life for national security. If you feel that you can conduct these exercises “safely” I assume that you will be putting divers into the water into the area of operations to guarantee that you are in deed operating at safe sound levels. Sorry, I cannot be more positive, but it is long past time to quit negatively impacting the environment with these exercises.</p>	<p>The Navy shares your concern for marine life. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no documented proof of injuries to marine mammals. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
<p>McMillan (Electronic)</p>	<p>Hello. I’m a former Army Sergeant who served two tours in Iraq, and I oppose this new testing because I think it would cause unnecessary harm to our Nation’s environment and its economy, and I think the American People’s resources could surely be better spent elsewhere. Does anyone have any idea how much this 5 years of military testing off our coasts is going to cost the taxpayers altogether? Couldn’t the money be better spent on projects that will better serve the Will of the People, such as rebuilding, reforming and modernizing our economy, or constructing off-shore desalination plants to send ocean water to California’s central valley rather than the North’s river water, or testing for radiation in the Pacific from Fukushima and cleaning up the contamination that has already occurred as a result of the ongoing spill of radioactive materials? Do we really want to take our Country in a direction that could lead to more conflicts? Shouldn’t we be</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>cutting our military budgets and dry docking some ships now that the wars are ending? What are we worried about? A Chinese invasion? The best way to improve our security at this time in history is to focus on creating liberty, democracy and prosperity around the world and reversing the decline of the global economy. That will require shifting assets away from the military and toward the civilian sector. This is an excellent opportunity to reverse the 10 year trend of sacrificing the environment and the American People's quality of life in the name of security and global power projection. I think we should reflect on our role in the larger World, consider how we would like to be seen in the eyes of our fellow human beings, and take concrete steps to alter public perception of our Nation for the better by modifying our military posture and our foreign policy in a way that decreases tensions, avoids future conflicts, and systematically improves quality of life for everyone on Earth. I don't this is the best time to "pivot towards Asia". I think we should cut our defense budget by 30% between 2015 and 2020 (primarily by ending combat operations abroad, dramatically reducing NSA spying domestically and on our allies. And returning the military to it's pre-9/11 force strengths and budgets). I think we should use the savings from this reduction in military spending to pay off the National Debt, to prepare for sea level rise and tsunamis, to protect and restore our environment, to prevent and reverse climate change, to invest in modernized infrastructure such as "Hyperloop" transportation systems, to convert to renewable energy, and to create a new non-profit financial and monetary system that will be locally and directly democratically governed by the American People. We can and should begin this process by de-funding this highly unpopular plan to test new weapons systems along the north-coast and redirecting the savings toward improving quality of life and economic conditions throughout the Northwest. Did you know that in a recent Gallup poll conducted in 65 countries around the World, the United States was considered "the greatest threat to peace in the World today"? From the Huffington Post: "There's really no way to sugarcoat it: The rest of world believes that the United States is the country that poses the greatest threat to world peace, beating out all challengers by a wide margin." "This is the conclusion of a massive world opinion poll conducted by Win/Gallup International and released at the close of 2013. The poll, which was first conducted in 1977, asked over 66,000 thousand people across 65 countries this year a variety of questions about the world, including which country they would most like to call home, whether or not the world is becoming a generally better place and which country poses the greatest threat to world peace." "The U.S. was voted the biggest threat by far, garnering 24 percent of the vote. Pakistan was a very distant second with 8 percent, followed by China (6 percent) and Afghanistan (5 percent)." http://www.huffingtonpost.com/2014/01/02/greatest-threat-world-peace-country_n_4531824.html From the BBC: "More bad, but not entirely surprising, news for the US. The world's sometimes eager, sometimes reluctant policeman is the subject of widespread animosity. Predictable in some areas (the Middle East and North Africa) but less so in others. Eastern Europe's 32% figure may be heavily influenced by Russia and Ukraine, but across most of Western Europe there are also lots of figures in the high</p>	<p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/submit/display.asp?template_id=10000) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Comments related to budget and national defense policy are beyond the scope of this project.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>teens.” “In the Americas themselves, decades of US meddling have left an awkward legacy. Its neighbours, Mexico (37%) and Canada (17%), clearly have issues. Even 13% of Americans see their own country as a danger. Pakistan’s unenviable position as a (distant) second in the global threat stakes probably has a regional explanation – 15% of the world’s population lives in its I-484 neighbor and arch-rival, India.” http://www.bbc.co.uk/news/world-2549629</p>	
<p>McMillan-01 (Written)</p>	<p>The mitigations that are offered are more draconian than the original EIS. A better mitigation would be to stay 30 miles offshore so as to preserve the many marine sanctuaries along the coast. I am writing to my representatives to protect this apparent grab of 126,000 sq. miles.</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p>
<p>McMillan-02</p>	<p>I have in the past attended your open house and have found the naval people more intent on trying to change my mind than listening to my ideas. Many areas along the Washington, Oregon, and California coasts have been set aside as marine sanctuaries. These areas must be protected by the Navy as well as the states involved. Therefore, make sure that all your ‘training’ takes place at least 50 miles offshore. This would be offshore of the Farallan & Catalina Islands. I’m sure you realize that this ‘training’ is most polluting & that it will only last a few days.</p>	<p>The Navy is not proposing to conduct training or testing activities in or near the California coastline. The proposed Study Area begins 12 nautical miles off the coast of California, so the closest that any activities would occur to the coastline is at least 12 nautical miles. Historically, activities within 50 nautical miles of the coast of California are extremely rare, and that pattern is expected to continue under this Proposed Action.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>Nearly all of the Navy’s proposed activities would continue to occur outside 12 nm. To stay outside of a specific distance, such as 50 miles would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).
McNitt (Electronic)	I am strongly opposed to ramping up the Navy's Training Center Program. To endanger any more cetacean lives is incomprehensible. There have already been so many whale strandings all over the world, and they are caused by the military's work with sonar. Having training even closer to shore is the last thing they should be considering (off-shore sonar). It is bad enough that the Pacific side has been pelted with Navy sonar and whaledeaths, but now we face oil exploration with sonar blasts on our Atlantic coast. The Puget Sound area has been crippled for marine mammals for years. More of us have become aware of it and there are very few who support it (I I-485 haven't heard from one, but there must be some in the military who are not opposed). What you need to remember is the future of our planet. The whales die, in no time we die. Whales keep the ocean thriving by eating and fertilizing, increasing the flora and the health of the entire ocean and its habitants. Whales are intelligent, sentient beings very much like us, not just fish. They must be conserved for the future life and health of our planet.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
McWayne, MD (Electronic)	You MUST IMMEDIATELY STOP KILLING these animals with your testing of underwater sound, radar and sonic weapons testing!	Thank you for participating in the NEPA process.
Mecke (Electronic)	I do see that the Navy has to test and develop sonar equipment and methods, but I should very much like if this could happen in areas where the possibility of so-called collateral damage is only small. Because: whales may look very sturdy, but they use for orientation sonar, and their hearing is indeed very fine and, unluckily, also very sensitive. Considering that cetaceans are highly intelligent and sentient beings, and also not so very abundant, I should indeed like if you could give thought to the question how to minimize (or avoid altogether) any possible damage which your sonar activities might cause.	Thank you for participating in the NEPA process.
Mercer (Electronic)	Our United States armed forces, including the Navy, have an important role in protecting our shores. But that job does not need to come at the expense of decimating the ocean ecology. Maintaining a health marine life is so essential to our human well-being that	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>considerations of the effects of sonar on whales, dolphins and fish are critical. Consider the science, which is clear! And stop destroying our ocean life with your use and testing of military sonar.</p>	<p>Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p>
<p>Merrill, Ph.D., ABPP (Electronic)</p>	<p>Having recently moved from Hawaii to the Northwest I have become aware of and appalled by the proposed increase in sonar activity by the US Navy which has shown total disregard for the findings of legitimate science by their consistently presenting a false picture of the effects of sonar on ocean mammals while simultaneously undergoing the activities leading to the injury and death of endangered species. Data from studies that support my concerns are mountainous and well known to all who are interested in and/or concerned by the effects of sonar activity on living organisms. They are too numerous to be included in this comment in that they far exceed the character limitations of this format. I am more than happy to present them in person should that be of interest to you in your decision making process. In the interim, know that I urge you to deny the US Navy's request to continue and expand their sonar activity in the Northwest Testing Range over the next five years. I thank you, Thomas S. Merrill, Ph.D., ABPP</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Mesa (Written)</p>	<p>After attending the February 17th meeting at Cascade High School in Everett, I felt moderately hopeful that the U.S. Navy truly cared about how their activities affects our environment. I am especially concerned with the animals and the plant life in and around our oceans.</p> <p>Then I read in the Animal Welfare Institute Quarterly magazine (Winter 2014 issue) how Earthjustice filed suit in Hawaii federal court because of approval from the National Marine Fisheries Service (NMFS) for the Navy to conduct testing and training off Hawaii and Southern California. There's no mention how the Navy will be on the "lookout" for marine species. Also the Navy and NMFS estimate this training will cause 9.6 million instances of harm! Who am I to believe??</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Meserve (Oral)</p>	<p>Yeah, we're here again -- I was here a couple years ago. It's always like we kind of feel like we're just talking to the wall. You guys are great. You do listen, you do respond, but it's very predictable exactly what we're going to hear and that's that stuff is just going to go on. With that said, I think -- I do have a suggestion, and that is that, you know, it -- it's quite possible, in this world of video games, in this world of advanced electronics, to do simulations. And I've talked to a number of your cohorts out there, and they say, well, simulations are good to a certain point, but then they just don't work. Well, excuse me. What we've got here is a Sailor sitting at a station, and he's got a couple controls, he's got headphones on, and he's got screen or screens in front of him; is that correct? That I believe is what's going on there. So why can't you simulate the active sonar and have him see exactly what would be going on, him or her see exactly what would be going on, without putting the sound out there that's destroying and harassing marine life? And I know it might get complicated, but all you have to do is record the very best moments from the past. Record the exciting times. Get all the -- the -- you know, the information from the bottom, what it looks like at the temperature, get the salinity, you know, get the enemy ship coming closer. You're simulating that anyway. So there's absolutely no reason to do at least 95, 98 percent of your work with simulations and spare the marine</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible;</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>environment. I mean, beyond that, you could do this. The money is there. The technology is there. You can send drones halfway around the world and -- and target people and kill them. You can certainly put something out, you know, if you -- if the energy is put into it, you can make a simulation that will be just as good training as anything else. I certainly understand that you can't have a full simulation for someone who's learning to fly a jet. You know, at a certain point, you need to have the feeling of the stick in your hand; you need to feel air currents and all that. However, this is purely electronic input for this person who's being trained. So I hope that you'll consider that, because that way, you could do your darn training, and at the same time, you could spare the marine mammals and spare the rest of the environment out there. And I just sincerely hope that somehow, through this process, that you're listening, that someone is listening and hearing from this whole community that we don't want to be destroying our marine environment. We don't even want to be damaging it. We don't want to be harassing it. We don't even want to be just bothering those whales out there. Imagine just for a second how it would feel to be a whale in that environment. Thank you.</p>	<p>please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
M. Meyer (Electronic)	<p>I am requesting that you cancel sonar testing in our ocean. Please protect our ocean animals. Thank you!</p>	<p>Thank you for participating in the NEPA process.</p>
R. Meyer (Electronic)	<p>I am opposed to sonar testing along the Washington Coast and any water body that endangers the well being of whales, fish and birds. The health of the wildlife surpasses the need for military testing. if testing is necessary do so in controlled environment in a laboratory or an artificial body of water in which no natural wild life is threatened.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p>
Michel (Electronic)	<p>I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event”.</p>	<p>during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>D. Milholland (Electronic)</p>	<p>The Southern Resident Orcas of Puget Sound have endangered species recognition. The 80 Orcas that live in our waters face multiple challenges – PCB contamination that threatens their ability to reproduce, increasing ocean noise levels caused by increasing human activities, daily harassment from whale watching boats, problems finding an adequate food supply (they like chinook salmon), other toxicity sources from run-off, air pollution, and chemicals used to treat water in sewage treatment plants. The EIS draft that the Navy has offered concerned citizens to review acknowledges that Naval activities will add to the burdens Orcas face. Scientists working on Navy contracts (Ketten 2012) have presented findings that claim an inconsequential impact of Low and medium range sonar. What the USS Shoup was doing in Haro Strait in 2003 clearly shows whales being harmed by sonar. Hearing loss resulting from auditory fatigue could effectively reduce the distance over which animals can communicate, detect biologically relevant sounds such as predators, food fish, and echolocation. The duration, magnitude, and frequency range of hearing loss will affect survivability and reproduction. Alternatives presented in the EIS process include continuing to do what has been done over the last five years or doing more. There is no alternative that proposes doing less. Nor is there a comprehensive look at how the Navy’s activities are adding impacts to already highly stressed ocean inhabitants. I strongly urge these shortcomings to be addressed and offer the following Alternative for consideration. Reduced Impact Alternative: • Strengthen the protection the Endangered Species Act offers the Orcas by setting aside from training the Haro Strait, and extend the critical area to include known Orca hangouts down the Pacific Coast. • Declare whale sanctuaries, birthing nurseries, and whale migration paths off-limits to sonar testing. Scheduling training to avoid times of the year when sensitive species are present in critical biological areas along this vast stretch of coast, including in places like the Olympic Coast National Marine Sanctuary on the Washington coast or biologically rich waters off of the Oregon and Northern California coasts; • Employ sophisticated listening devices to make sure no cetaceans are in the path of the lethal low frequency active sonar. • Propose a global network of marine reserves for buffering environmental variability and providing greater protection for marine communities. • Chose sonar frequencies that are not used for cetacean communication. The Navy trains in the same</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>infrequencies, 2–10 underwater kilohertz (kHz) used by Southern Residents for their whistles and calls. 180 db sonar in this frequency range could distract or permanently deafen a nearby killer whale • Provide a clear analysis of the different types of sonar, low, medium and high frequency, how far the various sonars sound carries through the water, how loud they are, how they affect marine life • Propose a serious and thoughtful dialogue with scientists, environmentalists, and elected officials about how to assure our military readiness while not destroying the life in the ocean. • Explore the necessary national security components an international treaty would have to contain in order to eliminate the need for 235 decibel low frequency sonar which has been described as a rolling wall of sound that fills the ocean. • Evaluate the impact of flying over cetaceans at low altitudes doing jet training exercises that last for hours and may involve dumping fuel into the ocean. Thorough reviews of the subject and available information are presented in Richardson et al. (1995), Efroymsen et al. (2001), Luksenburg and Parsons (2009), and Holst et al. (2011). The most common responses of cetaceans to overflights were short surfacing durations, abrupt dives, breaching, tail slapping and fleeing the area of the source of the noise. These “takings” need to be included. • Investigate the Environmental Superfund Site Naval Magazine Indian Island as a source for PCB contamination. Lighters unloading navy ships after ww2 may have dumped barrels of PCB’s directly into the water rather than taking them to the boggy spit dump. • Post a navy small boat (30’) near the Orcas to warn boaters not to come too close to the whales • Fund independent scientists & naturalists that are studying the orcas. Thank you for the opportunity to participate in this EIS process</p>	<p>Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>N. Milholland – 01 (Electronic)</p>	<p>Greetings Navy Environmental Impact Statement team: I recently watched the movie about Orcas called “Blackfish” on Netflix. I strongly encourage your team to watch it. I felt confirmed in my understanding that the Orcas are highly evolved intelligent beings with whom we share the planet. Orca families stay together their whole lives. The movie reveals that the Orcas have developed parts of their brain that we have not. If we can</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>learn about what this development of intelligence is and pursue learning how to communicate we may greatly benefit. The Southern resident Orcas are designated as an endangered species. This should have an impact on what the Navy can do near them. Haro Straits between San Juan Island and Vancouver Island is an underwater echo chamber for sonar and should be strictly off limits for testing and training. In 2003 the USS Shoup while heading north up Haro Strait panicked and may have temporarily or partially permanently deafened the Orcas. They were exposed to an average 170 db noise for over an hour. http://www.youtube.com/watch?v=O9gDk29Y_YY Through global warming, species extinction, overpopulation, overfishing, ocean acidification, our irresponsible use of nuclear power, the development of ever more destructive and remotely operated weapons, we are gradually destroying life on our planet. We are interdependent with all life. Your EIS team has a duty to create an EIS alternative that proposes a reduced impact on the marine environment. This Reduced Impact Alternative can propose strengthening the protection the Endangered Species Act offers the Orcas by setting aside from sonar training the Haro Strait, and extending the critical area to include known Orca hangouts down the Pacific Coast. Declare whale sanctuaries, birthing nurseries, and whale migration paths off-limits to sonar testing. The Navy could employ their sophisticated listening devices to make sure no cetaceans are in the path of their lethal sonar. Finally, the Navy could engage in a serious and thoughtful dialogue with scientists, environmentalists, and elected officials about how to assure our military readiness while not destroying life in the ocean. This dialog needs to include drafting an international treaty that would eliminate the need for the 235 decibel low frequency sonar. Include in this option an outline of the necessary national security components an international treaty would have to contain in order to eliminate the need for 235 decibel low frequency sonar Sincerely Nancy Milholland</p>	<p>Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>N. Milholland - 02 (Electronic)</p>	<p>Greetings Navy Environmental Impact Statement team: I recently watched the movie about Orcas called "Blackfish" on Netflix. I strongly encourage your team to watch it. I felt confirmed in my understanding that the Orcas are highly evolved intelligent beings with whom we share the planet. Orca families stay together their whole lives. The movie reveals that the Orcas have developed parts of their brain that we have not. Let's study them in their ocean environment. They will prove to be amazing and can become our friends. The Southern resident Orcas are designated as an endangered species. This should have an impact on what the Navy can do near them. Haro Straits between San Juan Island and Vancouver Island is an underwater echo chamber for sonar and should be strictly off limits for testing and training. In 2003 the USS Shoup while heading north up Haro Strait panicked the Orcas and may have temporarily or partially permanently deafened them. . http://www.youtube.com/watch?v=O9gDk29Y_YY They were exposed to an average 170 db noise for over an hour. This could have been prevented if the Navy had communicated with nearby whale watching boats. I propose that the Navy routinely</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>communicate with the whale watching boats to learn where the whales are before the Navy does training exercises that might impact them. I want a Reduced Impact Alternative considered in the Environmental Impact Statement process. This Reduced Impact Alternative can strengthen the protection the Endangered Species Act offers the Orcas: • Set aside from sonar training the Haro Strait, and extend the critical area to include known Orca hangouts down the Pacific Coast. • Declare whale sanctuaries, birthing nurseries, and whale migration paths off-limits to sonar testing. • Employ sophisticated listening devices to make sure no cetaceans are in the path of lethal sonar. • Engage in a serious and thoughtful dialogue with scientists, environmentalists, and elected officials about how to assure our military readiness while not destroying life in the ocean. This dialog needs to include drafting an international treaty that would eliminate the need for the 235 decibel low frequency sonar. Sincerely Nancy Milholland</p>	<p>with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA and ESA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species’ entire range and habitat. The stated intention is for the BIAs to serve as a resource</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, “existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS’ identification of BIAs. The same marine mammal density data present in the Navy’s Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
G. Miller (Written)	<p>The importance of training naval personnel and the testing of equipment prior to using it on the battlefield saves both dollars and lives. The Northwest Training & Testing ranges are an integral part of the live training for Sailors in a realistic environment. The testing of equipment and activities within the NWTT Study Area is imperative to our national security.</p> <p>It is vital for the Navy to keep up with advances in technology and national security challenges. Therefore facilities must be updated so that the Navy can maintain, equip and train the Sailors to be ready for combat in a variety of environments, and geographic locations, capable of winning battles, deterring aggressors and maintaining superiority and freedom in the air, on land and on the seas. Live training on the various ranges will save lives and there is no substitute for live training exercises and activities in a realistic environment. Navy range complexes have the realistic training environments. We must allow the Navy to test and evaluate new and developing technologies. The Navy must be sure to maintain superiority in sonar efficiency, in a world less secure due to many allies and rogue nations already possessing quiet diesel electric submarines which can probably easily penetrate our security (such as it is) along our thousands of unprotected shores.</p>	Thank you for participating in the NEPA process.
H. Miller (Written)	Having benefited from the U.S. Navy having a large presence in the region, having participated in many projects and programmes involving the excellent stewardship of our environment in Puget Sound by the various U.S. Navy commands, we understand the importance of conducting training and testing of systems and equipment to ensure that the U.S. Navy accomplishes its mission to maintain, train, and equip naval personnel to the highest standards of combat readiness, so that they can instantly respond to a wide	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>range of situations. The loss of the Diego Garcia testing ranges is a significant loss for the Navy. Other ranges must be utilized, to compensate for the this loss. The U.S. Navy has proven to be a world leader in marine species research, funding and partnering with many research institutions, laboratories, universities and researchers to increase understanding of marine species behavior.</p> <p>The scientific community needs to understand that unless the United States of America have a highly trained and well equipped deterrent military force, in particular a Navy equipped with the latest technologically advanced machinery, aeroplanes, ships, boats and state of the art weaponry, our nation as we know it today will not survive. Neither will the marine species.</p> <p>I sincerely hope and trust that the Draft EIS will prove the need for Northwest Training and Testing ranges.</p>	
J. Miller (Electronic)	<p>I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas an endangered species not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. I oppose "Alternative 1 includes some activities that were not analyzed in previous documents. ALL new activities being considered which include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales". National defense is no excuse to kill protected wildlife and make near shore waters uninhabitable. Sincerely, Janet Miller</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
K. Miller - 01 (Electronic)	<p>NW Training and Testing EIS/OEIS Dear USN, The nuclear weapons test bans finally stopped above ground, and most in ground and undersea, nuclear weapons testing in response to the dangers of radionuclides contaminating everything, including and especially, our bodies, our breast milk, our babies. In an irrational world, a pseudo-rational response has been to use the laser fusion project at LLNL, and other modalities, to model nuclear explosions without the blast. Of course, aside from ensuring the reliability of our</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>mega-weapons storehouse, the purposes for this technology include the development of more deadly and surgical nukes, Now that we understand the devastating impacts to all sea life from sonar, other sonic intrusions, explosions, propellers, and polluting waste discharge, it is time for the USN to stop with the outmoded and ultra-destructive seek, surveil or destroy practice missions. Instead, you, meaning we, should be employing modern technology, including using your intelligence and our tax dollars in smarter and more benign simulations that have been shown in other complex military scenarios to be very effective. The state of electronic gaming is up to the task, just ask any of your new recruits if your senior staff needs guidance. Our oceans, source of terrestrial life, face unprecedented challenges to the very survival of marine life as we know it, and as we have yet to know it. Every effort must be taken to avoid contributing to the dangers this precious, sentient, beautiful- beyond-compare life faces. As we did when faced with radiation poisoning to us, we should apply the same measures of concern and caution with regards to the seas, or there will be little left to protect off, or on, shore. Sincerely, Ken Miller, MD</p>	<p>a decade.</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities.</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
K. Miller - 02 (Electronic)	<p>NW Training and Testing EIS/OEIS Dear USN, I recently wrote supporting the No Project Alternative, because there is a preferable alternative to the destructive training and testing in this proposed project. Simulation laboratories, many of which could be sea worthy on board ships, should replace most if not all actual sonar and demolitions testing. If we can substitute simulated nuclear fission and recently fusion to replace nuclear weapons explosion testing to ensure reliability and innovation, we can certainly train personnel to current standards of readiness without raining destruction in our seas. The cost savings alone justify this substitution, but the main reason is respect for our precious sea life. Sincerely, Ken Miller, MD</p>	<p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
M. J. Miller (Electronic)	<p>Please do not subject Mother Earth's ocean life to the torture and murderous sonar and explosive actions that the Navy is proposing. Respect ALL life please...please !</p>	<p>Thank you for participating in the NEPA process.</p>
Milley (Electronic)	<p>We strongly object to the fly-overs at our home. It is disturbing to have these instruments of war flying over our home. They fly at low altitude day and night, disrupting our environment and creating distress. We moved here from Admirals Cove on Whidbey Island to escape the unbearable noise. We have recently been experiencing frequent fly-bys directly overhead at our house here on Camano Island, when there had been little or no air traffic from NAS planes. We are not located inside the military noise zone, and never expected to have this problem to deal with. We noted on your map of operations you do not even include Camano Island as part of your air operations, yet many residents experience the noise, rumbling, and vibration from the over-flights daily. Pilots seem to have chosen our geographic point as a landmark to create a new flightpath. Our quality of life is being eroded, and we need this to stop. We are not at war, yet the constant flyovers at low altitude make us feel like we are being attacked from the air. We are very, very</p>	<p>Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	stressed from this activity. Larry and Wilma Milley	
Charles Mills (Written)	<p>I'm writing you in regards to the notice you sent me with your intentions to conduct training and testing activities in the NWTT Study Area including the use of active sonar and explosives off the coast of Northern California Mendocino Humboldt and bay area. I would like you to consider the harm it will cause to the already fragile whale population, dolphins and other fish and sea life. I've listened to scientists whom used to be reactive in Navy activities and other professionals and without a doubt you will cause harm and death to our marine mammals. Also this is the sensitive area of major earthquake fault lines and wouldn't be a good idea to expose explosives, eruptions and sonar activities. You already defend our waters if need be and thank you as a good American to you for being ready to defend the United States of America. You already have enough military power and I don't believe that in an emergency situation that you and Air Force would have more than enough technology and weaponry to defend us. Please don't ruin the ocean any more than it already is. Thank you.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Charlotte Mills (Written)	<p>I planned to describe each item being faxed. Rather, for time and space reasons, I count on the Navy Team who reviews our Public Comments to accept my faxed items to be my comment. And I count on the team accepting items sent from 2009-2010 to review how and why many Oregonians respectfully opposed the 2009 NWTT EIS Project Proposals.</p> <p>Most Important – This year, most Oregonians do not hold the Navy responsible for yet another attempt to weaponize not only the Northwest coastline – but all 26 coastlines from the Marianna Islands to the Boston Range Complex. The good men and women of the Navy do not make policy.</p> <p>We urge the NWTT EIS team to report to their colleagues and Washington D.C. contacts: Most Americans recognize it is the Military Weapons Industries who lobby Congress members and attempt to get funding to weaponize every USA coastline. To name a few: Northrup, Lockheed-Martin and General Dynamics.</p> <p>Items included:</p> <ol style="list-style-type: none"> 1. Viewpoint – February 28, 2014 2. Viewpoint – March 19, 2009 3. Oregon Congressional Delegation letter to Secretary of Navy Winter – Feb. 6, 2009. 4. Redacted page (15 pp) request for EIS/OEIS 2009 Budget. 5. Redacted page (64 pp) request for EIS/OEIS Contractors' Identification for 2009. 6. Navy Deputy General Counsel Tomas N. Ledvina reply to a request for Budget 	<p>Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>and Contractors' Identification never provided until a Freedom of Information request was made – October 15, 2010.</p> <p>7. Attendance Map of 2009 Hearings Sites; Navy's average attendance at six sites was fewer than Contractors hired to attend hearings posters.</p> <p>8. Map of 26 Range Complexes Navy planned to hold hearings at in 2009 from Marianna Islands Complex to the Boston Range Complex.</p> <p>Further Comments – As citizens and taxpayers, along with other Oregonians, please take note especially about two topics mentioned here:</p> <p>1. Attendance during 2009 hearings was only 169 with an average of only 28 citizens attending while the Navy contractors hired to attend the posters was 29. The entire Navy traveling party numbered many more. Numbers indicate poor planning and discounting budget for taxpayers to fund.</p> <p>Navy's Counsel Tomas Ledvina's Page 3 comments about why he would not release information about the 2009 Hearings Budget or Identification of Contractors hired flies in the face of citizen-taxpayers: 1) Information of "no public interest." 2) Information would "result in substantial competitive harm." And 3) Information would "clearly constituted unwarranted invasion of personal privacy."</p>	
Mitchell (Electronic)	<p>The health and habitat of the endangered Southern Resident Killer Whales must be protected, and should be of highest consideration in the NWTT EIS/OEIS. The loss of even one SRKW will be devastating to the population -- and to human culture in the Pacific Northwest -- and we do NOT have the right to place our safety and protection over theirs. Testing and training can be successfully simulated in other areas and/or by other means. It is not required nor acceptable in the waters of an endangered species of such great value to our region. Thank you!</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Mix (Electronic)	<p>I viewed the video. I am glad there are some strategies in place to protect the wildlife. More protection needs to be provided for ocean mammals. Avoid known resident</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>locations; avoid migratory areas or paths; avoid calving areas. Do the drills away from shore where ocean mammals are less common. The sonar KILLS the mammals by confusing them, it amounts to torture. Please do BOTH your mission and protection of things worth having a mission in the first place. thanks, Merryl</p>	<p>as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>J. Mizuta (Electronic)</p>	<p>I've been racking my brain trying to think about how in the hell the navy would think that it would in the united states best interest to continue testing of harmful sonars not only around the Olympic coasts marine sanctuary but, Inside it? THAT MAKES NO [expletive deleted] SENSE WHEN THAT SANCTUARY IS THERE TO PROTECT THE SPECIES INSIDE IT FROM HUMANS. Get a clue and find somewhere else to test these things. Hasn't the navy ever heard the phrase "DONT [expletive deleted] WHERE YOU EAT"?</p>	<p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
<p>M. Mizuta - 01 (Electronic)</p>	<p>Personally I believe that navy can conduct adequate testing of such sonars in a controlled environment and if they can't then maybe they should move to something less damaging on the environment and the living things in that environment. We are not in danger here in the U.S. We should not be killing beings that have been around for longer than our species. We discovered sonar because of whales and bats so we return the favor by killing them with tool they helped us to build... That's some [expletive deleted] up stuff and honestly if this country decides that it would rather have a new sonar and explosives than the fish and whales in our sea I'm not going to be the only environmentally friendly American that loses faith in the people that are supposed to be defending us. The fish in our sea are what makes it so amazing here in California, when I saw videos of the mass beachings that have happened all over after the navy had tested sonars like the ones proposed now it honestly brought to tears. Sound so intense it drove things that big out of</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>their homes to die on a beach bleeding to death out of heads from trauma caused so obviously by the navy. I won't stand idly by while we hurt such amazing creatures. I really hope that the navy finds an alternative.</p>	<p>during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>M. Mizuta - 02 (Electronic)</p>	<p>I don't agree that the navy needs to testing such sonars and explosives in areas that even your navy reps admitted to having multiple species of endangered mammals and other life that THE NAVY IS SUPPOSED TO BE PROTECTING. The people are going to lose support for the navy if you just disregard these animals wellbeing just so you guys can try out your "new toys". This isn't WW2, the Japanese aren't trying to invade us with subs, that being said what good is going to come from these sonars killing off the majority of the few whales we have left in the wild? Were going to end up like china if we let stuff like this happen. On top of not having any bees because of all the pollution they have put out into their environment they've pretty much killed off all the sharks in their area to put it in a soup that doesn't even have any taste! I myself am an American that likes to think that we do more for the world than communist countries like china but when I read [expletive deleted] like what is proposed in this plan I realize that apparently were not different from them, we are worse. With all the bad publicity that sea world has gotten over the mistreatment of whales over the last few years I was surprised that the navy even proposed something as stupid as this even stating that testing would happen in areas known to be the only feeding grounds for certain whales. I love my country and I support our navy but, I do not condone these tests in waters populated by beings that use sonar exclusively to find their way through such a big ocean.</p>	<p>Thank you for participating in the NEPA process.</p>
<p>Moilanen (Oral)</p>	<p>Hi. My name is Marty Moilanen, and I don't even know what I'm doing here tonight. It doesn't really do much good to talk I guess. People don't listen very much. But I'm a Vietnam veteran. I grew up in a time we had to fear the -- the communist aggressors, as they put it. And like every good American boy that goes to high school here, goes to civics, studies the Constitution and the United States, and gets duped into going to a war that we should have never been into to begin with. I learned while I was in Vietnam, being in communications and signal corps, U.S. Army Signal Corps -- I tried to get in the Navy band myself actually. I tried to avoid all this and go into the Navy band, but I wasn't good enough for the Navy band, even though I was the top guy in the Fort Bragg band. But I don't believe in war. No. It's archaic. Too many innocent people are killed, wildlife and I don't want to see what's going to happen. I freaked out just when there's a helicopter flies over the sky, I mean from the Coast Guard our national -- our security people. It just --</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>there's not a day that goes by in my life that I don't think of Vietnam and wonder what happened to half of those guys that -- well, this is -- I came back as a conspiracy theorist. That's what they taught me when I come back from Vietnam, because I had a whole lot of new ideas when I came back when I learned the truth about what was going on. No, we are not bombing in Cambodia. We are not sending the ground troops into Cambodia? Well, I learned that was a [expletive deleted], because I don't know how many missions I was on and how many people blown up that I pulled out with this hand while I was shooting with this hand, hanging out there behind the door gunner. I mean it's crazy. I learned then that it was a big lie. Yes, we were over in Cambodia and I helped bring home a lot of people out of Cambodia. Like I said, I don't even know if anybody lived, they were so messed up a lot of these guys. So anyway, I'm totally against this, our current situation, I don't think we need all this testing. I don't think we need to destroy the planet. Everybody knows what happens when you put a stick of dynamite in the river or a carbine in a can, throw it in the river. The fish come up, everywhere. I did that when I was a kid too and I'm ashamed of it. I'm ashamed of what I did in Vietnam and I'm ashamed of the country and what's going on right now over in the Holy Land and everywhere.</p>	
<p>B. Moller (Oral)</p>	<p>My name is Barbara Moller. And when the Navy was here the last time I questioned the Navy. I thought they were the stewards of the ocean and I questioned the Navy about the increasing number of dead zones in the ocean; one being up off of the Oregon -- up off the Oregon coast right now, the newest one. And I asked the Navy what was causing these dead zones and nobody seemed to know. And the Navy said, you know, that they were the safeguards of the American people, using the ocean. Well, I think that's great, but the ocean is dying and in this current EIS/OEIS, two huge volumes, there was a small, little sentence that said what the Navy tossed into the ocean. Okay? And one of them was bombing residue, electromagnetic energy residue and right here the U.S. Navy toxic chemical menu increases yearly with ocean dumping and disposal. Electromagnetic weapons testing, submarine warfare exercises, experimental weapons testing, missile exercises, sinking exercises, gunnery exercises, bombing exercises, lasers and sonar. Now, I think it paramount that the Navy knows what is causing the dead zones in the ocean. If the dead zones are being caused by some of what they are throwing out, then they need to change. Okay? Because the ocean is dying and when the ocean dies so will humanity. The phytoplankton is very important in the C02 sequestration and all these dead zones the phytoplankton is gone. Phytoplankton and the redwood forests or the forests are the main C02 sequestrators, and the ocean is going to become more and more acidic and die. And when the ocean dies so will humanity and what's the Navy going to do then? I just have one little thing to say. You know, I notice on both the East Coast and the West Coast the testing areas are very close within to the land, landmass areas. These testing areas -- you know, if we're going to prevent somebody from attacking us, we better do it a heck of a lot farther out than -- than -- we can't wait until they get right here.</p>	<p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>Please Section 3.1 (Sediments and Water Quality) for a discussion of possible chemical impacts from training and testing in the Study Area. Overall, chemical, physical, or biological changes in sediment or water quality would not be detectable and would be below or within existing conditions or designated uses.</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>impacts to marine mammal species or stocks.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. The Navy has returned to the analysis in Chapter 4 due to concerns raised in public comments, and the Chapter has been revised in response to those public comments. The literature on ocean acidification has been reviewed, and is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
<p>B. Jo Moller – 01 (Electronic)</p>	<p>The Environmental Impact Statement initially makes it sound like the Navy wants to avoid any and all confrontations with marine mammals. But, then as you read on, it becomes clear that the mammals are the targets of the sonar, bombs, new electromagnetic weapons, and the list goes on. Let me say first, I take the Navy’s testing of ‘NEW WEAPONS’ in the path and at the time of whale migration as a direct assault. This assault is an assault not only on the whales, but on the large numbers of people both in boats, planes, and on land that care and love the whales and dolphins. I believe there is a conflict of interest in that the United States Navy takes money from National Oceanic and Atmospheric Administration and then requests the number of mammal ‘takes’ increased for their use of “Shock & Awe” Bomb Blasts, Sonar use, Missile Exercises, Live-Fire Weapons Testing, Lasers, Electromagnetic Weapons, and Experimental Weapons Testing. All of these weapons negatively impact marine life and our oceans. Disorienting mammals so they do not feed, unable to communicate, and the result is they either sink to the bottom or beach themselves to die. The United States Navy, by their own words, does not even know what causes the increasing number of ‘DEAD ZONES’ in the oceans. The Navy proclaims their job is to protect the American people. Protecting the American people does not entail polluting the ocean with remnants of “Shock & Awe” Bomb Blasts, Sonar use, Missile Exercises, Live-Fire Weapons Testing, Lasers, Electromagnetic Weapons, and Experimental Weapons Testing all of which negatively impact marine life and our oceans. I believe the United States Navy is responsible for the dead zones, by use of their new weaponry testing and the remnants they leave in the ocean. I believe the Navy should test their ‘new weaponry’ in those dead zones. The Navy really does not need live mammals to use with any of the ‘new weaponry’. The use of decoys dropped from the air in the dead zones would make a sudden sighting for new sailors. These new sailors would miss their sic excitement in killing a whale or dolphin, turtle etc. Furthermore, the U.S. Navy knows what is going to happen when they test these new weapons in the ocean. New bombs are going to make big noise and send shock waves throughout the ocean. The Navy’s new weapons can be tested using simulation exercises instead of giving the sailors the so called ‘thrill’ of watching as a torpedo hits and explodes a whale or dolphin. I personally take the Navy’s testing of their ‘new weapons’ right at the time of whale migration, which includes baby whales, as a direct assault on not only the</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When marine mammals have been sighted in the vicinity of the operation, all range participants</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>mammals that are attacked but on me and every other American that cares about the health of the ocean and its inhabitants. THE NAVY SHOULD CONDUCT NEW WEAPONS TESTING IN THE ALREADY 'DEAD ZONES', BECAUSE WHEN YOU GET TO THE BOTTOM OF IT, THE NAVY IS MOST LIKELY RESPONSIBLE ALONG WITH ALL THE OTHERS THAT POLLUTE THE OCEAN. A NEW JOB DESCRIPTION FOR THE NAVY, ---THE NAVY NEEDS TO PROTECT THE AMERICAN PEOPLE AND THE OCEANS THAT SUPPORT LIFE ON THIS PLANET. BARBARA JO MOLLER</p>	<p>increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities). As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
<p>B. Jo Moller – 02 (Electronic)</p>	<p>The United States NAVY IS NOT PROTECTING AND INSURING THE QUALITY OF LIFE FOR AMERICAN CITIZENS. In planning for an increase in 'new weapons testing', the Navy has implemented a wide range of programs with long, carefully worded names to suggest the benign use of their new weapons on the ocean, fish, and mammals. Yet, the Navy does DUMP hazardous materials into the ocean which has detrimental affects on both plant, mammals, and all aquatic life. The Resource Conservation and Recovery Act defines hazardous waste, 42 USC section 6903(5), as: a solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristic may cause significantly contribute to an increase in mortality or serious irreversible illness, or pose a substantial present or potential threat to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. According to the 'intended purpose, which includes training military. Military Ordinance includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters. The military Munitions Rule (40 CFR 260, et seq.) directs that I-505ssaultI-505I-505nal and chemical I-505ssaultI-505 ordinance are NOT considered hazardous materials according to RCRA under two conditions. 1. When the intended use is for military training, explosive emergency response, research and development activities, and when recovered, collected, and destroyed during range clearance events, and 2. When unused, repaired, reused, recycled, reclaimed, disassembled, reconfigured, or subjected to other material recovery activities. Military Munitions Rule has allowed the United States Navy to slip through the cracks in their I-505ssault on the ocean. The United States Navy does pollute the ocean with their discharge restrictions. Although I no discharges in U.S. waters (0-12 nm), beyond 12 nm there is Overboard Discharge Permitted of: 1) SOLVENTS: ETHYLENE AND PROPYLENE GLYCOLS, ETHYL, ISOPROPYL AND BUTYL ALCOHOLS. 2) WATER</p>	<p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p> <p>Please Section 3.1 (Sediments and Water Quality) for a discussion of possible chemical impacts from training and testing in the Study Area. Overall, chemical, physical, or biological changes in sediment or water</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>WITH CORROSION INHIBITORS: SODIUM METABORATE, POTASSIUM SILICATE MERCAPTOPTO-BENOTHIAZOLE (ML-A-53009), DIAMMONIUM CITRATE, DETU, MIL-D-16791 DETERGENT NALCOOL 2000, NALFLEET9-111; PAXCOOL, CATCOOL. 3) AIRCRAFT WASH DOWN WASTE WATER: GLYCOLS, TRIETHANOLAMINE, NAPHTHA, 2-BULOXYETHANOL, CADMIUM, CHROMIUM. 4) SUBMARINE MISSILE TUBE WASTEWATER: HEAVY METALS, CYANIDE. It appears that the Military Munitions Rule allows the Navy to POLLUTE THE OCEAN. This is TOTALLY UNACCEPTABLE. I am charging the United States Navy with POLLUTING THE OCEAN. Because of the high atmospheric carbon dioxide level, the phytoplankton is EXTREMELY IMPORTANT because phytoplankton sequestrates carbon dioxide. Because the level of carbon dioxide is so high, a part of the CO2 combines with the ocean water and makes HCO3, carbonic acid. Pollution kills phytoplankton and therefore the carbon dioxide can combine with the ocean water. IF THE U.S. NAVY IS TO TEST THEIR NEW WEAPONS, THE NAVY MUST TEST THESE WEAPONS IN THE DEAD ZONES ALREADY IN THE OCEAN. BARBARA JO MOLLER</p>	<p>quality would not be detectable and would be below or within existing conditions or designated uses.</p> <p>The Navy does not propose any activities such as “dumping debris on the seafloor, or spreading toxic chemicals.” In the course of the Navy proposed activities (listed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS), which do include the use of sonar and similar sound sources as well as underwater detonations, some expended materials are left behind in the ocean. The potential impacts of these actions was thoroughly analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS.</p> <p>Based on the analysis, and decades of experience conducting similar activities in the same area, there is no evidence of any habitat areas being degraded.</p>
Monson (Oral)	<p>Humans, unfortunately, have become collateral damage. I think that's wrong. Absolutely wrong. I live by the OLF. You are harming fetuses; that has been proven. You are giving people coronary problems; that has been proven. You treat other things better than humans. You, sir, are harming my life and I really wish you would stop hurting me. Thank you.</p>	<p>Thank you for participating in the NEPA process.</p>
Moore-Lewis (Electronic)	<p>Dear Commander of the Pacific Fleet, Congressman Kilmer, Senators Murray and Cantwell: The Navy's draft environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area of Washington to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to injure and possibly kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable—particularly because the Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. Please</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. Sincerely, Barbara Moore-Lewis</p>	<p>mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Moran (Oral)	<p>My wife's with me. Local resident. Just moved here a year ago. I'm Union rep for 23 and a half years. I know a lot about how to speak in a union hall. We moved here -- my -- my grandfather on my mother's side was a Captain in the Navy. My brother --my Uncle Bobby died in World War II, defending his country. My son Ian was one of those young men, after serving in the Coast Guard, the epidemic of suicide struck our family. So I don't come here lightly. I was a union rep for 23 and a half years; and before that, I was involved in building nuclear reactors. One of my toys is in Pennsylvania. You've heard of it, Three Mile Island, and the radiation poisoning that still continues to leak from that disaster. I handled Alameda Naval Depot, shut it down, Alameda Naval Air Station. I have gone to an awful lot of funerals of young men working as machinists who were exposed to minor amounts of radioactive material. They get brain tumors. I understand one of your police officers in this community -- my heart goes out to uniformed personnel -- and by the way, I want to thank the Navy and you guys in uniform. I have the deepest respect. You're the first guys that take the bullets, and you're doing it in our defense, and I appreciate that. But you got a police officer who's got a brain tumor. Yeah, I know. My granddaughter lives in San Francisco. My grandsons live in Salem, Oregon. And the radiation levels exposed to this community between March and April of 2011 were 38,000 times normal. You wonder why the starfish are dying? Off the coast of San Francisco, we dump thirty -- no, 47,000 barrels of radioactive material -- radioactive material, and we dumped a ship that was too hot to sandblast. When they closed San Francisco dry dock -- no, no, San Francisco Hunter's Point Naval Shipyard, we negotiated with Baykeepers because we didn't want to dredge dry docks number 3 and 4 for the Abraham Lincoln to come in, because the levels of radiation in the mud were too high, and that would actually be counterproductive, so when -- let it become sandstone. That's a joke. I'm here because I need the Navy to be retasked. I need Hanford to be shut down and decontaminated. I need San Onofre shut down and decontaminated. I need the drums off the coast here and off the coast of the East Coast to be removed. The sonar, I'm all for the sonar, because they keep telling me they can't find the barrels. Thank you. Two nuclear -- two nuclear rods from down the road here. So they lost them.</p>	<p>Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
Moreland (Electronic)	<p>The Navy's failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>is both unacceptable and unconscionable—particularly because the Navy's draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH that has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life.</p> <ul style="list-style-type: none"> • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Morgan (Electronic)	I think it utterly ridiculous at this day in age, with of of the technology we taxpayers have placed at your disposal, that you continue to train in ways that destroys sea life. What is going to be left for our children and grandchildren if we continue with these practices. Please use simulated exercises instead! The lives of dolphins, whales, and other sea life should not have to be sacrificed in the name of training, especially in this day where our technology can easily prepare our armed forces just as well.	The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Morr (Electronic)	The harm that the Navy is inflicting on marine life, particularly whales and dolphins, is completely inhumane and quite frankly disgusting. The Navy is a powerful force with many resources at its fingertips. They should be using their power to protect not only the lives of Americans, but also the invaluable marine life that surrounds it. There is no excuse for what the Navy is doing and they should feel completely horrible for the harm they have caused. I urge the Navy to be respectful of all life moving forward and to stop	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	harming these magnificent creatures.	impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
J. Morris (Electronic)	I have been living in the Sean Juan Islands for over 26 years. Our waters are home to a small population endangered Orca whales which have become an icon for the state of Washington but are also under attack due to environmental degradation. Lets not add sonar stress to the list. These animals can only take so much before they are pushed over the brink. Please consider the true impact on all the marine mammals especially those that use their own sonar. Humans cannot continue to carelessly use the marine environment for testing like this without considering the ramifications to the creatures for whom this is their only habitat. If you must test, find another way that does no harm.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
N. Morris-01 (Written)	<p>Endangered orcas and many other whales forage and travel in the training range. It's impossible to detect their presence in time to stop the exercises. Based on studies by NOAA, the area within the naval training and testing range is an important forage area for the whales.</p> <p>It is recommended that the Navy move the training range westward beyond the continental shelf or time the training when there are the fewest Orcas, May-Oct. Gray whales migrate northward primarily between March and June along the U.S. west coast and the coast in waters off Southeast Alaska, British Columbia, Washington, Oregon. Researchers have recommended delaying or postponing training to late October and</p>	As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>choose areas outside the migratory routes for these marine mammals.</p>	<p>considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIA's located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>effort, were completed and published in March 2015.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
N. Morris-02	<p>Sonar is known to cause death and serious physical pain to marine mammals such as the dolphins and whales. Mid frequency sonar is linked to the strandings of various species of cetaceans and baleen whales. Serious physical damage and whale mortalities have been reported by the strandings of beaked whales off the Bahamas and further investigation revealed the connection to the Navy's use of sonar. Sonar disrupts foraging and feeding behavior of Orcas and other cetaceans and the prey fish. "Fish show permanent and temporary hearing loss, reduced catch rates, stress, and behavioral reactions to noise" (Weilgart, L.S. 2007, THE IMPACTS OF ANTHROPOGENIC OCEAN NOISE ON CETACEANS AND IMPLICATIONS FOR MANAGEMENT, CAN. J. ZOOL. 85(11):1091-1116 2007, doi:10.1139/Z07-101).</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
N. Morris-03	<p>In Washington State the endangered Southern resident Orcas (J pod) were reported to have serious behavioral changes due to the US Navy's USS Shoupe using its mid-</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>frequency sonar in the San Juan Island region (Noren, D.P. et al. 2009, "CLOSE APPROACHES BY BESSELS ELICIT SURF ACE ACTIVE DISPLAYS BY SOUTHERN RESIDENT KILLER WHALES," Endangered Species Research; Vol.8: 179-192, http://www.int-res.com/articles/esr2009/8/n008pl79.pdf). It is imperative that you respect the findings of peer-reviewed science and keep sonar signals at levels below the threshold that will cause death, deafness, and severe pain to whales and dolphins; this includes the thresholds that cause strandings and permanent deafness. Deafness is a death sentence in a marine mammal who uses a form of sonar - echolocation for survival.</p> <p>Long gone are the days when it was thought okay to use whales as targets in naval exercises. Today the Navy must strive as much as possible, to protect our marine life. Dolphins, whales, sea turtles, and many other species in the ocean environment are valuable to the entire ecosystem of the ocean now and for our future generations. It is as important for our military forces to advocate for the safety of marine life (such as dolphins, whales, sea turtles and many other species), as it is for them to believe they must patrol the oceans for the safety of the United States and engage in war games.</p> <p>The Navy awards one of its medals of merit, the 'Dolphin pin,' to submarine officers. If the Navy honors Naval submarine officers with this distinction denoted by the dolphin, they should at the very least respect the dolphins themselves, and help protect their habitat in the oceans along with the myriad marine life species in the oceans of the Earth.</p>	<p>significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>The Navy used the best available science for this document. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. The Navy funds monitoring and research that can include dedicated Marine Mammal Observers (see the reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications)).</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications)).</p>
<p>T. Morris (Electronic)</p>	<p>We urge you to please put an end to the Navy's plans for bombing and sonar exercises in the Pacific Northwest. Bombing and sonar exercises can severely injure our highly endangered Orca whales along with other delicate marine life (dolphins, fish, etc) that migrate and live in these waters. These powerful sonar blasts will destroy their hearing and even cause their brains to hemorrhage. Naval sonar has already led to mass whale strandings, as disoriented whales attempt to escape the noise. Our fragile ecosystem is already overtaxed and does not need anymore hostile human interference that threatens the well-being of our waters and its inhabitants. Please consider the devastating consequences that this activity could have on our future generations if there are no</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	whales or dolphins swimming about of or salmon left left to eat in our waters. Thank you.	marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Moses (Electronic)	I am writing in opposition of the proposal to bomb and sonar test in the Pacific Ocean. As a property owner of land in the San Juan Islands, I do not think we should be causing more harm to a dwindling resident orca population for some testing. The San Juan Islands depends on a healthy marine mammal population for tourism. Please find another way to test that doesn't harm these sensitive marine mammals. Thank you.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Please see Section 5.3.1 (Lookout Procedural Measures) and Section 5.3.2 (Mitigation Zone Procedural Measures) for descriptions of the mitigation measures the Navy proposes.</p>
Moutn (Electronic)	Whales will die with continued sonar explosives.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Mueller (Electronic)</p>	<p>I am writing regarding the Navy’s proposed sonar and explosive weapons testing. I live on the Northern California coast and your proposed testing is a very big concern in our community. Please, please, reconsider this very dangerous action. As noted on The Lost Coast Outpost; Environmental advocates (including the Northcoast Environmental Center and Humboldt Surfrider) are urging the Navy to use “exclusion zones” – to avoid areas known to be critical habitat and feeding/foraging grounds for whales and dolphins. The proposed activities are expected to injure, disturb or kill more than 100,000 individual animals, including 29 different marine mammal species protected under the Marine Mammal Act. The proposed activities can cause whales and dolphins to abandon important habitat, halt foraging behavior and forgo critical feeding opportunities needed to survive. Similar testing and training projects have resulted in mass strandings elsewhere, which is not adequately addressed in the Environmental Impact Statement. This proposal does not ensure adequate mitigation to prevent harm to sea life. In particular, on-ship “lookouts” are an insufficient means of detecting nearby marine mammals. Areas of critical habitat, foraging and feeding have been identified and should be avoided. Establishment of “exclusion zones” around these areas would go a long way to protecting endangered species, such as the blue whale. More progressive alternatives to traditional training and testing should be explored; simulations and other non-harmful training methods should be emphasized and utilized to the maximum degree. Thank you, Rhonda Mueller Eureka, CA</p>	<p>training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
Mufson (Electronic)	This is a gross misuse of power. There is no gain that can justify this kind of cruelty and irresponsibility toward our ecosystem.	Thank you for participating in the NEPA process.
Munson (Electronic)	<p>My concern has to do with affording adequate protection to the other species with which we have co-evolved on this planet for millions of years, and without which our own lives would be impoverished and ultimately unsustainable. In particular I am concerned about the impact of active long-range sonar on the whales. The NWTT publicity presents laudatory assurances that protective protocols are in place and that the Navy personnel share these concerns and support ongoing research. Hopefully this is not just spin and hype. I fully appreciate the need for the US Navy to maintain naval supremacy, to protect US interests and freedoms globally, and to train for preparedness. If the training exercises are truly conducted with sensitivity to impacts on those animals relying on sonar for their own communication and migrations, then the US Navy is to be commended. If the protocols are simply a public relations appeasement, then the Navy will probably be doing us all more harm than good. Good luck ! Ron Munson</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
D. Murray (Electronic)	This is very bad for whales, dolphins. Please do not use sonar or bombing in Washington oceans.	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
L. Murray (Electronic)	Naval Facilities Engineering Command Northwest Attention: Ms. Kimberly Kler – NWTT EIS/OEIS Project Manager I live in Juneau Alaska . I believe that the Navy should conduct their training exercises outside the hearing range of our marine life, especially marine mammals. I say this because a couple years ago my hearing was damaged by loud fireworks. The damage to my ears made it so when I was outside walking I could not tell where noise was coming from. When people were in front of me talking it sounded as though they were beside me or behind me talking. It was extremely disorienting and gave me some insight on what it must be like for marine mammals exposed to loud sonar or explosive noises. However, exposer to loud noises must be even more hazardous for marine life because they depend on their hearing for survival. It's how they communicate, avoid dangers and find food. People know how to protect their hearing from loud noise. We must use this same information and use it to protect the hearing of marine life and marine mammals. Sincerely Lorraine Murray	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Myers (Electronic)	Please do not proceed with this testing. So long, and thanks for all the fish.	Thank you for participating in the NEPA process.
Nadeau (Electronic)	Naval sound in water or in the air over waters has huge impacts on marine mammals. Whales and other intelligent creatures suffer terribly, and may be endangered even to the point of not being able to live, to reproduce, to communicate, from many manmade problems, including pollution and noise which is carried far and magnified to the animals acute senses. Please do nothing to increase such sound impacts. Take actions to reduce sound impacts. And in every way respect and protect marine life.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Naidoff (Electronic)	Stop all sonar testing along the Pacific coast immediately. It is harming all sealife by torturing and killing them which you have absolutely NO right to do. How about testing the sonar on yourselves. Enjoy the earbleeds.	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Nam (Electronic)	Please protect our marine relatives. Stop destroying life, support life support ecosystems and true security for all. Thank you	Thank you for participating in the NEPA process.
Napoles (Electronic)	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. Please deny this permit. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. How many more cetaceans is the navy going to kill? Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event. All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales. Please stop killing cetaceans around the world with these underwater naval games.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
E. Nelson (Electronic)	Dear Commander of the Pacific Fleet, Congressman Kilmer, Senators Murray and Cantwell: The Navy's draft environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area of Washington to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to injure and possibly kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable--particularly because the Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The alternatives carried forward meet</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. Sincerely, Elaine A. Nelson</p>	<p>the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p>
R. Nelson	The Navy, and NAS Whidbey in particular, play a critical role in Island County's local	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	<p>economy. Approximately 50% (\$786M) of all compensation received by workers in the county comes from the base. 50% of Oak Harbor School District students are military dependents and federal impact aid adds \$4.5M to the school district each year. Base volunteers contribute over 3,000 volunteer hours to the schools each year and the Navy has provided over \$750K to purchase conservation easements in the county. The Navy also partnered with the Skagit River System Cooperative on a large salmon habitat restoration project that added a 300 acre salt marsh habitat. The economic contributions of the Navy to Island County are larger than any other regional employer. We understand the need of the Navy to use the range and appreciate their efforts to work with the community in the EIS process.</p>	
Neugebauer (Electronic)	<p>To whom it may concern, Here are some comments on your proposed actions in the Northwest Training Complex EIS. I have concerns and doubts about the validity of the Navy Acoustic Effects Model (naemo). I participated in the Everett meeting and the woman with the poster on marine mammals also said she was surprised that the modeling for injuries and mortalities to marine mammals to be ZERO in the ENTIRE range of the Northwest complex over the five year term of the permit. I find this difficult to believe and the criteria and definitions set for what an injury is defined as needs to be reconsidered. I understand NOAA is reassessing their guidelines on the effects of anthropogenic sound on marine mammals. I stress that this naemo model needs to consider these new guidelines. Pier side testing in Puget Sound should be minimized or eliminated to the greatest extent possible. Sound can travel long distances through water and it is impossible for observers to see past islands for marine mammals. IF the Navy must use pier side testing then the use of multiple observers not just on the ship but stationed on land based observation points similar to protocols used by the Army Core of Engineers for in water construction. No sonar or use of explosives should be used at night. Observers cannot see well enough at night and the use of night vision goggles is not powerful enough to adequately detect marine mammals. Increased technology allowing the passive acoustic buoys to relay information on the presence of whales in real time would improve our knowledge of locations of whales prior to training exercise. Many endangered cetaceans are also studied using satellite tags. Communication between the Navy and scientists should allow for real time information to be shared from these satellite tags to help plan training exercises. Recently, NMFS was petitioned to designate critical habitat for Southern Resident killer whales offshore in the waters of Washington, Oregon, and California. If critical habitat is to be designated, the Navy should make immediate changes in their permit and plans for training exercises in any areas determined to be critical habitat. I encourage the Navy to include independent observers on ships to ensure proper and transparent use of sonar frequencies, durations, and protocols similar to fisheries observers. Lastly, I wanted to note that the nwtteis website did not include dates and times for public meetings. I learned of these meetings through a newspaper article having already searched the website thoroughly.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/submit_request.asp?topic=main&cid=2088&cid2=2088&cid3=2088) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Because the Navy is continuing to improve mitigation measures, the Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p> <p>Thank you for the information, we will continue to improve the NWTT website.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Newkirk (Oral)	I'm a North Whidbey resident fourth generation here on assignment. You talked about the quality of life for yourself, but how about the quality of life for the marine mammals and the other mammals who are us humans that are being subjected to this process of militarization of the Pacific Northwest. That's exactly what this is. There is no way for the mammals to protect themselves and that's what we citizens are doing here, is to protect them. There is no threat that is imminent that is requiring this at all. The quality of life for our citizens is that this needs to stop and it needs to go somewhere where you can go and do it in a tank, not where you can harm people and the ocean and mammals in the ocean. It is not feasible to do that. It shouldn't be done. You should err on the full side of caution and not do this at all. This is totally harming us as people and the animals.	As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around the Sound. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Newman (Electronic)	I urge you not to conduct sonar testing in the Pacific Northwest. It is devastating to our whale populations despite what is being said re safety in your literature. This is not an acceptable way to steward our planet. The terrible acts of aggression humans perpetrate against other humans are horrific. Do NOT do the same to the whales. Thank you. Carol Newman	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Niesen (Electronic)	I would like to express my Opposition to the proposed Sonar Tests in the greater Pacific Northwest Region, especially within the Salish Sea. I have been a Resident of the Puget Sound Area since 2000 and am very concerned about the state of the Environment especially in our local Waters. As far as I am informed these Sonar Tests can significantly harm certain marine Mammal Species , amongst them our beloved Orca Whale Residents and Transients. This Region is increasingly relying on Income from Ecotourism such as Whale Watching and other Outdoor Experiences. I would like to see Changes made to	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	not use such powerful Sonars in our Local or any Waters for that Matter. Thank you for your Consideration.	<p>Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
Niles (Electronic)	<p>“The use of deafening noises just does not belong in sensitive areas or marine sanctuaries where whales and dolphins use their acute hearing to feed, navigate, and raise their young.” “It is critical that NMFS establish no sonar zones offshore of major coastal estuaries where the 81 remaining endangered Southern Resident orcas seek to find salmon if they are ever to recover.” Please, please, please stop terrorizing the Earth and the Residents thereof with all of your infernal noise; please stop draining our financial resources to pay for worthless experiments and make-work doings, just to keep a bunch of guys in ridiculous uniforms employed. You are NOT heroes, and you have no right to kill (“Take”) 70 whales per year. Whales are not enemies endangering our country. You are ALL SICK. Go away !!!</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Noll	Dear Commander of the Pacific Fleet: The Navy's draft environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	<p>of Washington to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to injure and possibly kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable--particularly because the Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest. Sincerely, Richard Noll</p>	<p>as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>• The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Norvell (Electronic)</p>	<p>I urge the Navy to use “exclusion zones” for their proposed sonar and explosive weapons testing – to avoid areas known to be critical habitat and feeding/foraging grounds for whales and dolphins.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Novak (Electronic)</p>	<p>The U.S Navy must adapt to changing seas and a dying ocean. Please stop the torturous use of these new sonar devices being tested that will "temporarily" (this cannot be proven) deafen millions of whales and other marine inhabitants who are very sensitive to sound -- and which will even by the Navy's own admission render deaf thousands of whales and other mammals permanently - this effectively is a death sentence to these animals who rely on their ability to hear to hunt for food. Even the ones "temporarily" deafened suffer incredibly. It is absolutely sickening to see the Navy claiming that this is "necessary" work to defend our nation - we citizens DEMAND you find a way to defend our great nation that does NOT result in the torture and death of so many creatures in the ocean !</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Nutter (Oral)</p>	<p>My name is Susan Nutter. I'm a member of the human race, and I live here in Fort Bragg. Thank you for holding this forum on the Navy's plan to train and test weapons along the Pacific Northwest coast. I realize the Navy needs to train and test weapons to protect our country. However, the Navy's plans for warfare testing from Northern California to Alaska must provide greater protection of marine life in these waters. The Pacific coast waters are not the private property of the U.S. Navy. Instead, as the Boston Commons really belongs to all Bostonians and not to a private owner, the oceans and air, etcetera, legally are natural commons and belong to us all. We as human beings, including the U.S. Navy, must protect them. The Navy's means of detecting whales by visual sightings by a lone lookout in order to stop damaging and lethal sonar testing is not only totally inadequate, but also worthless at night. Four years ago, this blue whale -- remember this? -- was struck and killed by a slow moving research vessel in broad daylight right off our Fort Bragg coast, demonstrating the inadequacy of visual sighting of the largest mammal on earth. One realistic way for the Navy to do what it needs to do and at the same time protect the gray, endangered blue and humpback whales during their all-year migrations along the Pacific coast is to perform all activities 100 miles offshore, leaving a sonar intrusion-free corridor for whale migration along the coast. As a human protector of the natural commons I hereby insist that 100-mile offshore corridor be off limits for all U.S.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Navy pending and weapons testing.</p>	<p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Nearly all of the Navy’s proposed activities would continue to occur outside 12 nm. To stay outside of a specific distance, such as 100 miles, would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average, ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar’s detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
<p>Nutter (Electronic)</p>	<p>I am writing to say that I think your EIS claiming zero (0) mortalities for marine mammals and other species of birds and fish from proposed Naval Training and Testing activities in the Pacific Northwest region is not only inaccurate, but also extremely dishonest. It is disheartening that the U.S. Navy so disrespects both the public and the natural world, they would produce such a short-sighted and deceitful report. As you are well aware, the Navy has more honestly predicted huge destruction and harm to all forms of marine life resulting from similar activities in other regions. Whales, dolphins, porpoises, and other marine mammals are particularly vulnerable. Though I know it probably seems outside the realm of possibility for the self-interest of Navy, I want to propose the idea of establishing an international treaty banning submarine warfare entirely. It has become plainly evident that the first beings to suffer from mankind’s madness for constant naval warfare will be the whales, dolphins and marine mammals. They simply are not able to withstand this constant onslaught of an arms race of silent submarines, and the super high-powered sonar and other weapons that are used to detect them and destroy them. For starters, you could leave a 100-mile corridor along the Pacific Coast for the gray whale migration from November to May and the blue and humpback migration from June through November to ensure protection of these important migration routes. The Navy must act responsibly in protecting the ocean fauna from its explosive damaging during training and weapons testing. Animals have rights that should be observed.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>The Navy used the best available science in the creation of this document. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy thoroughly considered the whale feeding and migration areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas.</p> <p>Nearly all of the Navy’s proposed activities would continue to occur outside 12 nm. To stay outside of a specific distance, such as 100 miles, would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average, ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).</p>
<p>Nyburg Epstein (Electronic)</p>	<p>Most of the research I have read indicates that the noise generated by this testing is very harmful to marine wildlife, which are absolutely dependent on their own sonar. It is my assertion that the harm sustained by wildlife and our marine environment in the course of the Navy’s testing, (sonar, noise, explosives) is far more important to the overall health of the planet than “naval readiness” and “hands on training” the Navy believes is crucial I also believe the harm is far more drastic than the Navy either believes or will publicly admit. Our planet is under extreme environmental pressure simply due to the number of people here. Even if we were doing a good job taking care of the atmosphere, the plants, and the animals with whom we share this beautiful globe, it would be very difficult to maintain some sort of healthy balance. I believe it would be a much more intelligent use of our resources to study how to achieve this balance than to study and rehearse warfare. PLEASE do not extend the range for this type of testing and military practice. PLEASE discontinue existing sonar and explosive testing in our waters. PLEASE do continue to</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	study our marine environment. I am NOT anti-Navy. I grew up in a Navy family- my father, uncle, brother and two cousins went to the US Naval Academy, and my Grandfather was a fine career Navy shipwright. I am proud of our Navy and I believe you are in a crucial strategic position to engage in enlightened and enlightening research and policy reform. Thank you -A bigger threat to our personal safety	EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Nyman (Electronic)	I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
O'Halloran (Electronic)	Please find a way to protect our marine mammals and sea life from the deleterious effects of loud sounds, including those generated by naval training and sonar.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.
Olenek (Electronic)	Truly a no brainer! The noise from the Navy's sonar and seismic testing is animal abuse. Disturbing perhaps the important sense for Marine mammals has proven to be disrupting	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	to their natural behavior which has been proven to cause fatalities. What is the point of doing these surveys, when it affects the natural balance and has dangerous ramifications. The noise is deafening to the human ear whose hearing is much less than those mammals who depend on this particular sense. Military funds should be spent on intelligent programs not on those which disturb the natural balance and are both abusive and illogical.	as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Oliver (Electronic)	I am very worried about the impact this will have on our marine life.I could go on and on, but won't. I am opposed to these ocean tests.Thank you.	Thank you for participating in the NEPA process.
Olson (Electronic)	To whom it may concern: I urge you to take the recommendation of many environmental advocates (including the Northcoast Environmental Center and Humboldt Surfrider) to use "exclusion zones" – to avoid areas known to be critical habitat and feeding/foraging grounds for whales and dolphins during the NWTT activities. Areas of critical habitat, foraging and feeding have been identified and should be avoided. The Navy's proposed activities are expected to injure, disturb or kill more than 100,000 individual animals, including 29 different marine mammal species protected under the Marine Mammal Act– this is unacceptable and measures must be taken to prevent these injuries and deaths. The proposed activities can cause whales and dolphins to abandon important habitat, halt foraging behavior and forgo critical feeding opportunities needed to survive. Similar testing and training projects have resulted in mass strandings elsewhere, which is not adequately addressed in the Environmental Impact Statement. This proposal does not ensure adequate mitigation to prevent harm to sea life. In particular, on-ship "lookouts" are an insufficient means of detecting nearby marine mammals. Establishment of "exclusion zones" around these areas would go a long way to protecting endangered species, such as the blue whale. More progressive alternatives to traditional training and testing should be explored; simulations and other non-harmful training methods should be emphasized and utilized to the maximum degree. Please consider these and the many other thoughtful comments you have received at the public meetings. These war games will cause unacceptable injury, suffering, and death of marine species. Thank you for your time and consideration.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/submit/display.asp?template_id=1000) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities). As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.
Ortiz (Electronic)	Good afternoon, Thank you for the opportunity to comment on the Navy's Permits to bomb and use sonar in Southern Resident critical habitat off the NW Coast. I would like to express my opinion of disagreement. The Southern Resident orca is a beautiful and important species to our ecosystem and I think we should do everything we can to protect it and not hurt the species of it's habitat. Marine mammals primarily communicate and hunt through sound and vocalizations and sonar use can affect their ability to survive and communicate with their pod. In addition, sonar can cause marine mammals to lose their hearing, causing them to become impaired and lowering their chance of survival. All in all, I believe we should not disrupt the ocean habitat because it can harm orcas, other marine mammals, and the general ocean ecosystem. Thank you for your time, Jannet Ortiz	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Palanio (Electronic)	My name is I-534auail-534 and I am writing this comment in regards to the orca whales habitat. Killer whales are endangered mammals that have a right to life, just like us as humans, they have family that rely on them. These habitats are suppose to protect all killer whales and if you take that away from them, there losing the home and protection. How would you feel if you were suddenly taken away from your home and lost protection? All the orcas are treasured and appreciated and I strongly believe in a right to life and protection. So I ask you if you can please not take away orcas habitats and protect them. I hope you listen to the people and our voices. Orcas need there freedom. Thank you	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Palmer (Electronic)</p>	<p>Imagine (should you be able to do so): you are diving underwater. Very involved in getting necessary fish for dinner. A bomb goes off. You have just lost your hearing. You have just had a heart attack. You are either dead or severely damaged. You have no idea why this has happened, nor does any insane justification that you are being “protected from attack” apply – in fact, it is just the opposite. Please stop this insanity. Our marine life is horribly challenged without you adding to it.</p>	<p>mammals from Navy activities.</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Paltin, M.D. (Electronic)</p>	<p>I am writing to express my dismay at the plans to test weapons off our coast, which pose the risks of harming sea life including mammals, and of causing various kinds of contamination. Is our Northwest Coast not worth preserving in its relatively rich and uncontaminated state? The Navy, unfortunately, has the reputation of causing wanton environmental damage, sometimes permanent (as in the case of the barrels of radioactive waste dumped off the Farallon Islands.) Is it not time to change the policy of the Navy to one of respect and preservation of our mutually beloved oceans? My mother taught me “it’s impolite to shoot your friends,” and I would ask you to leave our coast in its current state, without causing more whale and dolphin deaths, and without radioactive and other contaminants. Thank you for your kind attention, Sharon Paltin, M.D.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Parker (Electronic)	This comment is in regards to the Navy's sonar practices in California – Hawaii (2014-2018). I stand in staunch opposition as an American citizen to such practices. It is reckless to endanger marine mammals on such a large scale. Your efforts to minimize impacts are not sufficient.	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
Parlette (Electronic)	Sonar and explosives testing in ocean waters has serious and life-threatening effects on whales and dolphins. Mothers and calves cannot hear one another's calls and become separated, causing the death of immature calves who have not learned sufficient foraging techniques. The sound waves are so painful to the sensitive hearing of ocean mammals that they cannot enter primary feeding grounds or follow instinctual migration routes. Please halt your plans to pursue these tests that cause such harm to two of our world's most beautiful and inspiring animals.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Patrizio (Electronic)	please reconsider your sonar testing experiments in the pacific waters of california oregon and hawaii I witnessed hundreds of melon head whales trying to beach after you had been testing here in kauai waters. The people rallied w nets and redirected them back into the water. It is known to be harmful to marine mammals. Disorient their migrations. And generally not serving the well being of our ocean marine life please reconsider the negative affects the sonar testing has on our already challenged oceans	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Paull (Electronic)	Dear Ms Kler, While I fully support the Navy in providing the necessary training for deploying sonar devices and detonating underwater explosives, I am extremely concerned about the devastating effect that these practices have on mammals when performed near various protected marine habitats as proposed in Draft NWTT EIS/OEIS. It strikes me as unthinkable that you would consider moving ahead with these activities with the full knowledge of their effects as described in your video. Please reconsider your position in this matter and relocate these activities to a more suitable location. I realize that you have hard choices to make no matter what the outcome in this situation, but am sure your better nature will prevail. Thank you for your service. David Paull	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Paulson (Written)	<p>Fury, despair and deep sadness are a few of the emotions engendered by your plans for training & testing exercises which will have horrible consequences for the impacted wildlife.</p> <p>Humans always feel that they are the top of the heap – deserving of all resources and willing to exploit all other life forms in our quest to meet our “needs” – be they financially, geopolitically, or security-driven (not to mention true needs of food, shelter, water).</p> <p>We wrap our short sightedness in the cloak of “national security” etc – because we are unwilling (or incapable) of truly feeling sympathy for the creatures whose homes we invade with sewage, great floating acres of garbage, radiation, fertilizers and other pollutants and now, should they manage to evade all the above, with sound waves & explosives that give them no place to hide or chance of escape. This is beyond reprehensible. We are dismantling creation piece by piece. Humans will always wage war because we can’t seem t evolve in the direction of cooperation & mutual benefit. These glorious whales, dolphins and other creatures who have so much to teach us & are valuable just in their being, will never come again. We have a responsibility to guard & keep them that supersedes all else. We inherited a gorgeous planet...why are we trashing it and all else in it?</p> <p>Surely the great minds can come up with better simulation & a real hard look at how “necessary” these tests are. I, for one, don’t want to live in a world where these lovely beings are blasted to extinction – where the closest a child can get to an appreciation of their grace & beauty is in a Disney animated feature, or as a logo for sports team or on pajamas. What a colossal waste...how sad, how unutterably sad.</p>	Thank you for participating in the NEPA process.
Paulus (Electronic)	Please stop this action in the bays. This act cripples the residents whale population. I can't see why you Must do these tests. At the very least move them to a non mammal populated area if the ocean. Please and thank you.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Pearcy (Electronic)</p>	<p>As a marine biologist and faculty member at Oregon State University, I am concerned about the impacts, both immediate and delayed, on the health and behavior of marine mammals along the coast of the Pacific Northwest, especially from the high-intensity mid-range sonar. There is already evidence that these sounds from sonars have negative effects on whales and pinnipeds. I request that you submit for complete information of the known and suspected impacts and that all summaries be reviewed by biologists (not administrators) of NOAA and the USFWS.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy does obtain permits that staff biologists from NOAA and USFWS develop and conduct consultation under ESA in order to create Biological opinions. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>The Navy is in ongoing consultations with NMFS pursuant to the MMPA and with NMFS and USFWS pursuant to the ESA.</p>
<p>Peek</p>	<p>I understand that your prime directive is to make the waters safe around our country. But</p>	<p>The Navy shares your concern for marine life, but this concern must</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	surely in this age of science, there is a better way than destroying a highly intelligent and dwindling population of mammals than with sonar. Our survival as well as theirs is at stake. What are the alternatives? Find them!	be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Peggar (Electronic)	I write to strongly urge the Navy to adopt the No Action Alternative outlined in the draft NWTT EIS. The negative impacts represented by Alternative One and Alternative Two, as outlined in the draft EIS, are too great. I am particularly concerned about the harm – including death – that the Navy expects to cause to hundreds of marine mammals and sea turtles. The harassment of animals that are protected under the Endangered Species Act is unwarranted, and the increased harassment that is expected under Alternatives One or Two is unacceptable. The draft EIS does not adequately demonstrate that the Navy has exhausted all other alternatives to conducting these disruptive and harmful testing and training activities in our shared marine environment. I look forward to receiving your response on my comments.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Pendexter (Electronic)	Orcas are highly intelligent sentient beings. They're systems are highly sensitive to the Navy sonar that is being blasted through the oceans. How many dead orcas does it take before the Navy stops Killing them with the sonar blasts?	<p>(www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Pendleton (Electronic)	Stop destroying our oceans and marine life. Cetaceans are sentient beings, here to assist humanity in raising the vibration of our planet. We need them! I'm beginning to think there's a human subspecies void of the fundamental traits of compassion and kindness. Stop the madness immediately.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
L. Perkins (Electronic)	Please stop this dangerous activity. This area is the main habitat of many endangered species, including the Southern Resident Orca pods which are already at the alarming low count of 80 individuals. These Orcas are under enough stress and pressure from declining salmon runs. Sonar and bombing exercises have already had a negative impact on this group causing one of the young females to be killed last year. These endangered Orcas are a very important part of our Pacific Northwest culture and need to be protected.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Please do the right thing and stop these inhumane, dangerous activities.	<p>(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p> <p>Please see Section 3.4.3.1 (Acoustic Stressors) to understand how sound and sonar may affect whales and other marine mammals. Note that there had been no Navy training using sonar for at least 2 weeks prior to the stranding and that the cause of death for L112 in February 2012 was most likely the result of a vessel strike although the investigation by NMFS remains open (see the NMFS website for more details [www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/l112_stranding_report_2.html]). Also note that it is incorrect to characterize the shipping lanes just north of the Columbia River as "active military practice zones" since there was no training ongoing in that area, there are only a few Navy vessels intermittently operating out of the Puget Sound area, while conversely there are annually thousands of commercial vessels moving in those shipping lanes. In short, the death of L112 has no relation to the proposed continuation of Navy training and testing in the area. Regarding your overall concern with the use of sonar, please see the science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities). Based on the research and monitoring that has been accomplished over the last 8 years, the Navy believes that long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area.</p>
J. Perkins (Electronic)	As we now ponder cuts to the defense budget, why not stop this military sonar's expansion until we have enough sound science and environmental research to use it judiciously and with much greater concern for all life? In this time of collapsing fisheries and disastrous marine pollution, when our oceans are more fragile and endangered than	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	ever before, why let the Navy blast its expensive and fatal sonar through our seas?	
Perlman (Electronic)	Stop this arm to our oceans and it inhabitants..	Thank you for participating in the NEPA process.
Perry (Electronic)	This is also under Navy Activities/Proposed Action. I really don't like the idea of the Navy using sonar in our waters. I know it's supposed to be for our safety in the time of an alien attack but do we need it? I don't think so. It's part of the "Homeland Security" thing I'm sure but I would rather take a chance and give that up than destroy our marine animal population. We've done without this much testing all these years and I don't think we need it now. You don't need to be a rocket scientist to figure that out. Thank you for letting the general population comment on this. Will it really do any good? I hope so.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Petrosn (Electronic)	March 10, 2013 U.S. Navy Public Comment on Hazardous Materials & PFOS Acid The Hazardous Materials Section, found in the NWTRC Final EIS/OEIS is alleged to have not been updated and included in the NWTT Draft EIS. Without this updated information, in a special section, it is difficult to determine what types of hazardous materials the Navy intends to use in their expanded NWTT Range. Thus, the public does not have adequate information in order to comment on this issue with regard to the NWTT Draft. It should be noted that "...PFOS (perfluorooctanesulfonic) acid is highly toxic to marine mammals. It accumulates in the tissues of people and wildlife around the world, including whales, polar bears, sea turtles, bald eagles and pelicans. One of the rare studies that linked elevated PFCs to immune suppression leading to infectious disease in marine mammals was a case of female otter deaths on the California coast..." (1) "...The U.S. Department of Defense is now purchasing formulations of foam that don't contain PFOS, said Mark Wright, a DOD spokesman at the Pentagon. But the DOD is stuck with nearly 600 contaminated sites nationwide where PFOS-tainted foam was used in fire pits for training exercises, according to a federal database..." (1) "...Confirmed elsewhere are discharges from airports, military installations and refineries that have used PFOS-rich firefighting foam during fires and routine practice..." (1) Also contained in aviation hydraulic fluid. "...What makes perfluorinated chemicals (PFCs) so stubbornly persistent is that they contain fluorine bonds, which are the shortest and strongest of chemical bonds. These same characteristics make them popular with manufacturers as coatings because they	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>repel oil and water, stabilize heat and act as leveling agents to ingredients in cookware, textiles, carpeting, paper and other products...” (1) “...The 3M Company began selling Scotchgard made with PFOS in 1956. Nearly half a century later, after studies showed it was accumulating in human tissues, the company agreed to stop producing the chemical by 2002...” (1) “Perfluorinated compounds are unique in that they combine some of the negative aspects of chemicals such as TCE with the negative aspects of chemicals such as PCBs,” Higgins said. “They don’t just fit into the ‘mobile’ and ‘toxic’ category of TCE, or the ‘bioaccumulative’ and ‘persistent’ category of PCBs. They fit into both.” A) Will the U.S. Navy phase out the use of perfluorinated compounds in the NWTT Range and also work to reduce their usage so as not to negatively impact aquatic marine life and human health? B) What areas in the NWTT Range are contaminated with PFOS and what action will the Navy be taking to clean up these contaminated sites in the NWTT Range (formerly NWTRC Range)? (1) Environmental Health News – January 30, 2014 http://www.environmentalhealthnews.org/ehs/news/2014/jan/bay-seals-and-pfos</p>	<p>Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>Please Section 3.1 (Sediments and Water Quality) for a discussion of possible chemical impacts from training and testing in the Study Area. Overall, chemical, physical, or biological changes in sediment or water quality would not be detectable and would be below or within existing conditions or designated uses.</p> <p>The Navy does not propose any activities such as “dumping debris on the seafloor, or spreading toxic chemicals.” In the course of the Navy proposed activities (listed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS), which do include the use of sonar and similar sound sources as well as underwater detonations, some expended materials are left behind in the ocean. The potential impact of these actions was thoroughly analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS.</p> <p>Based on the analysis, and decades of experience conducting similar activities in the same area, there is no evidence of any habitat areas being degraded.</p>
<p>A. Peterson – 01 (Electronic)</p>	<p>March 9, 2014 U.S. Navy NWTT Public Comment #1 This public comment is to inform the U.S. Navy that the NWTT Draft EIS/OEIS is the worst written EIS of all of warfare testing range drafts written by the U.S. Navy. Please note that the U.S. Navy 5-Year Final NWTRC EIS/OEIS ROD (Record of Decision) choose Alternative 2, was signed on October 25, 2010. The U.S. Navy, at this time, is rushing forward with the NWTT Draft and has pre-selected, in their December 18, 2013, Permit Application to NOAA, Alternative 1. This means that the U.S. Navy is combining the activities in the NWTRC now under Alternative 2, and adding Alternative 1 activities in the NWTT without addressing this exponential growth in activities in the NWTT Draft and the impacts in marine life in the NWTT. We formally request that all Alaska related information be added</p>	<p>Please see Chapter 1 (Purpose and Need), and Chapter 2 (Description of the Proposed Action and Alternatives), for a detailed description of the Study Area, Proposed Action, and Alternatives. The NWTRC EIS/OEIS was a NEPA document and Proposed Action that occurred in 2010. The NWTT EIS/OEIS is a NEPA document and Proposed Action that is occurring presently, these projects do not overlap in time.</p> <p>NEPA requires an Agency to examine a range of reasonable alternatives for a proposed action. Additionally, NEPA requires an Agency to examine the No Action Alternative to provide a baseline for</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>to the NWTT Draft EIS and that the current NWTT Draft is withdrawn until rewritten. When the U.S. Navy filed their NWTT Range Application to NOAA/National Marine Fisheries Service they included in their Introduction their choice of Alternatives for the NWTT – Alternative 1. This action by the Navy invalidated the NEPA (National Environmental Quality Act), as it eliminated from consideration the No Action Alternative and Alternative 2 in the Navy NWTT Draft. Thus, the NWTT Draft should only have included Alternative 1, and the Alternative 2 activities from the NWTRC Final EIS, and not the other two alternatives which are not being considered at this time. This NWTT Draft EIS/OEIS violates NEPA due to the fact that the U.S. Navy applied for two permits from NOAA to “take” marine Mammals in the NWTT Range between 2015 and 2020, on December 18, 2013, one month prior to the NWTT Draft Being Released to the Public on January 18, 2013, making sure that the public comment period would be closed by February 28, 2014, weeks before the NWTT Draft could not be properly reviewed after reading the information in your application and that the time for public comments, after being able to read the NWTT Draft would be very limited. The Navy in the NWTT applications has pre-selected Alternative #1 as their basis for these applications to NOAA/NMFS for an LOA to “take” marine mammals in this range. Thus, the type and scope of the activities to be used between 2015 through 2020 has been predetermined by the U.S. Navy invalidating their NWTT Draft EIS/OEIS and the need for any public comments to be made on this draft. This action is alleged to violate NEPA requirements. The NWTT Draft EIS uses references and refers documents, not accessible to the public, as the basis of many general positions and statements with the text of this draft – violating NEPA – as it means that the public cannot access or assess this information. In addition, the Navy has not placed its references online for ease in reading and evaluating them to determine their relevance which precludes informed public comment and participation.</p>	<p>comparison.</p> <p>The Navy is completing this EIS/OEIS in compliance with current law, primarily the National Environmental Policy Act (NEPA). In addition to NEPA, the Navy continues to comply with other applicable environmental laws and with a number of regulatory requirements, such as the Marine Mammal Protection Act, the Endangered Species Act, the Coastal Zone Management Act, and the Magnuson-Stevens Fishery Conservation and Management Act.</p> <p>The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the Navy’s notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS. “1:59 AM CST March 26, is equivalent to 11:59 PM, March 25th, in accordance with the public notice. The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in Appendix B – Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements.</p>
<p>A. Peterson – 02 (Electronic)</p>	<p>This NWTT Draft EIS has an inadequate table of contents and also an impaired search engine so that many words can’t be located within the document itself. One example is the U.S. Navy maps which reflect “Explosive Ordnance Disposal”. When searching this document to find the scope of this activity, type, amount, to determine and type of disposal nothing can be found within the draft which spells out this plan in detail. I am formally requesting that you provide to the public the Draft Chapter and Page Number where this information can be found. What is being dumped, blown up, amount, type, scope, toxicity of chemicals, and types of containers, what has been dumped in these areas prior for the past ten years, will ocean dumping from Navy ships continue and what will be dumped overboard and how packaged? The NWTT Draft also lacks information on hazardous materials being used and disposed of in our range. There is no hazardous materials section located in the NWTT Draft. This NWTT Draft EIS/OEIS violates NEPA due to the fact that the U.S. Navy applied for two permits from NOAA to “take” marine Mammals in the NWTT Range between 2015 and 2020, on December 18, 2013, one month prior to the NWTT Draft Being Released to the Public on January 18, 2013. The</p>	<p>The NWTT EIS/OEIS has a complete table of contents and the electronic (PDF) versions have a fully functioning search capability.</p> <p>Please Section 3.1 (Sediments and Water Quality) for a discussion of possible chemical impacts from training and testing in the Study Area. Hazardous materials are also discussed in Section 3.1 of the NWTT EIS/OEIS. Please also see Section 2.1.2.2.1 (Explosive Ordnance Disposal Ranges) for a comprehensive discussion of the Proposed Action and training and testing activities that are proposed to occur with regard to explosive ordnance. Overall, chemical, physical, or biological changes in sediment or water quality would not be detectable and would be below or within existing conditions or designated uses.</p> <p>The Navy does not propose any activities such as “dumping debris on the seafloor, or spreading toxic chemicals.” In the course of the Navy</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Navy in the NWTT applications has pre-selected Alternative #1 as their basis for these applications to NOAA/NMFS for an LOA to “take” marine mammals in this range. Thus, the type and scope of the activities to be used between 2015 through 2020 has been predetermined by the U.S. Navy invalidating their NWTT Draft EIS/OEIS almost the need for any public comments to be made on this draft. The public comment period for the Navy application to NOAA closed on February 28, 2014, one month prior to the end of the public comment period of your NWTT draft EIS on March 25, 2014. The limited time for public comment on your pre-selected choice for activities in the NWTT Range negates the necessity for the rest of your “Open House Meetings” and has severely limited the public’s ability, under NEPA, to ask questions, given the public little time to address the draft EIS with regard to the Navy application to NOAA, and restricted public access by not placing online the references in your application to NOAA for quick public review. I am requesting that the U.S. Navy withdraw their NWTT Range application to NOAA, and that the Navy withdraw the NWTT Draft EIS/OEIS because they violate not only the spirit of the law but NEPA requirements under the law. Why should we comment on the “NO Action Alternative or Alternative #2, when Alternative #1 was preselected on December 18, 2013, by the Navy, as the one chosen to be implemented in our range? And since when does the Navy pre-select the “preferred Alternative #1” in advance of a NWTT Final EIS/OEIS and a Record of Decision by the Navy? With regard to our range it appears to both elected officials and the public that the “fix” choice is in thus invalidating the U.S. Navy Draft EIS/OEIS under NEPA requirements. What law and section requires that the Navy apply to NOAA for a permit to “take” marine mammals prior to the issuance of their NWTT Draft EIS? It is no wonder that the NWTT Draft EIS/OEIS is so poorly documented and written – the pre-selected “fix” was already decided by the Navy so why would one have to write a good draft for public comment? Why bother? The U.S. Navy does not list all of the areas in the new proposed NWTT range where warfare practice is limited or completely restricted in order to protect marine mammals, fish, and other marine life in biologically sensitive areas within the NWTT range: 1) We are requesting this information from the Navy, not only including these areas on a list but designating them on a map. 2) We are requesting that regions where the Navy states it does not conduct warfare exercises also not be impacted by lasers, IED or bomb blast concussions, and sonar which can travel for miles outside of these designated boundary areas. What types of mitigation measures are used to protect marine mammals and other marine life that might be impacted by long range weapons testing and experiments which travel for miles away from use areas? 3) We have also noticed that the NWTRC Final EIS/OEIS (September 2010), included all three alternatives: “The No Action Alternative, Alternative 1, and Alternative 2” instead of just letting the Public Comment on the Navy selected Alternative 2. This would have saved a lot of time and effort in making public comments because they could have been directed at Alternative 2, rather than comments on all three alternatives. We therefore recommend that the Navy, when the NWTT Final OES/OEIS is made public make Final EIS reflect the Navy final alternative decision. The few U.S. Navy Open House</p>	<p>proposed activities (listed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS), which do include the use of sonar and similar sound sources as well as underwater detonations, some expended materials are left behind in the ocean. The potential impacts of these actions was thoroughly analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS.</p> <p>Based on the analysis, and decades of experience conducting similar activities in the same area, there is no evidence of any habitat areas being degraded.</p> <p>The Navy is completing this EIS/OEIS in compliance with current law, primarily the National Environmental Policy Act (NEPA). In addition to NEPA, the Navy continues to comply with other applicable environmental laws and with a number of regulatory requirements, such as the Marine Mammal Protection Act, the Endangered Species Act, the Coastal Zone Management Act, and the Magnuson-Stevens Fishery Conservation and Management Act.</p> <p>The No Action Alternative, described in Section 2.6 (No Action Alternative: Current Military Readiness within the Northwest Training and Testing Study Area), provides information on the activities that are currently conducted in the NWTT Study Area. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the Navy’s notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS. “1:59 AM CST March 26, is equivalent to 11:59 PM, March 25th, in accordance with the public notice. The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Events, which last for approximately three hours, are staged events where the Navy will only answer questions if approached at various information stations. The Navy contractors at these events have consistently in 2014, refused to answer questions from the public in a group setting where everyone can ask questions and hear the answers. This gives the impression that the Navy is trying to hide information from the public or has no authority to answer said questions in a group setting where their comments may be recorded and made public. Thus, as in the case of the Fort Bragg Navy Open House in California on March 7, 2014, it appears that the Navy is violating NEPA in not allowing the public, as a whole group, to hear Navy answers to their questions. I am formally requesting a CD and hard copy of the NWTT Final EIS/OEIS when released to the public and to be notified when this is made public. Sincerely, Ava Peterson</p>	<p>Appendix B – Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements.</p> <p>The majority of comments received during the scoping phase from Washington came from Whidbey Island (Clinton, Freeland, Oak Harbor, Coupeville, Greenbank) and Friday Harbor, with Seattle following after that. No public comments were received from Portland, Oregon, and only one comment each was received from San Francisco and Sacramento, California. Previous Navy experience with other Northwest projects is that meetings held in larger population centers are often poorly attended. The Navy held one public meeting for this project in a large population center (Everett, Washington, near Seattle), and that meeting was the least attended of all eight public meetings. In addition to the meeting venues, the public could download and review the document, and make comments to it, on the website, which is available throughout the world.</p>
<p>A. Peterson – 03 (Electronic)</p>	<p>Will the U.S. Navy NWTT EIS/OEIS be addressing the following questions: 1) Would the U.S. Navy be willing to allow a 100 mile buffer zone between the NWTT Range Coastline out into the ocean where no military training, testing, or experimental weapons testing will be conducted to protect our marine life, habitats, and migration areas? Why? 2) Would the U.S. Navy be willing to stop all weapons system testing and radar use when whales and salmon are migrating through the NWTT Range? Why? 3) Will the U.S. Navy be testing Drones from the Boardman Drone Range in Oregon over Ocean areas in the NWTT Range? 4) Why isn't the Oregon Boardman Drone Range included in the NWTT EIS/OEIS as taking part in operations that will be conducted in the NWTT Range? 5) Once the public comment periods are over for the NWTT Draft and Final EIS/OEIS, why is the Navy, in its Record of Decision, allowed to change and add other activities in the NWTT Range without an additional public comment period? This happened with the issuance of the NWTRC ROD on October 25, 2010. 6) Please list all of the marine mammals by species, date, incident type, where the Navy has harmed marine mammals in either the Southern California, Hawaii Range, the Mariana Range, and the NWTRC since January 1, 2008. This information is needed in order for the public to evaluate the Navy performance in protecting Marine Mammals and other species with past mitigation measures. 7) U.S. Navy research has show that visual sighting techniques are effective in finding marine mammals, turtles, and other species just 9% of the time. 8)Please list all of the other types of marine mammals detection the Navy uses and how effective these other types are in detecting marine life prior to sonar use, bomb blasts, laser use, and other types of military activities? 9)Please explain why the Navy uses visual sightings as</p>	<p>Thank you for participating in the NEPA process. However portions of this comment, specifically question 5, 6, and 10, are outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p> <p>In answer to question 3, 4, 18, this EIS/OEIS includes analysis only of the in-water and overwater activities in the Pacific Northwest. Activities related to the Boardman Range are not related to the NWTT activities.</p> <p>To answer question 16, the Navy did not add new activities in the NWTRC ROD, nor would it add activities with the issuance of the NWTT ROD.</p> <p>To answer question 1, nearly all of the Navy's proposed activities would continue to occur outside 12 nm. To stay outside of a specific distance, such as 100 miles, would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>their main method of detection when ocean conditions are not ideal for this type of sighting most of the time. Is this a method chosen by the Navy so as to continue with most types of military activities because it produces so few sightings? 10) How many times since October 25, 2010, has the U.S. Navy stopped military training activities when a marine mammal(s), has been spotted in the NWTRC? 11) The Navy is well aware of marine mammal migrations through the NWTT at this time. Since the Navy has stated that they won't stop training during this period, even knowing that marine mammals and other marine life like salmon are present, isn't this a contradiction to your statements that all activities will cease when marine mammals are present? 12) What speeds will Navy ships be required to use in the NWTT to reduce ship strikes? 13) What precautions will the Navy take when salmon are migrating to and from rivers and streams so that they are not impacted by Navy activities? 14) The cumulative impacts of all types of marine life migrations are subject important to state in the NWTT EIS due to the number that move from one Navy Ocean Warfare Range to another and could be subjected to Navy activities (warfare testing), in each range. Please list the cumulative impacts from all military and non-military sources of sonar, and other types of permitted activities, in the Pacific that could cause species decline, injuries, death, strandings, and other type of harm by name of species and Pacific Warfare range impacts during their migrations. This information is needed in order for the public to comment on these types of impacts and if the Navy should do more to curtail warfare testing during migration periods. 15) Will the Navy stop warfare activities when marine mammals, turtles, and fish are in breeding, birthing, and feeding areas as they migrate in the NWTT Range? 16) Has the Navy conducted new weapons testing and experiments in the current NWTRC Range? Types and Dates? 17) Will the Navy conduct laser testing the NWTT Range? 18) What are the noise impacts of the F-35 Fighter Jet on marine mammals and fish? Will these jets be stationed or used in the NWTT Range? What mitigation measures will be used to reduce the noise factor from these jets?</p>	<p>testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average, ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>To answer question 7, and 9, Lookouts can visually detect marine</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When marine mammals have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p> <p>To answer question 1, 2, 8, 11, 12, 13, 15 as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p> <p>To answer question 14 the Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
A. Peterson –	March 14, 2014 Public Comment: What different types of sonar are now being used in the Pacific, Atlantic, and the Gulf of Mexico in all U.S. Navy Warfare Training & Testing	The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>04 (Electronic)</p>	<p>Ranges including the NWTRC? This is important to determine due to the fact that many marine mammals and other marine life migrate through some or all of the U.S. Navy Warfare Testing Ranges. This marine life might be impacted with different types of sonar through their migration routes and the Navy needs to assess their migration and the types of sonar impacts they may encounter in each range especially with regard to cumulative and synergistic impacts. What types of sonar are now being used in the U.S. NWTRC at this time? What types of sonar are now being used in the Alaska Range? What types of sonar are now being used in the smaller ranges within the NWTT Range? Please detail the potential impacts on all marine life and the purpose of each type of sonar use all ranges including the NWTRC range at this time and type and uses proposed in the new NWTT Range. Your NWTT Draft EIS/OEIS is confusing (and not well written), as it leaves many questions due to the extreme number of assumptions and generalizations throughout the entire document. The NWTT Draft violates full disclosure under NEPA and thus prevents the public from making informed public comments. Please list the various types of laser testing that will take place in all U.S. Navy Testing Warfare Ranges and their impacts on marine mammals and marine habitats. What types of lasers are now being tested in the NWTRC or the Alaska Range? (Please include the smaller ranges inside the NWTT proposed range.) What types of lasers are now being proposed to be tested in the proposed NWTT Range? It appears that the U.S. Navy has taken the position that the NWTRC Alternative 2 Adopted in the NWTRC Record of Decision is the current “baseline” or listed under the “No Action Alternative” of activities in the proposed NWTT Range (this includes all of the smaller Navy testing and training ranges now included in the NWTT Range). There were no public comments allowed after the Navy issued its Record of Decision in October 2010, on the NWTRC Range. No one knew that the Navy chose Alternative 2 because the NWTRC Final EIS/OEIS had all three alternatives listed as possibilities and did not list just Alternative 2 for public comment. This is a huge flaw in the Navy NEPA process. In addition, the NWTRC Record of Decision added activities to be used in the NWTRC Range without the Navy allowing public comment on these additions. Now the U.S. Navy has decided that all “Alternative 2” activities have been approved and that there is no reason to detail them in the new NWTT Range Draft EIS/OEIS. Since no one was able to address the “Alternative 2” chosen by the Navy in their 2010 ROD how can this new NWTT Draft EIS/OEIS ignore the current activities ongoing at the time in the NWTRC or the other ranges now in operation within the NWTT Proposed Range? The Navy has also removed from their NWTRC website their 2010 Final EIS/OEIS document and the copy of their ROD making it difficult to address current “Alternative 2” NWTRC activities under the NWTT “No Action Alternative”. It should also be noted that the NWTRC Range was only approved for five years along with all their NOAA permits. The Information in the NWTRC Draft & Final EIS/OEIS is older and based on information and research which has not been updated prior to September 2010. Therefore it should not be assumed that the NWTRC Alternative 2 Activities should be the “baseline” for the “No Action Alternative” in the NWTT Draft EIS.</p>	<p>included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the Navy’s notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS. “1:59 AM CST March 26, is equivalent to 11:59 PM, March 25th, in accordance with the public notice. The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in Appendix B – Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The No Action Alternative, described in Section 2.6 (No Action Alternative: Current Military Readiness within the Northwest Training and Testing Study Area), provides information on the activities that are currently conducted in the NWTT Study Area. These activities were analyzed using current techniques (e.g., using the updated Navy acoustic model) to provide a true baseline for comparison to the action alternatives.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>(This includes activities previously approved in all the smaller or new Alaska Ranges with the proposed NWTT range.) With new research, studies, new requirements by NOAA, and other issues the Navy should scrap the NWTT Draft EIS and prepare a more realistic and up-to-date Draft EIS with current information on activities, research, and other information included. Otherwise the public has no way to access the NWTT Draft EIS or provide public comment under NEPA due to lack of information. Please list individually all new and experimental weapons system being tested in the NWTRC since 2009, including information on their impacts on marine life. Will new weapons and experimental weapons be tested in the NWTT Range? Which ones? Will the Navy ROD for the NWTT Proposed Range include changes or additions in activities not included in the Final NWTT EIS/OEIS? Will the NWTT Final EIS/OEIS list all three alternatives or just the one that the Navy will choose in its ROD? It appears that under NEPA the public should have the right to public comment on the Navy's Final Alternative Choice prior to the ROD being issued. Sincerely, Ava Peterson</p>	
<p>A. Peterson – 05 (Electronic)</p>	<p>April 5, 2014 RE: Public Comment U.S. Navy Draft EIS/OEIS Your draft does not contain information about the status of future marine reserves in California, Oregon, Washington, and Alaska. Will the U.S. Navy avoid training and testing in marine reserves? Will there be any times when the U.S. Navy will stop all training and testing in the NWTT Range when marine mammals or fish (like salmon), are migrating along our coastline or during salmon runs into or out of fresh water streams or rivers? Please advise on how many times, with documentation, that the U.S. Navy has stopped all training and testing when A)Marine Mammals (list types) B)Turtles (list types) C)Other ocean life (list types) are present in the testing or training areas in the current NWTRC Range Complex. This information should include dates, times, and areas where training and testing has completed stopped until marine life has moved to another location. Will experimental weapons be used in the NWTT Range? Please list individual types of weapons (not in bin categories), and the harm that these weapons pose to all marine life, reefs, and biologically sensitive areas. Please list the types of acoustic lasers that will be used in the NWTT range, noise factors, and other impacts on marine mammals and other marine life including fish. If these acoustic lasers have been used in the NWTRC please advise on time, dates, and any marine impacts that were noted during these tests. Did the Navy or NOAA, in conjunction with the Navy, conduct any research while using lasers in our area? It should be noted that some birds and fish could be negatively impacted by acoustic lasers. Please list these species and what action the Navy plans to protect these species from acoustic lasers in the NWTT Range. What protection and/or mitigation measures are currently being used to protect marine and wildlife in the NWTRC (now NWTT), with regard to acoustic lasers at this time? Please advise on studies and reports which have been written on the subject of acoustic lasers and their impacts on all types of marine life. In addition, other weapons systems, like electromagnetic weapons, have been tested in the NWTRC. What impacts have these type of weapons had on marine life? Noise,</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Impacts on marine mammals and fish due to the training and testing activities of electromagnetic devices and lasers are discussed in Section 3.4.3.3 (Energy Stressors) and Section 3.9.3.2 (Energy Stressors) respectively. Birds will not be impacted by Energy Stressors</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Chemical, or actual harm caused by the use of these weapons systems? Please list the research on electromagnetic weapons and the impact on marine mammals, fish, and birds in the NWTRC or other ranges so that an evaluation can be made with regard to known studies and research. We any adverse impacts noted in this research? Please list giving type of impact, date, time, and number. Sincerely, Ava Peterson How effection</p>	<p>like electromagnetic devices or lasers.</p>
<p>A. Peterson – 06 (Electronic)</p>	<p>U.S. Navy NWTT DRAFT EIS/OEIS PUBLIC COMMENT A APRIL 15, 2014 Though the Navy has been conducting training exercises in the NWTRC now NWTT for several decades, it has recently evaluated and sought the required permits for increases in the intensity and tempo of its training activities in the NWTT Range Complex in their December 18, 2013, two applications to NOAA for permission to “take” marine mammals. Why does the Navy’s 2014 NWTT Draft EIS/OEIS not provide information on the activities that are currently being conducted in the NWTT range at this time? The public needs this information in order to properly evaluate the Navy’s alternatives under NEPA. Thus, we are formally requesting that the Navy provide all information to the public on their current activities along with detailed and referenced on their weapons systems and impacts on marine life and biologically sensitive areas. The Navy’s activities in NWTRC, now NWTT, area include surface-to-air gunnery and missile exercises; anti-submarine warfare exercises involving tracking aircraft, sonobouys, and use of surface ship sonar; air-to-surface bombing exercises; and sink exercises. The public needs a current list of all of these activities that are currently ongoing in order to properly and fully evaluate their impacts on marine life and biologically sensitive areas. As part of these exercises, the Navy will repeatedly broadcast high-intensity sound waves into a vast stretch of ocean, containing some of the most biologically productive marine habitat in the United States, and take other actions known to kill and injure whales, dolphins, fish, and sea turtles. With current mitigation measures only effective 9% of the time this type of activity could have long range and terrible consequences to all marine life in the NWTT Range. This we are requesting a listing of all current, and proposed, sonar, acoustic lasers, and other weapons systems or activities that produce this type of sound now being used the NWTRC Range and proposed for the NWTT Range. NMFS and the Navy estimate that the Navy’s use of mid-frequency active sonar (“MFAS”) and other actions will result in approximately 650,000 marine mammal “takes” during the first five-year authorized period of these training activities. According to these agencies, the use of MFAS in particular will harass marine mammals hundreds of thousands of times, disrupting their migration, breathing, nursing, breeding, feeding, and sheltering, and cause temporary hearing loss in species that depend on sound for their reproduction and survival. Thus, we require a listing of the areas in the NWTT that are currently and that will use these technologies in the future in the NWTT range. Also with each “MFAS” the Navy should detail known impacts to marine mammals and also the areas in which they will be used.</p>	<p>Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p> <p>The Navy shares your concern for marine life. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities.</p> <p>The No Action Alternative, described in Section 2.6 (No Action Alternative: Current Military Readiness within the Northwest Training and Testing Study Area), provides information on the activities that are currently conducted in the NWTT Study Area. The Navy submits an annual exercise report to NMFS, which contains information on Major Training Exercises, and a summary of sound sources used.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar’s detection would travel beyond the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.
A. Peterson – 07 (Electronic)	<p>U.S. NAVY NWTT DRAFT EIS/OEIS PUBLIC COMMENT C – APRIL 15, 2014 Shipboard waste-handling procedures governing the discharge of non-hazardous waste streams have been established for commercial and Navy vessels. These categories of wastes include solids (garbage) and liquids such as “black water” (sewage), “grey water” (water from deck drains, showers, dishwashers, laundries, etc.), and oily wastes (oil-water mixtures). Does the U.S. Navy’s Submarines discharge compacted, sinkable garbage between 12 nm and 25 nm provided that the depth of water is greater than 1,000 fathoms? Do the Navy’s Surface ships use pulpsters and shredders for all discharges of food products, paper, cardboard, glass and metal wastes? Is shredded metal and glass bagged prior to disposal at sea or just dumped as loose material into the Pacific Ocean? It is alleged that all U.S. Navy Submarines discharge compacted, sinkable garbage into the ocean. Is this type of discharge permitted in the NWTT Range? Please show locations where this type of dumping has occurred in the NWTRC, now NWTT Range, in the past five years? How many tons are dumped each year in the NWTT Range? Surface ships without an operable OWS must retain oily waste for shore disposal. If operating conditions require at-sea disposal, minimal discharge is permitted beyond 50 nm from nearest land. How much of this type of material has been dumped into the NWTT Range in the past five years? Record-keeping requirements exist for at-sea discharge. Minimal discharge authorized if plastic waste processor inoperable and necessary for safety of ship/ health of crew. How many times each year are waste processors inoperable in the NWTT Range? Please advise on the tonnage of this type of discharge in the NWTT Range in the past five years? If submarines are allowed to conduct this type of ocean dumping does this mean that other types of ships are engaged in ocean dumping in the NWTT Range. Please advise on the number of tons dumped in the ocean from vessels other than submarines and where this dumping takes place in the NWTT Range. What are the potential effects of this type of dumping on ocean marine life and how much of this type of materials has been located on nearby shores where said dumping occurs? We expect that the U.S. Navy will address all these issues in a well-written form in your EIS. In addition, if you refer to documents or reports, please make sure that they are available by links to the public or online where the information can be read and researched. Making broad statements that refer to classified documents unavailable to the public for review is unacceptable to the public and violates NEPA.</p>	<p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>The analysis is contained throughout Chapter 3 (Affected Environment and Environmental Consequences) of the Draft and Final EIS/OEIS (e.g., Section 3.3.3.2.1, Impacts from Military Expended Materials discusses marine habitats). For example, military expended materials related to training exercises under Alternatives 1 and 2 would not impact more than 0.00009 percent of the available soft bottom habitat annually within any of the range complexes. The Navy has standard operation procedures in place to reduce the amount of military expended materials (Section 5.1.4.2, Weapons Firing Range Clearance), including recovering targets and associated parachutes to the maximum extent practical. In addition, the Navy has developed mitigation areas (Section 5.3.3.2, Seafloor Resources) to avoid and reduce potential impacts of military expended materials on seafloor habitats, including coral and hardbottom habitats.</p>
A. Peterson – 08 (Electronic)	U.S. NAVY NWTT DRAFT EIS/OEIS PUBLIC COMMENT E – APRIL 15, 2014 The U.S. Navy has various radiation sources which exposure Navy personnel to various types of radiation. There is also radioactive waste where disposal is required. Does the Navy dispose of this radioactive waste by dumping or disposing of this waste in the ocean in	The analysis is contained throughout Chapter 3 (Affected Environment and Environmental Consequences) of the Draft and Final EIS/OEIS (e.g., Section 3.3.3.2.1, Impacts from Military Expended Materials discusses marine habitats). For example, military expended materials

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>the NWTT Range? If so where does this type of disposal take place...please include medical radioactive waste. If this waste is disposed of on land please designate disposal sites. Which weapons or other systems in use in the NWTT Range contain radioactive materials or when used could expose Navy personnel to this type of exposure including medical areas? Could this exposure or the use of various types of weapons system expose Navy and the public to these type of weapons systems or materials? We know that weapons systems, bombs, and other experimental weapons could expose both the public and Navy personnel to radioactive or toxic chemicals. Which types of bombs are being used that contain radioactive materials. The 2014, NWTT DRAF EIS/OEIS, does not have a hazardous materials section, including a radiation hazards section, which designative the hazardous materials now being used in the NWTRC or proposed to be used in the NWTT Range. Since the NWTRC Final EIS/OEIS for 2010, was released, Alternative 2, was chosen by the Navy. Thus, we have no current facts or figures with regard to the whole lists of weapons systems being used or proposed to be used in the NWTT Range at this time. And the listing of toxic chemicals and radioactive materials listing is also missing. We are requesting that all of this information be included in the next NWTT EIS. Also this section should include disposal methods, location of where these items are disposed of...whether at sea or on land. Also there should be information on the health and toxicity levels with regard to marine life, birds, and plants in the NWTT Range. Human health information should also be included because both Navy and the public could be exposed to these types of toxics. What procedures does the Navy have in place to handle Navy and public exposure to toxics and radiation sources?</p>	<p>related to training exercises under Alternatives 1 and 2 would not impact more than 0.00009 percent of the available soft bottom habitat annually within any of the range complexes. The Navy has standard operation procedures in place to reduce the amount of military expended materials (Section 5.1.4.2, Weapons Firing Range Clearance), including recovering targets and associated parachutes to the maximum extent practical. In addition, the Navy has developed mitigation areas (Section 5.3.3.2, Seafloor Resources) to avoid and reduce potential impacts of military expended materials on seafloor habitats, including coral and hardbottom habitats.</p> <p>The Navy does not propose the use or dispose of ordnance containing depleted uranium or phosphorus, or other radioactive waste. Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
	<p>U.S. NAVY NWTT DRAFT EIS/OEIS PUBLIC COMMENT F – APRIL 15, 2014 Weapons systems based on lasers and ray guns , are now viable, with state-of-the-art laser weapon systems are now a reality. All branches of the military and industry have mastered high power levels, beam control, and adaptive optics. In 1999, the Department of Defense (DOD) formally recognized lasers as future weapons and began research and development (R&D). In 2000, the Joint Technology Office for High Energy Lasers was formed to bring all laser technologies together to develop a complete laser weapon system that could be used by the warfighter. Many types of lasers, including Solid-State Lasers, Chemical Lasers, Gas Lasers, Fiber Lasers, and a wide variety of miscellaneous Lasers have been developed in the past forty years. These include but are not limited to: Baseline Demonstrator Laser (BDL) Hydrogen Fluoride (HF), Navy-ARPA Chemical Laser (NACL) HF, Alpha HF – Built for Strategic Defense Initiative (SDI) Space-Based Laser (SBL), Tactical High-Energy Laser (THEL), Advanced Tactical Laser (ATL), Airborne Laser (ABL) (CO2) Chemical Oxygen, Joint High-Power Solid-State Laser (JHPSSL), and the Navy Laser Weapon System (LaWS), and acoustic lasers. What types of lasers are currently used in the NWTRC, now NWTT Range? Please list the various types of lasers and their impacts on marine mammals and other aquatic species. How often are these lasers proposed to be used in the next five years in the NWTT Range?</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Effects to Marine Mammals are discussed in the EIS/OEIS, Section 3.4. Impacts on marine mammals due to the training and testing activities of electromagnetic devices</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>What are the effects on whales, dolphins, fish, and the bottom of the ocean floor, and coral reefs from the use and testing of lasers? Are electromagnetic weapons systems being used in the NWTT Range at this time. What impacts do they have on marine mammals? What areas of the NWTT Range are used for this type of training and testing? Some of these types of weapons have effects, from light, noise, etc. What are these effects and how is the Navy mitigating these effects other than by visual sightings of marine mammals?</p>	<p>and lasers are discussed in Section 3.4.3.3 (Energy Stressors).</p>
<p>A. Peterson – 09 (Electronic)</p>	<p>U.S. NAVY NWTT DRAFT EIS/OEIS PUBLIC COMMENT G – APRIL 15, 2014 1) Will DARPA's Distributed Agile Submarine Hunting DASH Program be used or testing the NWTT Range Complex by the Navy? Has this technology been tested in the NWTRC Range in the last five years? A) DASH's goals, using functional distributed sonar, communications, and mobility at deep-ocean depths in order to use sonar to help find and track quiet submarines. B) What impact does this technology have on marine mammals and other aquatic life? C) Can this technology be used to find whales and other marine mammals that can't be spotted from visual observations ships? D) What research has been conducted on impact to marine mammals and other aquatic life from using this technology? E) Has the Navy researched the impact of this technology on marine mammals? Please list the results of any research projects. 2) What types of methods can the U.S. Navy use to locate marine mammals and other aquatic life that can't be visually seen with "visual" methods? A) Please identify these technologies, where were they tested, and how accurate are they at this time. B) Will these new technologies be used in the NWTT Range in the next five years to protect marine life? C) What research has been conducted on impacts to marine mammals from the use of this technology?</p>	<p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. The DASH program will not be used in the NWTT Study Area and is not a part of the Proposed Action.</p> <p>The Navy funds monitoring and research that can include dedicated Marine Mammal Observers (see the reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		should be considered in identified biologically important areas.
<p>A. Peterson – 10 (Electronic)</p>	<p>U.S. NAVY NWTT DRAFT EIS/OEIS PUBLIC COMMENT H – APRIL 15, 2014 Questions about Upward Falling Payloads Advances Deep-Sea Payload Technology 1) Payloads with protective containers will lie on the deep-ocean floor for years and then be re-called for use on demand for payload launches. 2) What types of payloads will be used? 3) What happens if these systems don't work after years of being on the bottom of the ocean? 4) Will these containers move with ocean currents, earthquakes, volcanoes, hurricanes, or other unpredictable events breaking them or make them unusable? 5) Will the Navy be able to retrieve them if they don't work or have been moved from original location? 6) Will these types of containers be deployed in the NWTT Range? 7) In what location will they be deployed? 8) If these containers become defective and their payloads are leased into the ocean what will be the impacts of this type of payload on marine mammals and other sea life on the ocean floor? The U.S. Navy has a bad habit of changing the operations, training, types of weapons systems deployed and testing over five years in various range complexes. Will the Navy be required to prepare a applications to NOAA for permits and/or a new EIS when they use these new training, testing, and weapons systems in the NWTT Range? If not, why not?</p>	<p>The types of systems specifically mentioned in the comment are not proposed for use and were therefore not analyzed in the NWTT EIS/OEIS. Regarding other new systems; in accordance with NEPA, the Navy would be required to supplement the NWTT EIS/OEIS if it were to make "substantial changes in the proposed action that are relevant to environmental concerns; or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.</p>
<p>A. Peterson – 11 (Electronic)</p>	<p>U.S. NAVY NWTT DRAFT EIS/OEIS PUBLIC COMMENT B – APRIL 15, 2014 NWTRC Final EIS 2010 – U.S. Navy Quote – PAGES G-26-27 "As stated in the (NWTRC), DEIS, and as stated in public articulations of the professional military judgment of senior Navy leaders, alternatives that would impose limitations on training locations within the NWTRC, would not support the purpose and need. The analysis mandated by NEPA is not an evaluation of alternative means to accomplish the general goal of an action. Rather, alternatives to be evaluated should be those that reasonably satisfy the specific purpose and need for the agency action. The underlying need is to conduct training of a specific nature, type, and scope that is required to ensure Navy personnel and units are fully trained. The DEIS appropriately limits its analysis to alternatives that meet the Navy's congressionally mandated training mission..." Public Comments on the Above Statement by the U.S. Navy: 1) With the U.S. Navy Training and Testing in the Atlantic, Pacific, and the Gulf of Mexico in more than twelve operating ranges and huge enlarged ranges approved in 2013, the U.S. Navy now has a opportunity in the NWTT Range to self-impose limitations on training and testing locations, and the time of training and testing, to protect and not destroy our oceans and marine life in some areas. Will they Navy adjust its training and testing in order to protect biologically sensitive areas, marine reserves, and other breeding and feeding habitats for many endangered species, and reduce their activities during periods of species migrations? 2) Since it is claimed by the Navy that all of the training and testing has been conducted in other ranges before being brought the NWTT Range it would appear that escalating the training and testing in our range is overkill and a waste of bombs, missiles, and other types of weapons used in our range</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>under life-fire training, testing and new weapons testing. Isn't it the job of the Navy to preserve and protect these finite resources rather than to destroy them in the name of warfare practice in the NWTT Range? 3) I object to the Navy's analysis of NEPA. Under this analysis the Navy may as well not list any alternatives as they have pre-determined that their EIS is "...not an evaluation of alternative means to accomplish the general goal of an action. Rather, alternatives to be evaluated should be those that reasonably satisfy the specific purpose and need for the agency action..." A. Why bother with the NEPA Process at all when this is the conclusion reached prior to any public comment? B. Since each all the alternative in the Draft NTT EIS have been pre-determined to be the ones that the Navy have already been chosen and your mitigation measures to protect marine species are effective only 9% of the time why even bother to have a public comment period on your actions? The Navy only wants mitigation measures that allow C. It is alleged that the U.S. Navy, in almost all of their Record of Decisions, with very few, exceptions, have chosen Alternative 2. Thus, the NEPA process is also flawed as the other Alternatives are not valid alternatives. 4) The U.S. Navy states that it is protecting marine mammals and other aquatic life but with their above statement only their training and testing are important and they accept no limitation on their actions which would protect our oceans and marine life. 5) The end result is that the Navy doesn't accept any mitigation measure that would place any limitations on training and testing. This is why NOAA Rubber-Stamps the U.S. Navy permit applications and doesn't protect our oceans or marine mammals or other sea life. Since they are not an oversight but co-operating agency they have no authority to do anything but comply with all the provisions in the Navy applications. If this statement is incorrect please list all of the areas where the Navy is not allowed to train or test in the NWTT Range. 6) The end result is a flawed NEPA process where public comments are made, other governmental agencies information is given, and the U.S. Navy ignores them all. Why have a fake NEPA process at all if the Navy statement above in your position?</p>	<p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p> <p>Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
<p>A. Peterson – 12 (Electronic)</p>	<p>U.S. Navy Ship Collisions: http://www.theguardian.com/environment/2013/jul/01/alaskan-beaches-tonne-garbage?INTCMP=ILCNETTXT3487 http://news.yahoo.com/2-us-navy-ships-collide-pacific-no-injuries-235934488.html http://www.nytimes.com/2012/10/15/us/navy-nuclear-sub-and-cruiser-collide-off-east-coast.html?_r=0 Navy Ships are colliding with each other...time for the Navy to re-evaluate, slow down, And address these issues. How many accidents have happened in the NWTT in the last 5 years? How many marine mammals have been killed by Navy ship strikes on the west coast of the United States? Should Navy ships slow down in order to avoid hitting each other and marine mammals?</p>	<p>Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project. Note that as the EIS/OEIS presents, there have been no (0) U.S. Navy vessel strikes to marine mammals in the NWTT since the Navy began keeping records in the mid-1990s. The history of U.S. Navy vessel strikes to whales on the west coast and in Hawaii are also outside the scope of this document, however, that information is available at the HSTT EIS website [hstteis.com].</p>
<p>R. Peterson (Oral)</p>	<p>Hello. I want to say that the Navy personnel has always been kind and respectful, and I don't have any comment about them personally because they have answered my questions and they have been very kind to me, whether it's public relations or whoever is</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>with the Navy. So I want to say that for everyone here. I want to say that in February 2009 when I first found out that the U.S. Navy was going to be engaged in warfare testing in our range I didn't have any idea that the U.S. Navy was -- had a map out since 2007 showing all the ranges that they are going to be testing at over the five years, between 2008 and 2013. And it's -- there's ranges in the Gulf of Mexico. There's ranges in Alaska. There's ranges in Hawaii and Mariana Islands near Guam in the Pacific. There's range testing in the Gulf of Mexico. So when they say that oh, they just have to test in one little range in the Northwest Training Range, the Navy in their EIS, which I'm requesting they put in, is the map of all their testing ranges. Because what happened in November and December 2013 is that the U.S. Navy expanded their Hawaii-Southern California range and they also expanded their Atlantic Fleet range. I put a map together of the Navy maps. I borrowed them from the Navy because they were online, and in those Navy maps I show all the ranges. If you look at those Navy maps you will see that the Navy is testing along the entire east coast. They have these small ranges and now they have a gigantic range which goes from the Canadian border, above the Canadian border actually, all the way down through the Gulf of Mexico and it even looks like it's in international waters. This Navy has also decided that they are expanding the Hawaii-Southern California range and they're going to be conducting testing there and in each of the small ranges and each of the large ranges they have active applications approved by NOAA for permits to take mammals in all those ranges. In the Final EIS 2010 for our range, the Northwest Training Range Complex, it states that the Navy will not stop testing in our range during the migration of marine mammals, and I even have the page number if the Navy would like. I have the page number. And so what's happening is that the Navy is allowing takes of marine mammals to happen in all their ranges along the coast and as marine mammals migrate along the entire coastal range in these maps you can see that they're going to be impacted in every single range. The Navy states -- okay. Let me finish one sentence. The Navy states in its Final EIS for our range that a lot of the activities that are taking place in our range have already been used and practiced upon in other ranges.</p>	<p>the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
R. Peterson – 01 (Electronic)	Testing March 3, 2014	Thank you for participating in the NEPA process.
R. Peterson – 02 (Electronic)	Alaska - The area just south of Prince William Sound and east of the Kenai and Kodiak Island is a major feeding sport for whales. Most cruise ships ply those waters at that time just so their clients can see whales. Also, given the collapse of the Chinook salmon fishery on the Kenai Rivers, I am shocked that no one asked the Navy to look at if their actions over the last few years is in any way linked to the collapse of those fisheries. What research has been conducted to find out if Navy activities in this area are having an impact on the Chinook Salmon population? What were the results? Port Graham, right at the tip of the Kenai, and the closest native village to the operations area has had to close	Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>their cannery in the last year because of the lack of return of several species of salmon. With the reported decline in salmon populations near the state of Washington why has there been no research conducted to find out if U.S. Navy Warfare Testing and Training Activities are having an impact on this population of salmon? Will the U.S. Navy cutback on its activities during the salmon migration in either location in the next five years in both of these areas to see if these salmon populations recover?</p>	
<p>R. Peterson – 03 (Electronic)</p>	<p>On an interesting development, Flint Hills Refinery in North Pole, Alaska just announced that they are closing for good this summer. Their major product is Jet A (JP 8) and JP5 which is mostly sold to the military. They have a direct pipeline from the refinery to Eielson AFB and is why Eielson has an air tanker mission. Without that fuel supply, there is no reason to keep Eielson AFB open. Also Fort Wainwright in Fairbanks is a major buyer of JP5 for the Strykers as well as JP8 for the Air Cavalry division stationed there. With the loss of Flint Hills, the military will have to move fuel up from Puget Sound via barges. The NWTT Draft EIS/OEIS does not address this issue. I am requesting that the impact of using barges be addressed in the NWTT EIS/OEIS. It appears that military readiness will be impacted by the closing of the Flint Hills Refinery and a more costly solution will be used to supply jet fuel in the future. Accidents, bad weather, freezing temperatures, and other issues face those who transport jet fuel by barges. And the Navy should address the problems faced when highly explosive jet fuel is loaded, unloaded, and bounced around on a barge during inclement weather. I suspect the military will have to modify or even prepare an EIS for the movement of fuel to Alaska through Prince William Sound and/or Cook Inlet. They need several million gallons a month to maintain operations. There should be an environmental assessment made to determine the impacts of this activity and also a realistic assessment of this activity in the NWTT EIS/OEIS. The cost of moving highly volatile jet fuel via barge in all types of weather conditions and during military exercises should be included in the NWTT EIS/OEIS which is void of this information which should also include increased costs for use of barges for this type of transportation. What military activities will need to be suspended in areas during transportation of jet fuel by barge? If there are jet fuel spills or accidents what are the potential problems? Cleanup of spills in this area would be difficult but should be addressed in an NWTT EIS. Will these issues be addressed in the NWTT Final EIS/OEIS?</p>	<p>Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
<p>R. Peterson – 04 (Electronic)</p>	<p>Questions Regarding Your Public Comment Deadline for the NWTT EIS/OEIS 1) Will the U.S. Navy be extending the public comment deadline to allow more time for public comments? 2) Your website states: "The Draft EIS/OEIS is now available for public review. View documents here. Comments will be accepted from January 24, 2014 until March 25, 2014." 3) This public comment form states that the public comment deadline ends on March 26, 2014. This is leading to some confusion with regard to when the public comment deadline ends. 4) Please note that the time for cutoff of the public comment date, whichever, one it is, confuses the public because Alaska, Oregon, Washington, Idaho, Northern California are three hours or more behind the East Coast. Will you</p>	<p>Idaho is not included in the Study Area. Thank you for participating in the NEPA process. However, parts of this comment are outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project. The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>address this issue on your website to clear up this problem? Public comment should be open until the time in local regions, in each State, reach midnight on the final day allowed for public comment. Additional Questions: 5) Why were there no Navy “Open House Meetings” in Idaho since the U.S. Navy NWTRC Range includes parts of Idaho? Has Idaho been removed from the NWTT Range Boundaries? 6) If Idaho is still part of the NWTT Range what activities are being conducted in Idaho at this time under the 2010 NWTRC Alternative 2, and also what activities are proposed to be conducted in Idaho if still included in the NWTT Range in the future? 7) There are additional questions with regard to the “NO ACTION ALTERNATIVE” in the Draft NWTT EIS/OEIS. Clarification is required since the 2010 NWTRC Range NOAA Permits, 5-Year Final EIS/OEIS, and Navy ROD, which denote “Alternative 2”, expires after five years. It should also be noted that the NWTT Range includes smaller U.S. Navy Ranges each with their own individual NOAA permit and 5-Year EIS/OEIS. Once encompassed into the NWTT Range will these individual ranges still have their own individual “take” permits and 5-Year EIS requirements or are they now incorporated into the NWTT Range and EIS/OEIS? If these smaller ranges are to remain individual ranges then please note the cumulative and synergistic impacts of multiple listings of marine mammals in the NWTT “Take” permits with NOAA and the listing of the same marine mammals for “take” permits in each individual smaller range within the NWTT. 8) Questions have been raised with regard to which areas in the proposed NWTT Range are off-limits for Navy Training and Testing. Please lists these areas and detail on a map the location, area size, names, if any, of these areas. 9) What does the U.S. Navy do with the sewage and waste water produced by Navy ships? We do know that it has been dumped into the oceans in the past in violation of environmental laws. How is this sewage and waste water currently being processed and detail locations where is it disposed of, if not in our Oceans? How much sewage and waste water is produced by the Navy each year from all Navy ships? 10) The U.S. Navy is conducting warfare exercises in various ranges in the Pacific, Atlantic, and the Gulf of Mexico. The NWTT Draft EIS/OEIS fails to provides maps of all range areas where the Navy is conducting warfare exercises (training and testing). The public is unable to evaluate the areas in which all training and testing occurs and also to determine the need for an expansion of training and testing in the NWTT without this information and these maps. In the Navy Final 2010 NWTRC EIS/OEIS it states that all training and testing, now conducted in the NWTRC, has been conducted in other warfare testing ranges. Will this continue to be the case in the NWTT Range? The duplication of testing and training exercises does not seem justified at this time. We hope that you can clear up the Public Comment Deadline dates and time problems on your website. In addition, we would appreciate an extension of your public comment deadline due to the lack of an Index which is needed to find locations of information because the NWTT EIS/OEIS draft is so poorly written. Sincerely, Rosalind Peterson</p>	<p>locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the Navy’s notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS. “1:59 AM CST March 26, is equivalent to 11:59 PM, March 25th, in accordance with the public notice. The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in Appendix B – Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements. The analysis of impacts to marine mammals in the NWTT EIS/OEIS is presented by area (Offshore Area, Inland Waters, and Western Behm Canal) in order to more accurately focus on the activities impacting species and stocks in each of these geographically separated areas with attention also paid to those that are also sometimes present in all three locations. For purposes of ESA and MMPA, determinations were based on the combined effects of the activities on those individual marine mammal populations, regardless of location specifically to incorporate potential cumulative and synergistic impacts.</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
<p>R. Peterson – 05 (Electronic)</p>	<p>March 18, 2014 The NWTT Range has been the site of previous military munitions dumping in the past. What types of military munitions dumping has been dumped in this area since 2001, in the NTWRC (now NWTT) range by the Navy and other branches of the military? Where have these munitions been dumped? Please designate locations on a map and list types of munitions that have been dumped in the proposed NWTT Range. Since previous military munitions dumping has taken place in the Pacific, starting just prior to World War I according to the U.S. Department of Defense FY2009, please designate on a map where these areas are located in the NWTT Range and also what precautions the Navy is taking to not disturb these areas. With increased military use of bombs and other types of activities in the NWTRC Range will NWTT proposed increased testing, with the use of bombs, lasers, electromagnetic weapons, and other types of activities disturb the munitions dumped in these areas? Will the U.S. Navy be dumping chemical weapons, munitions, hazardous and toxic waste, and human waste and wastewater into the NWTT range or nearby ocean areas? Please identify (NWTT Range), all types of ocean dumping and locations on a map designating the types of containers to be used and the longevity of these containers before they begin to leak. What types of radioactive waste has been dumped in the NWTT Range Area? Please designate location on a map and dates of dumping. What is the longevity of these radioactive waste containers? Will the Navy Training and Testing in the NWTT disturb or crack open these containers? What precautions is the Navy taking to protect these areas from being disturbed during training and test activities? Thank you very much.</p>	<p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>The Navy conducted a full analysis of the potential impacts of military expended materials on marine resources and has proposed several mitigation measures to help avoid or reduce those impacts. The analysis is contained throughout Chapter 3 (Affected Environment and Environmental Consequences) of the Draft and Final EIS/OEIS (e.g., Section 3.3.3.2.1, Impacts from Military Expended Materials discusses marine habitats). For example, military expended materials related to training exercises under Alternatives 1 and 2 would not impact more than 0.00009 percent of the available soft bottom habitat annually within any of the range complexes. The Navy has standard operation procedures in place to reduce the amount of military expended materials (Section 5.1.4.2, Weapons Firing Range Clearance), including recovering targets and associated parachutes to the maximum extent practical. In addition, the Navy has developed mitigation areas (Section 5.3.3.2, Seafloor Resources) to avoid and reduce potential impacts of military expended materials on seafloor habitats, including coral and hardbottom habitats.</p>
<p>R. Peterson – 06</p>	<p>U.S. NAVY NWTT DRAFT EIS/OEIS PUBLIC COMMENT D – APRIL 15, 2014 The U.S. Navy has had a myriad of problems over the past several years with regard to Navy</p>	<p>The testing proposed to be conducted in the NWTT Study Area is unique testing, not conducted elsewhere. Much of the proposed</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	<p>Personnel and also Navy accidents costing U.S. taxpayers \$Millions of dollars. With the Navy planning on more training and testing activities in the NWTT Range complex it worries many of us that these Navy problems could endanger other shipping in the NWTT, fishermen, marine mammals, marine reserves, coral reefs, National Marine Sanctuaries, as it appears that accidents, equipment failures, and Navy personnel problems are getting worse each year. The U.S. Navy needs to address these problems before any training and testing takes place in the NWTT Range Complex. This should be easy to do as the U.S. Navy is well-aware of these deficiencies and could easily address these issues so as not to damage the marine life, biologically sensitive areas, and coast regions, due to Navy incompetency. Does your proposed NWTT action include 'testing' of weapons and training with weapons and platforms that are not already tested in other complexes and ranges? It is a monumental waste taxpayer money if the Navy continues to duplicate live fire testing of weapons systems already tested in other areas. In the NWTRC Range how many weapons systems, and experimental weapons systems were tested in the past five years? Please address this issue and give specific details instead of broad generalizations. It has come to my attention that the Navy appears to be having a crisis on many fronts. This include Navy conduct problems, ships running aground, equipment problems, threats from foreign-made parts and part failures, building the most expensive jet in history (F-35) whose problems seem insurmountable, ethical problems, navigation problems, Navy commanders dismissed in the past five years number in the hundreds, Navy ships hitting other Navy ships, nuclear submarine docking problems and fires, bombs dropped on coral reefs, ship run aground on coral reefs, and much more. It is a staggering list of problems and failures that threaten the ocean areas in the NWTT (formerly NWTRC), range. These issues are in the news more and more as the general incompetence of Navy personnel at the Commander and higher levels is made public. Just read the news and remember that the Navy is having more problems in 2013 and 2014: 25 Navy Commanders Dismissed http://www.stripes.com/25-navy-commanders-dismissed-1.202123 "...It was a brutal year for U.S. Navy commanding officers, who saw 25 of their own get pink slips in 2012. Many of the commanders were fired for personal misconduct, with the Navy providing few details about what exactly caused their downfall. The number of dismissals is a slight uptick from 2011, when 23 commanding officers were fired. Navy officials have said they are working to weed out bad commanders. Starting in 2013, all commanders will be subject to informal evaluations from peers and subordinates. "Loss of confidence" was the most commonly stated reason cited for the removals. The explanations offered for other dismissals were more specific..." End 1) Military Brass-Behaving Badly-Files Detail A Spate of Misconduct Dogging Armed Forces January 26, 2014 Washington Post.pdf The following statement by the U.S. Navy is unacceptable as these occurrences do happen to Navy vessels. "...As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed..." NWTRC Final EIS/OEIS (Page G-26) Thus, the U.S. Navy should address and analyzed</p>	<p>training is similar to that conducted in other locations, but the training is critical to the readiness of the personnel stationed in the Pacific Northwest.</p> <p>Some of the very issues raised in the comment underscore the importance of realistic training, training that helps prevent ship- and aircraft-related incidents.</p> <p>Seismic airguns are not a part of the Proposed Action, and therefore will not be used in training or testing activities in the NWTT Study Area.</p> <p>Recommendations to change the mission of the Navy or the policy of the United States government are beyond the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>these occurrences in their NWTT EIS along with prevention measures and methods of clean-up and disposal and the Navy should be prepared to deal quickly and efficiently with this problems. In addition the following problems are plaguing the Navy: 2) March 14, 2014 – U.S. Navy Ship Fires: http://hamptonroads.com/2014/03/navy-will-study-sea-dragon-engine-problems 3) U.S. Navy Rebukes Three Admirals for Taking Questionable Trip to Britain February 7, 2014 Washington Post 4) http://www.military.com/daily-news/2013/08/16/uss-henry-m-jackson-chief-of-the-boat-relieved.html?comp=7000023435630&rank=6 5) U.S. Waived Laws to Keep F-35 on Track With China-Made Parts January 3, 2014 Reuters News 6) U.S. Navy Warship Runs Aground in Black Sea February 18, 2014 NBC News Article+Video 7) November 13, 2013 Littoral Combat Ship-More Problems that are continuing in 2014. http://www.stripes.com/news/littoral-combat-ship-sidelined-again-by-maintenance-issue-1.252620 http://www.military.com/daily-news/2013/07/26/gao-navy-must-test-lcs-before-full-rate-pace.html 8) Sexual Assault in the Military – U.S. Senate Hearing - June 19, 2003 http://www.c-span.org/video/?313137-1/senate-committee-reviews-sexual-assaults-military 9) F-35 Joint Jet Strike Fighter-Most Expensive Military Weapons Systems in History-Years in Making-November 28, 2012 NYTimes.pdf June 4, 2014 http://www.c-span.org/video/?313451-1/sen-subcmte-debates-joint-strike-fighter-system 10) http://www.theguardian.com/world/2013/jul/06/missile-interceptor-test-fails-pentagon http://abcnews.go.com/Politics/pentagon-confidence-shaken-missile-interceptor-test-failures/story?id=19608463 11) Ship Noise - Crab Impacts: http://www.eurekalert.org/pub_releases/2013-07/uo-sni071113.php 12) http://www.dailymail.co.uk/news/article-2371795/U-S-jets-drop-BOMBS-Great-Barrier-Reef-fuel-emergency-training-exercise.html 13) http://phys.org/news/2013-01-philippines-stranded-navy-ship.html#nRlv http://www.greatbarrierreef.com.au/information/great-barrier-reef-threats/ Questions: Will the U.S. Navy be using seismic airguns in the NWTT Range? Where and for what duration? Impacts on Marine Mammals and other marine life?</p>	
<p>R. Peterson – 07 (Electronic)</p>	<p>U.S. NAVY NWTT DRAFT EIS/OEIS PUBLIC COMMENT J – APRIL 15, 2014 In NWTRC Final EIS/OEIS 2010 - Volume II Lists Dumping 30 Times - The Following are U.S. Navy Quotes & Page Numbers "...The Navy is aware of the diverse biological presence in the area and has conducted a thorough analysis of potential effects in Chapter 3 of the Draft EIS/OEIS. The Navy does not dump toxic pollutants into sensitive marine protection areas. Please see Chapter 3 of the EIS/OEIS for the description and analysis of potential effects. Chapter 4 includes cumulative analysis of all past, present, and reasonably foreseen future projects by the Navy and non-Navy activities..." (Page G-3) 1) If the U.S. Navy does not dump toxic pollutants into sensitive marine protection areas where does it dump it toxic pollutants in the NWTT Range? 2) Why wasn't a new Hazardous Materials Section added to the NWTT Draft EIS/OEIS due to new weapons systems, use of new or ongoing toxic materials, etc? These items should be addressed in a new hazardous</p>	<p>Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>materials section along with all the weapons and weapons systems and their hazardous materials that may, or may not be recovered after use in our oceans. 3) The lack of this older section being updated in a new NWTT Range which includes the Alaska areas is a violation of NEPA in that we are unable to make public comments on these items. The expansion of weapons, training and testing along with the additional of new and experimental weapons system must be addressed in any Navy NWTT EIS/OEIS. Another Issue: How much of this garbage belongs to the U.S. Navy? What research has been conducted to determine how much ocean dumping of trash and other items has been tracked by the Navy in the NWTT Range? What were the results? http://www.independent.co.uk/news/uk/home-news/exclusive-worlds-most-pristine-waters-are-polluted-by-us-navy-human-waste-9193596.html March 15, 2014 Exclusive: World's most pristine waters are polluted by US Navy human waste How much human waste is dumped by the U.S. Navy in the NWTT Range each year?</p>	<p>ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals. The Navy conducted a full analysis of the potential impacts of military expended materials on marine resources and has proposed several mitigation measures to help avoid or reduce those impacts. The analysis is contained throughout Chapter 3 (Affected Environment and Environmental Consequences) of the Draft and Final EIS/OEIS (e.g., Section 3.3.3.2.1, Impacts from Military Expended Materials discusses marine habitats). For example, military expended materials related to training exercises under Alternatives 1 and 2 would not impact more than 0.00009 percent of the available soft bottom habitat annually within any of the range complexes. The Navy has standard operation procedures in place to reduce the amount of military expended materials (Section 5.1.4.2, Weapons Firing Range Clearance), including recovering targets and associated parachutes to the maximum extent practical. In addition, the Navy has developed mitigation areas (Section 5.3.3.2, Seafloor Resources) to avoid and reduce potential impacts of military expended materials on seafloor habitats, including coral and hardbottom habitats.</p>
<p>Petrulias (Electronic)</p>	<p>"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Phillips (Electronic)	I am vehemently against this proposed testing/training that would devastate countless marine mammals as well as other species.	Thank you for participating in the NEPA process.
Piazzon (Electronic)	<p>Re: Northwest Training Range Complex Draft Environmental Impact Statement Mrs. Kimberly Kler NWTRC EIS/OEIS Naval Facilities Engineering Command Northwest 1101 Tautog Circle, Suite 203, Silverdale, WA 98315-1101 Thank-you for taking my comments on this crucial proposition. We are completely in agreement with the Orca Network and the NDRC that the “No Action” Alternative is the only rational one for the reasons they have cited. I have my own points to bring to your attention. . Future threats will not come from submarines but from rising sea levels, dying ocean and a radically destabilized climate due to our persistent attack on the biosphere and its destabilizing impacts on social structure here and abroad. We were warned in 2011 that the ocean is on the brink of collapse due to multiple factors, the most critical being CO2 pollution Now we can even predict when that is likely to happen, 2048 . This will only be one more impact on it. You have not convinced those who study marine life that your simplistic methods of detecting it would be effective. Having lookouts scan the surface of the water from high in the superstructure of a rolling warship in a raucous ocean is simply ludicrous. These animals are adept at avoiding detection and they live beneath the waves. The toll it will take on marine life is unacceptable by reasonable standards as well as ethical. Killing by sound also means deafening by sound. Deafening means death in the long run of marine species that depend on sound for feeding, breeding and protection. The toll will be devastating at a time when the marine environment is under catastrophic stress already. The “No Action” option is the only when that will not hasten it. I cannot believe that is what you want. Myopia and linear thinking is passe’ in this Age of the Unthinkable . Time to think of the big picture in a systems out of the box way. Major James Sharron has one approach that would turn the military into a vehicle of prevention, cooperation and conservation. We have become soulless I fear. To consider imposing this level of suffering on these innocents is clear evident of our inherent problem that has led us to this stage. The level of insensitivity is magnificent. It is an affront before God. No wonder we so easily sacrifice others, yes even those we know and love, as you well know, to this end. I fear for the future for none can stand this degree of wanton cruelty. So, what are you protecting us from by destroying what we need to survive. It’s like burning down your house to keep warm. ”Disruption and conflict will be endemic features of life. Every time there is a choice between starving and raiding, human’s raid.With inadequate preparation, the result of abrupt climate change could be a significant drop in the human carrying capacity of the Earth’s environment.” - “An Abrupt Climate Change Scenario and Its Implications for National Security: Imagining the Unthinkable.” US Pentagon Paper 2003 “ The consequences of even relatively low-end global climate change include loosening and disruption of societal networks. At higher ranges of the spectrum chaos</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar’s detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>awaits. The question is whether a threat of this magnitude will dishearten humankind, or cause it to rally in a tremendous, generational struggle for survival and reconstruction. If that rally does not occur relatively early on, then chances increase that the world will be committed irrevocably to severe and permanent global climate change at profoundly disruptive levels.” They found that the scientific community has been “shocked at how fast some effects of global warming are unfolding” and conclude that the current projections of the climate models are 'too conservative'. -"The Age of Consensus: The Foreign Policy and national Security Implications of Global Climate Change." a collaboration of the Center for Strategic and International Studies and the Center for a New American Security 2007 A deaf whale is the equivalent of a blind bird. It will not survive in the natural world. There are no hearing ear dogfish to assist them. You must not increase the damage already being done to our beleaguered marine mammals. Thank-you,</p>	<p>within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy, in coordination with NMFS, evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p>
<p>Laureen Picciani (Oral)</p>	<p>My comment is since visual sight as a mitigation measure, according to Congressman Thompson, is effective only 9 percent of the time -- 9 percent of the time according to Congressman Thompson -- there should be other methods that are developed. And I agree with making a wider corridor. I think that could achieve all the goals that everyone needs. I'm basically against war, period, but I realize we don't live in that kind of world and things can happen. So I'm not anti-Navy or, you know, but I think 9 percent sucks.</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.
Laureen Picciani – 01 (Electronic)	since visual sightings as a mitigation measure were only 9% effective in 2009 according to Congressman Mike Thompson (who generally supports a strong military) in 2009 and if you improved 100% it would only be 20% effective which is not enough protection for these amazing rare intelligent creatures who will continue to be at risk even without sonar bombardment.	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
Laureen Picciani – 02 (Electronic)	There are no independent studies on the cumulative effects of frequent sonar blasts on sea mammals. If you developed alternatives that put key biological areas off limits to testing and training you totally reduce the impact of necessary navy activities.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. The Navy funds monitoring and research that can include dedicated Marine Mammal Observers (see the reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
Pickard (Electronic)	The Navy's proposed actions, to cause death, suffering and health issues on the sea life of Puget Sound and the Pacific Ocean, is immoral, unforgivable and completely without merit. Our military is inhumane and is not protecting citizens, it is a war industry. Stop.	Thank you for participating in the NEPA process.
Pielmeier (Electronic)	Marine mammals are incredibly susceptible and sensitive to bomb and sonar testing. Orcas and other cetaceans prominent in the Pacific Northwest communicate mostly through sound and echolocation. Please do not further endanger the lives of these beautiful creatures! They are already endangered and threatened by pollution, a lack of salmon, and human boating activity. Please reconsider. Do not directly or indirectly harm the lives of others!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>M. Pinnow (Electronic)</p>	<p>Due to the decline in number of endangered Southern Resident orcas (only 80 individuals now), I am very worried on what the effects will be on the population if the navy uses sonar and explosives in the orcas' critical habitat. We know that sonar and explosives at least alter the behavior of whale and dolphins, often causing them to strand themselves and if the too close to say the sound waves of an explosion, the impact can kill them. These orcas have too many threats to their survival already, from severely decreased prey availability (they only eat salmon, Chinook being the most preferred), high levels of toxins in their bodies like PCB's, and too much boat noise around them, which makes it so they can't hear each other, or listen for their echolocation clicks, which tell them where the salmon are. I would imagine sonar would have the same effects on their hearing. Adding another threat to the Southern Resident orcas' survival could be catastrophic. If we loose these iconic species, the effects on the ecosystem, economy, jobs, and much more would be in danger. Please deny the navy their permit to use sonar and explosives in areas where the Southern Residents travel, or anywhere even near those areas. The sound of sonar can travel for hundreds of miles underwater. Thank you.</p>	<p>mammals from Navy activities.</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. As stated by NMFS in the 2014 Reinitiated Biological Opinion, "the vast majority of impacts expected from sonar exposure and underwater detonations are behavioral in nature, temporary and comparatively short in duration, relatively infrequent, and not of the type or severity that would be expected to be additive for the small portion of the stocks and species likely to be exposed either annually or over the remaining period of the five-year MMPA regulations or in the reasonably foreseeable future."</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
W. Pinnow (Electronic)	I'm just a normal, mainstream, working person on San Juan Island. I can't help but notice how the death rate for the Southern Resident Killer whales goes up while the Navy is doing sonar testing in the area. The last time at least two healthy and young Orca whales showed up dead on the shore. One was a very young whale that had brain trauma but no marks on the outside of the skull. The whales are not only our islands livelihood but we also know them all by name and grieve with their loss. I'm a tax paying citizen and I ask that there be no more sonar testing. Thanks Wendy	employment associated with tourism is not expected to occur. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Pire (Electronic)	Please do a more precise assessment of marine habitat before testing sonar weapons. Or better yet dont use sonar weapons. Whales and dolphins are being driven out of there homes from this and will suffer tremendously. The testing is too much for the marine life to bear, and it will have detrimental effects on us all in the long run.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. To clarify, sonar is not a weapon but a system that uses transmitted and reflected underwater sound waves to detect and locate submerged objects or measure the distance to the floor of a body of water.
Pitman (Electronic)	The U.S Navy must finally adapt to changing seas and a dying ocean. We must make sure the navy stops killing and finally starts saving our seas. Because as the Star Trekkers of the 23rd century realized, by saving the whales, we will also save humans. No	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	more Sonar!	
Polski (Electronic)	<p>Navy is still stuck in a 20th century Cold-War mentality that focuses on our oceans only as a battle zone, not a primal life support for us all. The Navy hasn't figured out that what they really need to do is help protect our world's marine life and defend us from a dying ocean. To do this, the military must reconsider its role and look beyond warfare to survival through conservation of our seas. The navy's massive sonar budget could be transformed from killing whales to constructive conservation. Instead of blasting sonar along our coasts, the navy could build mangrove forests to protect our shorelines from flooding. Instead of deafening whales and the ocean habitat they help balance, the Navy could spend its bloated sonar budget on creating marine reserves where fish and coral reefs have been proven to thrive. We're getting rid of defunct and outdated airplanes and even aircraft carriers. Why not fewer submarines and much more limited sonar tests? Why not move sonar training ranges westward out beyond the continental shelf; or time their trainings when they do not coincide with fall and spring gray whale migrations or orca gatherings here in the Northwest May-October? These are simple safeguards and practical limitations that the Navy has yet to even consider. Back in 2000, while researching my National Geographic book, SIGHTINGS: The Gray Whales' Mysterious Journey, and my Sierra Club novel, Animal Heart, I met many marine scientists who were deeply troubled by the U.S. Navy's sonar. "The military only regards the oceans as a big acoustic battleground map--not a living ecosystem that needs protection itself," the scientists told me. "The Navy wants to ensonify the seas just like the now defunct Star Wars plans for space. As military sonar has increased its territory and the "take" or kill grows with each target practice--from the Bahamas, to Greece, to Hawaii and our East and West Coasts--many scientists are courageously speaking out. Long-time orca researcher, Ken Balcomb, calls military sonar an "acoustic holocaust" and Nova Scotian whale researcher, Lindy Weilgart," writes in a Christian Science Monitor op-ed: "I cannot imagine why we would subject marine inhabitants, the majority of which are highly sensitive to sound, to yet another source of pollution." To limit military sonar and make it off-limits in biologically sensitive marine areas, EarthJustice and NRDC, among other environmental groups, have filed suits."The Fisheries Service basically issued a blank check to the Navy, allowing it to kill scores of marine mammals--including endangered whales--and critically imperiled turtles, with no meaningful limits to ensure these species will not be pushed closer to extinction," said David Henkin of Earthjustice. Taken from Stop U.S. Navy's War on Whales Posted: 03/14/2014 9:01 am EDT Updated: 03/14/2014 9:59 am EDT</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/submit/display.asp?template_id=1000) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p>
Porter (Electronic)	Please do not do any testing...you are destroying our wildlife	Thank you for participating in the NEPA process.
Post	All Naval testing and Sonar activities should be banned from the north coast of california	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	and all other environmentally sensitive areas.	
Potter (Electronic)	Dear We have polluted our oceans irretrievably And to add this terrible sound pollution will just further degrade our fish life The noises have been proven to disrupt whales lives We need to be a caring nation Preparing for war is a poor justification to destroy the oceans and world we live in We need to protect and preserve this world not use our agendas to destroy it Please do not do this kind of training It is too destructive Thankyou Sincerely Roseann potter	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Pounds (Electronic)	I feel that the training the Navy is proposing is an enormous waste of natural, cultural, and monetary resources. I do not support any activities proposed in the training. I repeat: I do not support any activities of any type the Navy is proposing, has yet to propose, or is considering. These activities are a huge waste of natural and cultural resources, time, and money.	Thank you for participating in the NEPA process.
Marna Powell (Electronic)	In California's North Coast our environment and natural resources are our future and our pride. The Marine Mammal Protection Act and our local Marine Protected Areas were created following sound scientific processes. Our local area has a healthy fishery and habitat for migratory and local marine mammals, fishes and birds. In fact, our area is critical to many species. Redwood National Park is a UNESCO World Heritage Center. It makes no scientific or economic sense whatsoever to conduct these tests along our shores. The Navy might as well be shooting cannons into our own homes and businesses. Don't you realize that many of us humans also make our living on the ocean? I absolutely disagree with the Navy's desire to test sonar or weapons of any kind in our waters.	Thank you for participating in the NEPA process. Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.
Mary Powell - 01 (Electronic)	I strongly object to the enhanced sonar testing and bombing by the navy in the eastern pacific. Marine mammals and indeed all species are currently under many stresses, chemical, physical and environmental and this added injury is completely unacceptable. I am surprised that an organization that is so closely involved in the sea is seemingly unaware of and indifferent to the many ways it is harming the marine environment.	The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.
Mary Powell –	I have read much of the EIS and am writing to urge to you go further than the three	The Navy is committed to protecting the marine environment during

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
02 (Electronic)	options in your proposal. Please consider reducing the testing and training you are now engaged in and use your personnel and expertise to study the Northeastern Pacific and the inland waters of Washington and Alaska for better understanding of the conditions and health of the ecosystem. Already the mammals, fish, shellfish, even the single celled organisms in this area are experiencing severe impacts from human activity including chemical and plastic pollution, changes in water conditions, over harvesting of species, and human activity. The testing of mid range sonar and the “taking” of endangered and threatened species as a result of any activities is entirely unacceptable. I regret that this will hinder the efforts of the Navy to test new technology, but this area is too fragile now to sustain more damage no matter how “local” and “temporary”.	<p>the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Prabhu (Electronic)	I am absolutely opposed to any type of large navl activity of the coast I live so very close to. Although I do understand that there are necessary “evils” involved in protecting this great country we live in, I do not however feel that this is one of them. I think the overall impact in a negative way by far outweighs any possible positive that may come. Our coast is a fragile delicate ecosystem that many lifeforms rely upon to exist. It is a historic fact that it takes little to impact such ecosystem damaging them beyond repair. I live very close to the water and do not want to gamble with my heath and safety. With any naval presence there is an additional threat of terrorism both domestic and international. That is a risk I am not willing to take. Thank you for the opportunity to voice my opinion on such an important issue. Please remember you have many lives in your hands , both human and animal. Lucretia Prabhu	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Pratt (Electronic)	April 15, 2014 Kimberly Kler NWTRC EIS/OEIS Naval Facilities Engineering Command Northwest 1101 Tautog Circle, Suite 203, Silverdale, WA 98315-1101 Re: Northwest Training Range Complex Draft Environmental Impact Statement Dear Mrs. Kler, Thank you for the opportunity to comment on the Northwest Training Range Complex Draft Environmental Impact Statement (DEIS). The DEIS does not comply with the requirements of the National Environmental Policy Act. The Navy did not employ rigorous standards of environmental review, including a full explanation of potential impacts, a comprehensive analysis of all reasonable alternatives, a fair and objective accounting of cumulative impacts, and a thorough description of measures to mitigate harm. Of particular concern to residents and visitors in San Juan County are our listed as endangered Southern Resident Killer Whales (SRKW). The analysis included in the DEIS substantially understates the potential effects of sonar on marine wildlife. Military training with sonar and weapons must not take place in the critical habitat of the SRKW. Furthermore, military sonar and weapons exercises are completely incompatible with the many tourism industry-related sport fishing, pleasure, and whale watch boats and kayaks;	<p>The Navy is completing this EIS/OEIS in compliance with current law, primarily the National Environmental Policy Act (NEPA). In addition to NEPA, the Navy continues to comply with other applicable environmental laws and with a number of regulatory requirements, such as the Marine Mammal Protection Act, the Endangered Species Act, the Coastal Zone Management Act, and the Magnuson-Stevens Fishery Conservation and Management Act.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>and the commercial fishing and national and international commercial vessel traffic, all traversing the narrow passages of the Salish Sea. Finally, the DEIS does not address the potential increased risk of oil spills from the activities that support the proposed increases in training. This analysis, and proposed mitigation measures, must address all adverse environmental and economic impacts, including the adverse impacts to property values (both private and public properties). Thank you for your attention to these comments.</p>	<p>The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.</p>
<p>Pullinger (Electronic)</p>	<p>Please don't do Sonar testing . The whales and other marine mammals are migrating up and down the coast of Washington and Oregon and that kind of testing can be harmful to them. so pleasbe considerate of our valuable sea creatures. Thank You for the opportunity to voice my opinion. Thanks, Judy Pullinger.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Pulsifer (Written)</p>	<p>Per the Navy testing NWTT, including the use of explosives in the waters off of northwest coast.</p> <p>Although my concern for the health of the water and by extension all marine life and human life, wonders at the contamination wrought by chemicals contained in explosives; I suspect there will be explosives no matter what I or thousands of others think.</p> <p>And so, I'll limit my request to something I do believe can be achieved by this correspondence.</p> <p>Please include exclusion zones which would be the identified areas of biological and marine importance (based on feeding grounds for whales as well as other marine life.)</p> <p>To not designate these areas is to create a farcical situation wherein your mission to "deter aggression and maintain freedom of the seas" is completely undermined in the disregard and destruction of marine life and the pollution of our waters.</p> <p>Oh, if only I believed there could be a change in the offensive nature of our "defense department."</p> <p>Please know that for each letter like mine, there are hundreds more who haven't written but have attended meetings and have had the intension of writing.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmon/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species’ entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, “existing density estimates, range-wide</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS’ identification of BIAs. The same marine mammal density data present in the Navy’s Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Pumplin (Electronic)</p>	<p>The harm to marine mammals of sonar and explosives testing is unconscionable. How can we survive, how can earth survive, when the Navy, charged with protecting human life, demonstrates that it fails to understand that human life is intimately connected with and dependent upon other forms of life? The Navy has a legal obligation to protect and not harm our endangered and threatened marine species. The Navy should stay out of critical marine habitats and should not test in areas when sensitive species are present. The Navy can’t say it hasn’t been told of the impacts of sonar and explosive testing on marine life, nor of the damage the training and testing would add to already threatened marine ecosystems due to ocean acidification and noise pollution. The Navy’s deficient draft EIS should not be accepted.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Quies (Electronic)</p>	<p>I am writing with grave concerns about the Navy’s proposed use of sonar and undersea explosions in the Northwest Training Range. I live in the San Juan Islands – Endangered orca whale country. There are only 80 orcas left off the entire coast of Washington, Oregon, and California. Orcas already face many man-made threats along their migration routes, without more preventable and needless deaths. People come from all over the world to see the whales off the Pacific coast. Many of our coastal economies depend on eco-tourism and fishing, but our concern for the wellbeing of cetaceans goes far deeper – we love, appreciate, and respect these highly intelligent beings. Marine mammals are extremely sensitive to noise. Sonar destroys important habitat and disrupts the essential</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>behavior of killer whales, blue whales, harbor porpoises and other marine wildlife. If you deafen a cetacean, you essentially kill it, destroying their navigational and communication abilities. Has the Navy considered the deafening of whales in its kill estimates? What about other cetaceans affected, and the loss of habitat and food supply caused by sonar and explosion testing? What are the real numbers when it comes to maimings and deaths? In 2004 the Navy’s sonar was implicated in a mass stranding of as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. And in 2003 the USS Shoup exposed a group of endangered orcas to sonar in Washington’s Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound. There is no need for this torture of innocent marine mammals – and it IS torture. Who will be physically and fiscally responsible – the Navy, or the U.S. taxpayers – for cleaning up the carnage of whale and dolphin corpses, or worse, dying cetaceans that we’re powerless to help, washed up on our beaches? And how do we explain to a traumatized population, to our kids and grandchildren, WHY these magnificent creatures died – needlessly – at the hands of our own military? The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on the region’s valuable wildlife. Has it been scientifically proven that the impacts even can be mitigated? Have these questions and many more, been considered, and satisfactorily answered? Have outside, unbiased Academic Marine Biologists weighed in on the EIS? Who really stands to make their fortunes, or increase them, on these weapons tests, against the will of the U.S. taxpayers footing the bill? As you continue to provide for our country’s defense, please find a way to train that respects and protects our natural resources and our ocean’s sensitive wildlife, and the people who see the value in cetaceans. Thank you for hearing me, as I know that I speak for thousands of concerned citizens of this unique Northwest ecosystem. Sincerely, Erin Quies</p>	<p>impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Raffo (Electronic)</p>	<p>The Navy's draft environmental impact statement for the NW Training and Testing Range, a vast area stretching from the Puget Sound area of Washington to Northern California, is woefully deficient and lacks meaningful alternatives and mitigation strategies. Under this proposal, the Navy is prepared to injure and possibly kill thousands of threatened and endangered animals during the next five years of testing and training with dangerous sonar and explosives. Our west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Endangered bird species, such as the Marbled Murrelet, are also at risk. The Navy's failure to develop meaningful alternatives and strategies to mitigate this harm is both unacceptable and unconscionable--particularly because the Navy's plan fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary,</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. Please send the Navy's deficient draft EIS back to the drawing board and direct the Navy to meet it's legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p> <p>Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>given population, and consequently will not result in any adverse changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p>
Ragle (Electronic)	<p>Really! In this day and age, with the technology we have, there is NO need to damage or kill the few remaining creatures that beong in the sea, as opposed to humans, who seems to hurt everything natural wherever they go. I am very respectful of the military and especially the Navy. PLEASE come into the new century and use the knowledge, and technology to do your jobs and leave the sea and it's creatures unharmed. Thank you, Alexandra Ragle</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p>
Rainwater (Electronic)	<p>Please, please reconsider this....our oceans are already hurting from what mankind has done to them over the course of the last 100 years, harming, hurting and potentially killing marine wildlife is just another assault on our big blue sustainer...</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
Rakestraw (Electronic)	<p>The behavior of the military and its sonar is horrible. I am ashamed to be part of a world that would destroy the earth in the name of money and war... I am calling for an total stop to these actions that are killing marine life and bringing torment to the creatures of the ocean. Shame on those that destroy this earth. Take accountability for your actions and bring honor back to this country.</p>	<p>Thank you for participating in the NEPA process.</p>
Raymond (Electronic)	<p>I am writing to express deep concern and disagreement with the possibility of Naval bombing/sonar testing off the NW coast of Washington state. This testing has recognized negative impacts on marine habitats and on marine mammals directly. I do not support the use of tax dollars to fund these destructive activities. These weapons' sole purpose is to cause damage and we should not use them ever - in exercises or in war. The damages done to humans and the earth are simply not acceptable.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.
Reeve (Electronic)	<p>RE: Northwest Training and Testing EIS Dear Sir or Madam: As a resident on the south end of Lopez Island, Washington, I am directly impacted by the Navy operations. The sound impact is the most devastating both to my health and to the quality of life at my home. But I have other concerns also. 1. The insert map provided in the Navy documents, whether due to space limitations or otherwise, does not give a representation on the northern edge of the training area for me to determine whether the designated training area is right outside my window or is 10 miles out in the Straits. A map which has a scale and also shows the southern part of the San Juan Islands archipelago must be provided in order for those impacted to have reasonable data upon which to review the material. The map as provided is flawed. 2. The general area for the NWTRC, especially as to the part within the Straits of Juan de Fuca, has significant vessel traffic with the possibility of a large increase in the amount of commercial traffic in this area. In addition, this area is a popular recreational boating, fishing and sight-seeing area. The potential safety concerns for conducting training in such a busy area needs to be addressed with special attention paid to the safety of small watercraft such as kayaks. The southern end of Lopez Island is a popular with kayakers and sailors. The upland terrain and marine conditions make this a potentially hazardous situation. Add to that Navy operations that can cause major wave and wind action, and there is a large safety concern. Perhaps in the Navy procedures they will station a person to watch for kayakers as they are to do for whales and not conduct operations should kayakers be in the area. Having watched a Navy operation a very short way off the southend of Lopez a couple of months ago, I can attest that the wash from the hovering helicopter created large waves and wind action close to shore, conditions dangerous to kayakers and those in small boats. Wildlife sightseeing boats, ranging in size from large 100 person ships to small zodiacs, often visit the southend of Lopez Island. The safety of these operations could be compromised given the location of Navy's operations. 3. The operations in the NWTRC will have a significant impact on the quality of life for those living in the area (and not just those on Whidbey Island) and those visiting the area. The EIS needs to consider this impact on the quality of life of a rural area with significant conservation values (National Fish and Wildlife areas, National Monument, National Historic Park, State Parks, State DNR Lands, County Parks). These agencies as well as the Native American Nations need to be included in coordination with the Navy. 4. The operations in the NWTRC may have a significant negative impact on property values in the area due to the noise impact and disturbance to one's life caused by the operations. This needs to be considered in the EIS. And again, the impact is not just based at Whidbey Island but extends much further. All the San Juan Islands should be considered in the impacted area. 5. The visual and noise impact of operations will have a</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Prior to a training exercise, the Navy and U.S. Coast Guard (USCG) issue a Notice to Mariners (NTM) and a Notice to Airmen (NOTAM) to announce an exercise and to notify the public of potential hazards in the exercise area. In addition, scheduled training will be communicated to the stakeholders, mayors, resource agencies, and fishermen using telephone tree and e-mail (developed by the Navy with stakeholders' input) to send, facsimiles to mayors and fishermen and notices on the NOAA and local channels, and emergency management offices.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>large, detrimental impact on the quality of life in the San Juan Islands. People want to live and visit this area because of its natural beauty. Large and loud military operations do not fit into this environment especially when there are other choices for locations which have less impact. The EIS needs to include the impact the training will have on the lives of residents in the area and the impact upon the local economy. The San Juan Islands rely upon tourism first and real estate second for its economy. Navy operations will directly impact out economy, and this needs to be considered in the EIS. The San Juan Islands are not able to re-coup dollars into our economy as does Oak Harbor by having the base stationed there. Instead, we will likely see property values and tourism decrease as people will not find it desirable to live adjacent to nor care to visit places of natural beauty which is impacted by such loud noise and disturbance. 6. Should there be an accident related to the training such as an oil spill or jet fuel dump, the impact on fishing and the marine environment in the area would be significant. The EIS needs to consider other locations where should there be an accident that the impact would be less than in the NWTRC area. 7. The natural values of the land and marine environment need to be considered. I'm sure many other have stated this concern far better and with more expertise than I can. But I have found 'fried' harbor porpoises several years ago after earlier Navy sonar training in the area. These animals plus other wildlife (fish, birds etc) should be valued and respected with much stronger emphasis than the Navy is considering. The EIS needs to look into less invasive procedures for operations and operations in locations and at times to have the least impact on the wildlife. I am not anti-Navy, but I have to wonder just what will be left around 'to protect' if Navy operations are able to destroy so much. Navy operations can occur in particular manners and places that are appropriate, and Navy has the smarts and financial means to conduct these operations in a responsible manner - for the safety of those around and for the protection of the environment.</p>	<p>proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the Draft EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around the Sound. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the Draft EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Reilly (Electronic)	I oppose the Navy's plans to do bombing and sonar testing in areas that interferes with precious NW ecosystems. Please protect the habitats of marine mammals. Thank you.	Thank you for participating in the NEPA process.
Rennacker (Oral)	<p>My name's Ann Rennacker, and I am very disturbed about the way this meeting was put together so we were segmented into different little stations and not allowed to hear each other's comments, talking to a lot of slick people who had lots of answers. I actually looked at the huge document, it was like two books, 900 pages each, and I found a few things I gleaned out of it. And my comment is the expansion of the Navy warfare range from Northern California all the way to Alaska or to Hawaii endangers our marine life. The use of sonar explosives, ordnance and ordnance disposal and experimental weapons testing and toxic chemicals and harmful activities threaten all the marine life in the ocean, in our whole Northwest Training Range. And this is the migratory path of our gray whales. So I agree with the previous speaker that said we should do it 100 miles out, because it's</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>not okay to kill our whales. We love our whales here in Fort Bragg and we're having whale festivals right now and this is disturbing. The Navy expansion of these exercises affect every coastal state, including the biologically sensitive areas of marine habitats, like our national marine sanctuaries and our breeding habitats and all these migrating whales. And in the Navy OEIS I read that there would be more than 2.3 million takes per year. Takes means harassing, maiming, killing, bothering, capturing, shooting. 2.3 million takes per year were estimated by the Navy in this EIS That was per year, that means over 11.7 million over a five-year period. Now, when I asked a contractor about that he said oh, takes could be they just hear you and they look around, but we know it's more than that, because they listed all the chemicals that they're using, red phosphorus, which is actually a toxic chemical that was banned by the Geneva Convention. They're using things like cadmium, iron, lead, benzene, barium, chromate, potassium perchlorate, etcetera. It goes on and on. My time is up, but I am very disturbed about this and I really don't want to see it happening here because it's happening all over the world and we don't -- we really don't need it here. Thank you very much.</p>	<p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/submit/display.asp?template_id=1000) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Please Section 3.1 (Sediments and Water Quality) for a discussion of possible chemical impacts from training and testing in the Study Area. Overall, chemical, physical, or biological changes in sediment or water quality would not be detectable and would be below or within existing conditions or designated uses. The Navy does not propose the use of ordnance containing depleted uranium or phosphorus. Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
Rezner (Oral)	<p>My name is Janie Rezner. I can't imagine -- it's so echo-ey -- what it must be for you getting ready for these meetings, knowing that you're probably going to be facing a hostile audience. It can't be easy and no matter who you represent you are, in fact, each a human being, faced with the same concerns as the rest of us. Representing the Navy does not give you an out regarding the facts about living on a planet in crisis, which I'm sure you're well aware of. We cannot fail to see or read about the diminishing of all life in a patriarchal world, where life has no meaning. Species rapidly disappearing and earth covered with poisons and toxins and radiation, lack of clean air and water, loss of fish in a dying ocean, an increasingly violent climate everywhere, children starving and dying and being tortured, along with their mothers and fathers, surrounded by war and industries, and corporate power that serves war. Polluting and poisoning life for generations to come until obviously it is done... all in the name of money. In such a state of emergency who in their right mind would feel the need to practice war games? Surely, the Navy is not planning to wage war once again on this suffering earth. That would hasten death for all</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>of us. Your children and grandchildren, as well as mine. I think probably the biggest drive underneath the patriarchal need to kill something so that you can demonstrate your so-called power is money. Don't you think? It seems these intelligent, feeling and caring creatures in the ocean you so casually intend to take, our ancestors, are of little consequence to you or the Navy, because the prospect of creating and selling weapons and conducting war games is such big business. I suppose playing with these in the ocean and killing has its own rewards for those who love power and killing. We just need to practice for just in case. Who knows who might be trying to attack us. Yeah, right. We are the most powerful and lawless nation on the earth. Who would dare such a thing? Excuses, excuses. How about instead say no more to killing and war? How about finding the heart inside you that connects to all life? How about standing up for life, finding the gratitude inside yourself for the gift of life on this beautiful and suffering planet with its creatures that have been so amazingly put together, including our own bodies. For all things to work in harmony with each other. I invite you to open your eyes to the beauty that's around you. To look inside yourselves and find the courage to take a stand to support life, rather than destroy it. May it be so.</p>	
<p>Richoux (Written)</p>	<p>My husband and I attended the Poulsbo Meeting, Feb. 28, 2014 for the renewal of Northwest Training and Testing so that bombing and sonar exercises can continue -- 30 bombing exercises per year in the range, and 100 mid-range active sonar tests each year (Earth Fix PBS, Ashley Ahearn, Feb. 21, 2014).</p> <p>Those numbers did not come from the meeting but from an environmental source. What we got from the meeting were bright brochures, posters and 15-20 well-organized Navy personnel assuring us how much they care about the Puget Sound, and our Olympic Peninsula, and they like to live here too.</p> <p>The expense of the Navy presence that evening did not make me feel better since our military is so outrageously expensive. And it was unclear what level of increase there may be in the future. (There needs to be a new Environmental Impact Statement every five years. This new one starts in 2015). There were plenty of waffle words and that is why I relied on the numbers from another source.</p> <p>The brochure assures us that they need to do live testing to prepare sailors for conflicts and “the skills needed to achieve military readiness are challenging to master and difficult to maintain without constant practice.” (p.2) This testing will lead to “cumulative impacts ... expected on some individual marine mammals and sea turtles, including several Endangered Species Act-listed species” ... and “would also contribute incrementally to greenhouse gas emissions.” (p.8</p> <p>After re-reading all the Navy materials and feeling assured in the brochure that Navy personnel are sincere about their Marine Mitigation Measures, we can't feel comfortable with endorsing this EIS. Bombing and sonar testing that disturbs marine life for training</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>sailors who need “constant practice” is not justified when there are new technologies available as simulations. live explosions for the sake of practice shouldn't be necessary. Technologically, the Navy should get creative and find new ways to practice without harm to any of the environment and not acidify the oceans and Puget Sound.</p> <p>Just because the Navy is doing less harm than in the past, does not mean it's OK to still harm the ones that are left.</p>	<p>Impacts) of the EIS/OEIS.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
Richoux (Oral)	<p>I'm from Port Townsend. There's not very many people here. There's a couple people here from Port Townsend. I guess I want you to know about what we feel like in Port Townsend. We love our active community, our caring community, the families and retired. Visitors love Port Townsend. We love our dairy farmers. We work for sustainability all the time. We do have worries that we have environmental issues. I will mention the PT paper mill that is an environmental issue. We depend on tourists, which is an issue. We have Indian Island, which is the naval munitions. And as I understand it, this EIS is also part of that; is that correct -- I'm not allowed to ask it, I guess. The Whidbey Island Naval Station expansion and then we have the Naval Base Kitsap. It sounds like you're going to be doing some expansion. There was only one slide that I saw and I don't see back here as to what your plans really are as far as expansion is concerned. And then we have the bottom one (referring to her diagram) which is earthquakes and tsunamis, which is another one of our concerns. And I don't know if you've addressed that at all in your EIS. The Seattle Times a couple days ago mentioned it again and it's like, oh, yeah. It's one of those things you're likely to forget about, but it's around. We have all these naval activities. We have the munitions right across the bay from us. We do worry about a lot of environmental aspects where we live, and our hearts can be reassured that the Navy does know that, you know, there are people there too. Thank you.</p>	<p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around the Sound. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities.</p>
Richoux (Electronic)	<p>Naval Facilities Engineering Command Northwest March 25, 2014 Attention: Ms. Kimberly Kler – NWTT EIS/OEIS Project Manager 1101 Tautog Circle, Suite 203 Silverdale, WA 98315-11013 Dear Ms. Kler: My husband and I attended the Poulsbo Meeting, Feb. 28, 2014 for the renewal of Northwest Training and Testing so that bombing and sonar exercises can continue – 30 bombing exercises per year in the range, and 100 mid-range active sonar tests each year (EarthFix PBS, Ashley Ahearn, Feb. 21, 2014). Those numbers did not come from the meeting but from an environmental source. What we got from the meeting were bright brochures, posters and 15-20 well-organized Navy personnel assuring us how much they care about the Puget Sound, and our Olympic Peninsula, and they like to live here too. The expense of the Navy presence that evening</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>did not make me feel better since our military is so outrageously expensive. And it was unclear what level of increase there may be in the future. (There needs to be a new Environmental Impact Statement every five years. This new one starts in 2015). There were plenty of waffle words and that is why I relied on the numbers from another source. The brochure assures us that they need to do live testing to prepare sailors for conflicts and “the skills needed to achieve military readiness are challenging to master and difficult to maintain without constant practice.” (p.2) This testing will lead to “cumulative impacts ... expected on some individual marine mammals and sea turtles, including several Endangered Species Act-listed species” ... and “would also contribute incrementally to greenhouse gas emissions.”(p.8) After re-reading all the Navy materials and feeling assured in the brochure that Navy personnel are sincere about their Marine Mitigation Measures, WE CAN'T FEEL COMFORTABLE WITH ENDORSING THIS EIS. BOMBING AND SONAR TESTING THAT DISTURBS MARINE LIFE FOR TRAINING SAILORS who need “constant practice” IS NOT JUSTIFIED WHEN THERE ARE NEW TECHNOLOGIES AVAILABLE AS SIMULATIONS. LIVE EXPLOSIONS FOR THE SAKE OF PRACTICE SHOULDN'T BE NECESSARY. Technologically, the Navy should get creative and find new ways to practice without harm to any of the environment and not acidify the oceans and Puget Sound. Just because the Navy is doing less harm than in the past, does not mean it's OK to still harm the ones that are left. Sincerely, Jeanette Richoux Howard Richoux</p>	<p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
Ricks (Electronic)	I think you should NOT do your messed up tests in the ocean the poor ANIMALS are at our mercy it kills them I you have any feelings at all I love the animals and they need respect and a good place to live...!!!!!!!	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.
Ricon (Electronic)	Please stop this harmful action now!	Thank you for participating in the NEPA process.
Rideout – 01	I am commenting on the proposed sonar testing in Pacific Northwest waters. I am	The Navy shares your concern for marine life, but this concern must

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	absolutely opposed to this proposal and will be contacting my Congressional delegation members to encourage their opposition to it. The Navy has tested sonar in waters elsewhere with tragic results. We don't need to do it here as well. Killing and/or harming marine mammals here is not an option. Please discontinue this poorly thought out proposal. It will cause great environmental harm.	be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Rideout – 02 (Electronic)	I am commenting about proposed sonar testing in the waters off the Pacific Northwest. I am opposed to this proposal and will be contacting my Congressional delegation members to express my opposition to it. The Navy has conducted similar testing elsewhere in U.S. waters with tragic results for marine mammals. We don't need it here. Please discontinue this poorly conceived proposal. With proper planning, the Navy should be able to do its testing in a lab setting. This should be pursued.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Riep (Electronic)	Please do not disturb this sensitive habitat! These are important areas for life and reproduction of our marine life. We have no ethical right to disrupt the habitat of other creatures, but think especially of the marine mammals. They are intelligent and emotional beings who need us as an ally instead of an enemy. If you don't care for the wellbeing of other beings, think of yourself. You are depleting our fish sources. These locations are important to fish spawning. Please consult with ecologists and biologists before you take	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	any action to be sure all life is being considered and protected.	impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Riley, PhD (Electronic)	We the people are the living land and waters that make our place home of the free. Our whales and salmon, seals and dolphins need protection from sonar explosions especially in marine sanctuaries. Their health and ours is a single web that needs to be guarded rather than threatened by our military. The Navy should not test and train in biologically significant habitat but respect local communities, natural resources and habitats. Dr. James Riley, PhD Cascadia Institute, Ish River	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Riser (Electronic)</p>	<p>Stop harming and or killing everything beautiful & vital on this amazing planet NOW! Stop sonar testing and other forms of pollution and torture!</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Ristow (Electronic)</p>	<p>I can't imagine that this could be legal; nor is it necessary. Marine life, particularly whales, have an incredible sense of hearing- and all studies have shown that the type of 'testing and training' that you propose will have significant impacts. Your proposed activities are expected to injure, disturb or kill more than 100,000 individual animals, including 29 different marine mammal species protected under the Marine Mammal Act- PROTECTED under the Marine Mammal Act. Why in the world is the Navy exempt from laws? The EI Statement does not adequately address the mass strandings that have resulted from similar training and testing. This proposal does not ensure adequate mitigation to prevent harm to sea life. At the very least, exclusion zones need to be established to protect areas of critical habitat. What alternatives have you considered that would be non-harmful to marine life?</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Regarding previous strandings, see Section 3.4.3.1.8 (Stranding) and the referenced technical report "Marine Mammal Strandings Associated with U.S. Navy Sonar Activities" (U.S. Department of the Navy 2013c). While the annual strandings in Washington in 2003 had no relation to Navy activities, the Navy does consider all cases simply "coincidence" as the comment asserts and has presented five specific mass stranding events where sonar use had been identified as a contributing cause or factor in a stranding. The fact remains, however, that the Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Roberts (Electronic)	I am disgusted by the callousness of the Navy to our Marine Mammals, these are intelligent creatures who are created by the same creator that made us. We are to be good stewards to the animals on this planet, instead the same group who is suppose to protect and serve has no compassion for the marine mammals who have their own families, have their own language, proven emotions and love as we do. Anyone who will be cruel and uncaring to the animals and mammals in this world will be the same to humans. I have lost pride for our Navy due to this.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
G. Robinson (Oral)	Hi. My name's Geoff Robinson. I've been living in Humboldt County for 20 years. I'm a plumbing contractor. I'd just like to put this in perspective. This Proposed Action is to strengthen our already superior military. Our military, especially our wars, has environmental, social and cultural impacts. With all due respect to the great Sailors in the Navy, the purpose of all branches of the military is war. War is harmful to all living things. It's an industry, primarily. It's an industry that benefits military contractors, oil companies, and other captains of industry. With the strongest military in the world, freedom still is not free. Freedom is languishing in the brig with Chelsea Manning. Freedom is waiting in Russia for permission to be free in the United States again after exposing our shameful secrets. Freedom is in Guantanamo Bay. Habeas corpus is ancient history. When do we - - when has any politician ever spoken of bringing back habeas corpus? And we have the highest incarceration rate in the world. For all of our military, freedom is still in prison. Yes, we need to defend America. But not from foreign military. We need to defend ourselves from Halliburton. We need to defend ourselves from Chevron. We need to defend ourselves from General Dynamics, General Electric, Monsanto, Bank of America. This project is less than useless in that regard. We would rather save the fish. It's been pointed out to me that the no-project alternative is actually "continue business as usual, testing sonar and torpedoes" alternative. There needs to be another alternative. No action. Which is actually no more testing. Otherwise, it's just not a complete EIS. There are other	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	alternatives that are viable that have not been explored. Thank you.	
James Robinson (Electronic)	And other marine Life that is harmed by this practise please stop it. Why can't we use our Navy to skim plastic from the ocean and recycle it, do something POSITIVE Don't Blow Our Precise Marine Live. Thank You.....James Robinson	Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
Janet Robinson (Electronic)	Please stop the blasting in marine areas. These blasts can be deadly to the marine animals in the area and any increase in sonar, and mines exercises and increase in underwater charges is unacceptable. This is their home and you are trashing it by putting bombs and sonar there. How would like it if someone did that to you? Put yourself in their place. They are not just stupid animals; marine animals are more intelligent than many humans. Please stop your war on whales.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
K. Robinson (Electronic)	We don't want testing on the west coast or any where.look what has already happened in the past.Wholes and other marrine life getting beached and thrown of track.also messed up from sonar testing.We Don't want it. So I say no to Navy testing off the west coast.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Rogers (Electronic)	The proposed action will damage the local wildlife in a very drastic manner. The whales, dolphins and others that use sonar will suffer to a incredible degree. I am sure there are other ways to overhaul, modernization, maintenance and repair the shipyards. Many have already died an excruciating death from them. Please find a solution that everyone including the wildlife can live with. Thank-You, for your time and attention to this most important issue.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Rohr (Electronic)	We strongly oppose the planned activities as they will harm many underwater creatures. Please act responsible to this/our planet!	Thank you for participating in the NEPA process.
Rolland (Electronic)	The Navy's failure to develop meaningful alternatives and strategies to mitigate the harm of sonar and explosives testing in the Northwest Training and Testing (NWTT) Study Area is both unacceptable and unconscionable—particularly because the Navy's draft EIS fails to adopt common-sense measures that would dramatically reduce these injuries and deaths without compromising national security. Most importantly, the Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view that these would be the most effective means of reducing harm. The Navy has also failed to meet the statutory requirements of NEPA and its regulations because it improperly limited the scope of the draft EIS and failed to include sufficient information on the cumulative impacts of the project on marine mammals, including ocean acidification and noise pollution. Ocean acidification results from the ocean's absorption of carbon dioxide from the atmosphere, which causes seawater to become more acidic. Ocean acidification increases the impacts of sonar and other noise pollution on the acoustic environment, with corresponding impacts on marine mammals. Ocean	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy used the best available

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>acidification decreases the sound absorption of seawater causing sounds to travel further. Already sound travels 10-15 percent further with only a change of 0.1 pH that has occurred on average in the global oceans due to anthropogenic carbon dioxide. Finally, the draft EIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The draft EIS makes no mention of the value lost from the harm to marine mammals that attract the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly in those areas centered on observing whales and other marine mammals in their natural habitats. The Navy's deficient draft EIS should be sent back to the drawing board and the Navy should meet its legal obligations to protect and not harm our endangered and threatened marine species. Our waters are already showing evidence of harm from climate change and the Navy's plans will only result in further deterioration of this precious resource that contributes to the economic vitality and beauty of our Pacific Northwest.</p>	<p>science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Please see Chapter 2 (Description of Proposed Action and Alternatives) regarding the development of the alternatives. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS presents the proposed mitigation measures and a discussion of the analysis used to determine which mitigation measures would be effective.</p> <p>The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no evidence to indicate any meaningful impacts to marine habitats in the area. The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>any adverse impacts on Sanctuary resources and qualities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Romanelli (Electronic)	<p>I believe in order for our planet to sustain itself we need to re orient our perspective as human beings and cease and desist all warring activities wether they are against other member of the human race or aimed toward other sentient beings. Marine mammals have no control over what we do to their environment and we have been steadily polluting it with toxic debris and debilitating sound. Have naval researchers read any of the available documentation provided by many scientific sources regarding the intelligence of cetaceans? It appears that they may even be smarter than we are. The progressive wave of the future is going to be based in CO-OPERATION, NOT COMPETITION! Please stop all forms of aggression which cause the suffering of other lives. Thank you</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
K. Rose (Electronic)	<p>What your planning to do off the coast of Washington state is going to hurt the Orca's. There are lots of places you could train away from the coastal cetations, and the delicate coastal environment. You are destroying the character of the country you are trying to protect, and it's needless.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>S. Rose (Electronic)</p>	<p>Find another way to do your testing. You are invading the home of these marine mammals and doing damage to them and their environment. Much more respect for the Navy in the world if they manage to do the 'right' thing. As we all know the right thing in our government is sadly lacking.</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p>
<p>Rossi (Electronic)</p>	<p>RE: Northwest Testing and Training (NWTT) Draft E.I.S. Dear Ms. Kler and the NWTT review committee, Thank you for requesting comments for the Navy's Draft Environmental Impact Statement for the proposed increase in tempo for the Northwest Testing and Training Exercises. The Point No Point Treaty Council (PNPTC) is concerned about the significant adverse effects on our Tribes' Treaty Rights and natural resources with this project. Our tribes (Jamestown S'Klallam and Port Gamble S'Klallam) would like to request government-to-government consultations to resolve some of these major concerns. The PNPTC is a tribal organization that provides fisheries support services to the Jamestown S'Klallam and Port Gamble S'Klallam Tribes, which have Usual and Accustomed Fishing Areas in Hood Canal, Strait of Juan de Fuca, and the Puget Sound. The Usual and Accustomed (U&A) fishing areas of both tribes includes the proposed testing and training areas. The Tribes rely on the healthy habitat conditions that sustain critical finfish and shellfish populations which support fishing activities that are fundamental to the economies and cultures of tribal communities. Treaty Rights The Treaty of Point No Point Reserves Perpetual Fishing Rights to the S'Klallam Tribes, which the Navy Cannot Infringe. A proper conception of treaty fishing rights must begin with the history and purpose of the Treaty. In Article I of the Treaty of Point No Point, the S'Klallam people ceded to the United States most of their rights in their land. However, the Treaty reserves the right of the Tribes to take fish "at usual and accustomed grounds and stations." Treaty of Point No Point, 12 Stat. 933, Article IV. The right is not created by the Treaty; rather, the Treaty "secures" pre-existing Indian fishing rights. In other words, the Treaty of Point No Point did not grant fishing, hunting, and gathering rights to the Tribes; rather, it reserved to the Tribes its pre-existing rights to engage in those activities. This reservation of rights was intended to permanently secure the full breadth of pre-treaty</p>	<p>This comment was submitted in written form as well and is addressed in Table I.4-2, as a comment from the Point No Point Treaty Council.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>resource procurement practices. Nothing in the treaty language or negotiations suggested, and neither side anticipated, that non-Indian development would ever hinder Indian fishing or deplete the seemingly inexhaustible abundance of resources. The Treaty of Point No Point protects three essential components of our Tribes' fisheries: 1) Access to Fishing Places; 2) Access to Sufficient Harvests; 3) Access to necessary, healthy fish habitat. The Navy's continued and increased use of Hood Canal and other portions of Puget Sound for training and testing activities infringes upon each of these aspects of the Treaty Right. Please also see letter submitted by the Port Gamble S'Klallam Tribe for additional information (March 27, 2014). Below, we have briefly reviewed the Draft Environmental Impact Statement (D.E.I.S). First, we are concerned that the proposed facility would impact our Tribes ability to access their Usual and Accustomed fishing grounds for shellfish, finfish and other species, which is our Tribes' Treaty Right under the Treaty of Point No Point. Second, we have concerns regarding the environmental impacts on the area that will be utilized and disturbed under the impacted areas. Third, we are concerned that the D.E.I.S. does not adequately address all of our concerns and more detail needs to be provided. The following comments should be considered as you continue to develop the plans for the increased tempo for the new and old testing and training activities. Because of the short time frame for the progress of these proposed activities, we look forward to the continued consultation with the Navy as the draft E.I.S. moves forward. 1. Impacts to Court-Affirmed Treaty Fishing Rights: The Tribes are concerned about the impacts the fishing activities and treaty rights that this DEIS does not accurately assess nor does it include the full range of detrimental effects on shellfish habitat, salmonid/finfish habitat and other important saltwater ecosystems. Any habitat impacts would translate directly to an infringement on tribal fisheries that are protected by court-affirmed treaties. The Port Gamble and Jamestown S'Klallam tribes actively fish through-out the Hood Canal, parts of the Strait of Juan de Fuca and the Puget Sound. *** Space is limited so I am emailing and snail mailing the rest directly. You should consider allowing more space for appropriate comments. Thank you. There are 6 more pages to go! --Cynthia Rossi</p>	
<p>Rossouw (Electronic)</p>	<p>I know that my comments are irrelevant and will be ignored. In the US 'national security' always wins over all other arguments, so I am confused why you are even pretending to do an environmental impact statement. Perhaps environmental whitewash statement would be a better label? It is obscene that you are doing these 'tests' and it is outrageous that you are going to be granted permission to continue on after your alleged EIS. What in the [expletive deleted] is the military protecting if they have to blow up the environment and kill thousands of animals? I know that these tests are just a tip of the iceberg of your environmental destruction in the name of protecting the country. I realize that you guys are still smarting over the fact that you cannot blow up whole islands in the Pacific with Hydrogen Bombs like the good old days, but for [expletive deleted] sake, grow up and act like responsible human beings. think about leaving the planet as you found it. thanks for</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	screwing up the planet.	
Rugge (Electronic)	Please put safeguards in place that would protect our marine mammals and creatures that this technology affects negatively. We can find a balance here something that works. Get Creative find a win-win for us (civilians), marine mammals, and the navy. Get to work your intelligent! You can do it!	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.
Russell (Electronic)	Please stop testing. The known impacts on whale populations is significant, especially on a population already under relentless attack in the Puget Sound/WA/Oregon area.	The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Rust (Electronic)	The expanded NW training range would have a very negative effect on the resident orcas of the region. Their population is already so fragile, they do not need one more obstacle to survival.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Ryan (Oral)	. I'd just like to ask that you have these locations in places where folks like me can get to and observe the Americans with Disabilities Act. It's a long distance from where you park to here. I want to comment and say I really support the United States Navy on what you're doing. I want to say there can be a lot more harm to our standard living, so keep it up.	Thank you for participating in the NEPA process. I The Navy will take this comment into account when choosing appropriate venues in the future
S Finley (Electronic)	There is no excuse for hurting sea life. There is no threat greater to our safety than the killing off of species diversity. So if the military does care about keeping Americans (or any humans) safe, stop the sonar and explosions that hurt the sea animals. Otherwise, we will all die. It is a loose-loose or win-win scenario. Very simple.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p>
<p>Sacks (Electronic)</p>	<p>I am opposed to the U.S. Navy's proposed plan to expand testing to the waters of northern California, Oregon, Washington and Alaska. The pain and suffering to marine mammals caused by the increase in sonar and explosive is reprehensible and morally wrong. If a land animal was being tortured in this way, the perpetrator would be arrested for animal cruelty. But the whales and seals have no such protection and the Navy has no such consequences for its cruelty. It is inconceivable that it is necessary for the Navy to have such a huge area for testing sonar and explosives. Surely, the testing can be confined to a smaller area. In addition, it has been suggested that by moving 100 miles offshore for these tests, the effects of the deafening sonar on the whales themselves and on migration patterns and maternal/infant bonding might be diminished. Finally, some of the information in EIS, such as using vision to find marine mammals in the testing area, makes it hard for a person of average intelligence to believe that any effort is being made to really protect sea life. The manipulation of language ("takes" for animals impacted by the testing for example...) and the manipulation of the process (no questions and answers in the group setting...) and the manipulation of the visual scene (only one person in uniform...) is another example of how disingenuous the Navy is in this whole process. Ann Sacks</p>	<p>The Navy is completing this EIS/OEIS in compliance with current law, primarily the National Environmental Policy Act (NEPA). In addition to NEPA, the Navy continues to comply with other applicable environmental laws and with a number of regulatory requirements, such as the Marine Mammal Protection Act, the Endangered Species Act, the Coastal Zone Management Act, and the Magnuson-Stevens Fishery Conservation and Management Act.</p> <p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Nearly all of the Navy's proposed activities would continue to occur outside 12 nm. To stay outside of a specific distance, such as 100 miles, would exclude much of the available area. In Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy explains why certain mitigation measures have been considered but eliminated. As described in Section 5.3.4.1.10 (Avoiding Locations Based on Distances from Isobaths or Shorelines), areas where training and testing activities are scheduled to occur are carefully chosen to provide safety and allow realism of events. The proximity to facilities, range complexes, and testing ranges is essential to the training and testing realism and effectiveness required to train and certify naval forces ready for combat operations. On average, ships have about 19 days of underway time per quarter to train in over 24 mission areas, which limits the time available to sail farther out to sea than necessary to accomplish the training. In addition, training closer to facilities, which typically equates to training closer to shore, results in reduced fuel costs and reduced air emissions. Limiting access to coastal areas would restrict access to certain training and testing locations and would increase transit time for these activities,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft).</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Sanders (Electronic)</p>	<p>Whales and marine life are so much more important than indiscriminate sonar and explosive testing. Please reconsider this testing in the northern pacific and stop the killing of the whales and find other ways to prove the effectiveness of these weapons. Learn from nature and don't kill it.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Santos (Electronic)	Dear Sirs, Please, please, please cancel the sonar testing in the waters. Our loved animals will be killed by it and they do not deserve this... They did not do anything against us to die this way. Thank you,	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Sawyer (Oral)	Yeah. Hello. Hello. I'd just like to -- I'm from Whale Tales, Inc. It's been a pretty rough symposium. I just want to bring a little bit of light to it. I was fishing last year; I live on a fishing boat. I was looking forward to a life of, you know, maritime stuff, and to have kids and have them be involved in the ocean. You're going to ruin my chance of mermaids, basically. And I have a friend down in Berkeley that worked for a long time with the Navy doing a project that involved taking sea lions and having them trained to go out to find terrorists, you know, people coming on in under the ocean; and she worked for six years with the Navy to do this. And she just recently -- the whole program was just canceled because they realized the terrorists are not coming in under the ocean. They're going on buses. And she was really upset about the sonar stuff, based on the fact that, you know, there's a -- it meddles with a lot of the mating calls of the whales. And so I have a story about that. And since I feel like it is rigged and this is a joke, this is a story. And you don't have to worry about the cards. These two whales are sitting outside of Pescadero, and it's a -- you know, it's a female-male team. They're kind are getting to know each other, and they're cruising out there, and they go out to the Farallons, because whales do that. And so they'll go. And they start to hear these sounds. They go up, and it's a NEQUA (sic) boat. An -- or a NEQUA -- NEQUA? NEPA. It's a NEPA boat. And they're doing testing. And the male's like, "Oh, my goodness. We have to stop this boat. We can't -- we can't have this. Remember the sonar blast that blew our friend Willy across the lake? We have to stop it. So what you should do," he tells the female, "is maybe you could go over and do the spouty thing on one side of the boat, and then I'll go to the other side of the boat, and then all the -- when all the Sailor men are coming over there, I'll push the boat over,	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>and we'll eat them. You know? Yeah. It'll solve the whole problem. It'll be done; right?" She's like, "No, man, this is kind of -- you know, we don't need -- we can be a little more like, you know, a little more together than that, work with them." He goes, "No, we have to push them over the boat and eat them." She says, "I'm sorry. I am totally down for the blow job, but I am not going to swallow the seamen." I'm so sorry. I'm so sorry. It was terrible. But I get to say, this is totally rigged. And I do want you to know that we appreciate you coming out, but I -- I need you to know that this is not an open house where we agree with you and you can -- and giving comments, and then you make us feel good by writing us comments, and then we agree. We're not down at all. And is there a chance we could all stand up for one second? Who is in favor of this? Who is not in favor of this, stand up. Who is not in favor of this? Sit down, stand up, sit down. I think this is a joke. It's rigged. Thanks for coming, but no thanks for the project.</p>	
<p>Schaefer (Oral)</p>	<p>My name is John Schaefer. I've always had a high opinion of the Navy as the most sophisticated of the military services, and it's particularly disappointing for me to see the quality of this EIS, in a number of different ways. For one thing, on a strategic basis, there's no evidence of a more sophisticated threat than we've had in the past, so I fail to see why we need more sophisticated weaponry to deal with it. The EIS itself is improperly formulated. For one thing, the No Action Alternative really isn't no action; it's continuing to do the same thing that we've been doing all along. What we've been doing all along is killing marine mammals. I was unable to get your technical experts to describe to me how many animals have been killed or what the extent of damage is to the marine mammals that have washed up on our shores, but we all know that the Navy is doing sonar testing, and it is killing some marine mammals. Killing too many. The Navy proposes to vastly expand this area for training, even though it refuses to admit the level of damage that the current level of training causes. Therefore, the EIS as it's written is unacceptably vague, and I would hope you can improve upon it, or add another alternative. You have the No -- what you call the No Action Alternative, which is really continuing the present policy. I submit that you should have a real No Action Alternative, which is to say, shut down the sonar testing completely. Thank you.\</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Schiller (Electronic)</p>	<p>Please consider exclusion zones, I understand that there are reasons the military deems this testing necessary, however, the long term negative impacts that may result (and usually result when humans interfere in nature) have yet to be determined. So perhaps if we are more cautious at the start we will be grateful in the future.</p>	<p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>As described in Chapter 5 (Standard Operating Procedures,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
Schneider (Electronic)	<p>I am 100% in favor of the proposed action. Our port has become nothing but a body of water. Any additional activity in the area will support our local economy which relies only on illegal drug grows. I am hopeful that this will help generate some jobs in the dilapidated port of Humboldt Bay. I feel the government will do their part in protecting the environment. I am not concerned that this action will have any negative impacts on the community, environment, or economy, only positive impacts. Please continue with the action and make use of our underutilized port.</p>	<p>Thank you for participating in the NEPA process.</p>
Schulz (Electronic)	<p>Please I implore the US Navy to stop killing Marine Mammals with their sound tests in the Pacific Ocean near known breeding and foraging areas of Whales and Dolphins. There is scientific evidence that your tests will either kill or disorient Marine mammals. Thank you, Terry Schulz Retired Biologist</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Seidell (Written)	My family, community and I are totally opposed to any naval testing in the NWTT "Study Area." This testing will destroy whales mammals with sonar. Sonar is a deadly element to whales & mammals – as is explosives. Deny all applications for Federal permits for the NWTT EIS/OEIS.	<p>training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Sextro (Oral)	I came from Sequim, Washington, this evening. I had a couple of comments and I'll be providing you the full written comments during the comment period. First off, as I understand it, the Northwest Testing and Training range is fairly well-encompassed in the Northwest part of that area with the National -- what is it -- the Olympic Coast National Marine Sanctuary and, as such, I feel that the Navy should give hardy consideration to avoiding all testing and training within the limits of the marine sanctuary. I was told that you worked hand and hand with them. I think the idea of a marine sanctuary to avoid wildlife disturbances to the maximum extent possible is in the public's interest. I believe the Navy should, of their own volition, look at the idea of avoiding the marine sanctuary for all training and testing in the future. Secondly, in the EIS as I've looked at it, there were some discussions on climate change and particularly ocean acidification, but not much in terms of how the Navy would monitor or even attempted to mitigate it if they had any effect on marine acidification. I want to draw your attention to two reports, one actually by the marine sanctuary and the other from the State of Washington Department of Ecology. They both discuss ocean acidification here in Washington's waters. And if you didn't know, our waters are heavily affected by ocean acidification so much so, in fact, that the scallop and shellfish industry have had devastating effects particularly in Puget Sound and along the Straits of Juan de Fuca. So any activities that the Navy does that results in increased ocean acidification by lowering the pH, I think should be discussed more fully in the EIS with potential mitigation steps because our state has already been impacted greatly by ocean acidification.	<p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Thank you for providing these resources. The literature has been reviewed, and ocean acidification with relation to marine mammals is now discussed in Section 4.4.4 (Climate Change), of Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
Shadrovi (Electronic)	<p>Dear US Navy, You have the means to know when pods of whales and dolphins are near where you want to do sonar testing. Please don't do such tests around these wonderful sea creatures, who are already stressed by increasing pollution of the seas. I grew up in a landlocked state. One of my biggest joys is seeing beautiful sea life, wild and free. It's horrible to see these animals washing up on beaches, knowing that human actions are behind their suffering. The Navy would gain tremendous respect by showing itself responsible towards life in the seas.</p>	<p>Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When marine mammals have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p>
Sharpe (Electronic)	<p>Our national security depends upon a healthy marine environment and democratic governance by the people directly affected. Our national security does not require naval sonar and arms practice in our ocean. I have heard a suggestion of using simulators rather than disturbing our marine environment and expect you to explore that option. We insist on no arms fire, explosions, disruptive sonar, or any other activities that may disrupt or harm marine life. Your mission is to protect and defend; step up and do the right thing.</p>	<p>Thank you for participating in the NEPA process. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p>
Shea (Electronic)	<p>PLEASE STOP KILLING SEA LIFE!!!!!!!!!!!!!!!!!!!!</p>	<p>Thank you for participating in the NEPA process.</p>
Sheldon (Oral)	<p>I'm an oysterman from Klovdahl Bay. I came over here to take a look at your program to see whether it would affect what we do, and it won't. However, I've got a long history of commercial fishing, pushing 60 years, and I strongly suggest that you listen to the two previous gentlemen on their concerns. Mine are somewhat the same, having that history. On the environmental side of it, I started fishing when the United States still had whales out there, Navy (inaudible) out of Northern California was one and I can't remember the</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>one out of Astoria. And we spent some time on our tuna trips giving false information where the whales were supposed to be to keep those whales (inaudible). This is before the president's concern about whales were -- found out it's justified. But I also, I also spent World War II on the beaches in Long Beach and I also watched the oil-soaked life rafts and balsa rafts come in and life jackets and debris that was coming out of the Pacific. Not a lot of it, but it was there. I watched the blimps fly over. It was the best thing we had to deal with the submarines at the time, I guess. And that also influences the way I think about these things. The sophistication of the, our adversaries out there today is, is considerably on a higher level than it was in those times. And for the, to deny the Navy the opportunity to improve their ability to counteract these things I think is a mistake. And though we have to deal with some, maybe some environmental damage and whatnot, we, the primary thing is to protect this country. And that's kind of my comments. I will add one more thing. If you want to get a lot of votes for this project within the, most of the fishing areas in this state, you might consider taking seals and sea lions off your list. Thank you.</p>	
Shepard (Electronic)	Re. Proposed Training and Testing in the Pacific Northwest Please note that I am against the U.S. Navy's proposed training and testing activities in the Pacific Northwest region.	Thank you for participating in the NEPA process.
Sherwin (Electronic)	<p>When I read about plans to conduct sonar test in the Pacific Ocean I am ashamed to be an American. We have no regard for other life forms as marine mammals WILL be damaged by these "exercises". I read the mitigation plans and they are a joke. Blue whales can hear up to ONE THOUSAND MILES and you won't test within 1000 feet. Are you kidding? Call it off before you do irreparable harm to one of the few surviving oceanic ecosystems. War games are a waste of tax-payer dollars and detrimental to the planet. Haven't we evolved beyond that?</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>Shiner (Electronic)</p>	<p>I have just watched the video provided on the site about the need to train our Navy personnel in real situations, including the practice use of sonar. I was very pleased to see that the protection of marine habitat, including our beloved and threatened icons, the South Resident pod of Orca whales and other species are also of concern to the Navy. I also understand that the National Marine Fisheries Services has recently been found at fault in a court case for not considering current marine science in their 2012 green light to the Navy to go ahead with increased sonar testing in this area, and that this must be included in a new plan established by August of this year. Given the high level of sophisticated equipment that was being demonstrated in the video, I was fairly startled to observe that the way that whales and other marine life will be “avoided” is by human observers with binoculars. I wonder how effective that would be in detecting submarines and mines? This leads me to question how seriously the Navy is committed to protecting this habitat. There is abundant evidence, for example, that mid-frequency sonar has led to the mass stranding of whales and the disruption of feeding as whales desperately try to get away. I believe there needs to be increased regulation in order to protect these species from the impact of these exercises. I would propose that the Navy be required to devote some scientific resources to determine a very limited area of the Pacific Coast where such testing will do the least harm. I believe that right now the Navy has wide open access to the entire Coast, including, to my astonishment, known sensitive habitat areas that should by all means be sonar free zones. When I read in the paper of the volume of activity that is being proposed, I can assure you that I feel far more threatened than protected by these proposals for such destruction in my “backyard”. (I live on Whidbey.) Surely training can be accomplished in a much more restricted way that also protects our environment. Please do your best to insure that environmental protection is of the highest concern in the development of any further plans. And that all planning for increased training, sonar, and related activities is stopped until that is insured. Once the harm is done, there’s no “going back” as we sadly know from the loss of other natural resources. Thank you, Dianne Shiner</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
<p>Shipley (Electronic)</p>	<p>As a resident along the Strait of Juan de Fuca, I am thrilled to sight orcas and other wildlife. I'm also aware of the effects of ocean acidification and other harm to my environment. I have been concerned for years over the Navy testing that interferes with the wildlife here and on the coast. The nation's defenses are vital but should not result in the disruption of the life in our ocean and the Salish Sea. I urge the Navy to carefully study the issues and make every effort to protect our heritage. Human action should not endanger other life on our planet.</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p>
<p>Shomer (Electronic)</p>	<p>Alternatives presented in the EIS process include continuing to do what has been done over the last five years or doing more. There is no alternative that proposes doing less. Nor is there a comprehensive look at how the Navy's activities are adding impacts to already highly stressed ocean inhabitants. Marine mammals are intelligent creatures with brains similar in size and function to our own. If humans were the species being considered for impact, certainly there would be alternatives for doing LESS! In fact, the impacts considered as "Take" for marine mammals, would not be considered at all. IT IS INHUMANE TO TREAT INTELLIGENT MARINE MAMMALS WITH SUCH NEGLIGENCE. Marine mammals are not "mere fish." I strongly urge these shortcomings to be addressed and offer the following Alternative for consideration. Reduced Impact Alternative: Strengthen the protection the Endangered Species Act offers the Orcas by setting aside from training the Haro Strait, and extend the critical area to include known Orca hangouts down the Pacific Coast. Declare whale sanctuaries, birthing nurseries, and whale migration paths off-limits to sonar testing. Scheduling training to avoid times of the year when sensitive species are present in critical biological areas along this vast stretch of coast, including in places like the Olympic Coast National Marine Sanctuary on the Washington coast or biologically rich waters off of the Oregon and Northern California coasts; Employ sophisticated listening devices to make sure no cetaceans are in the path of the lethal low frequency active sonar. Propose a global network of marine reserves for buffering environmental variability and providing greater protection for marine communities. Chose sonar frequencies that are not used for cetacean communication.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. To clarify, the Navy is uses Mid-Frequency Active Sonar for training and testing, and does not use Low Frequency Active Sonar in training or testing activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>The Navy trains in the same infrequencies, 2–10 underwater kilohertz (kHz) used by Southern Residents for their whistles and calls. 180 db sonar in this frequency range could distract or permanently deafen a nearby killer whale Provide a clear analysis of the different types of sonar, low, medium and high frequency, how far the various sonars sound carries through the water, how loud they are, how they affect marine life Propose a serious and thoughtful dialogue with scientists, environmentalists, and elected officials about how to assure our military readiness while not destroying the life in the ocean. Explore the necessary national security components an international treaty would have to contain in order to eliminate the need for 235 decibel low frequency sonar which has been described as a rolling wall of sound that fills the ocean. Evaluate the impact of flying over cetaceans at low altitudes doing jet training exercises that last for hours and may involve dumping fuel into the ocean. Thorough reviews of the subject and available information are presented in Richardson et al. (1995), Efrogmson et al. (2001), Luksenburg and Parsons (2009), and Holst et al. (2011). The most common responses of cetaceans to overflights were short surfacing durations, abrupt dives, breaching, tail slapping and fleeing the area of the source of the noise. These “takings” need to be included. Investigate the Environmental Superfund Site Naval Magazine Indian Island as a source for PCB contamination. Lighters unloading navy ships after ww2 may have dumped barrels of PCB’s directly into the water rather than taking them to the boggy spit dump. Post a navy small boat (30’) near the Orcas to warn boaters not to come too close to the whales Fund independent scientists & naturalists that are studying the orcas. Thank you for the opportunity to participate in this EIS process. Forest Shomer</p>	<p>Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>Investigating the Environmental Superfund Site Naval Magazine Indian Island as a source for PCB contamination is outside of the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
Short (Electronic)	<p>I am very concerned about the impact of sonar and explosives on the marine mammals and the ocean ecosystem in general off the Mendocino Coast and all our coasts as well. I am concerned for the animals sake, because they are creatures of beauty and intelligence and i am also concerned, even more, for our sake. We just can't know what kind of damage we are doing and what repercussions we all might suffer if we continue to mess up our environment and not respect the other life on this planet. Please think about this. Question whether there might be another way to test these weapons. And an even bigger question, do we really need them at all? Thank you.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Shown (Electronic)	<p>You cannot kill these majestic creatures. You cannot. Do you believe in God? Do you have any kind of a conscience? Please reconsider this dangerous and deadly plan. Thank you.</p>	<p>Thank you for participating in the NEPA process.</p>
Siegel (Electronic)	<p>"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".</p>	<p>(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Silva (Electronic)</p>	<p>I totally support the US Navy's training in the waters off the coast of N. California to prepare our military in case we need to defend our country. Please ignore the long-haired, pot-growing, environmental stoners who just want to live their lives in peace, yet who have no concept of what it takes to preserve the peace. A well trained and experienced military. Go for it. I seriously doubt much if any harm will come to any marine animals.</p>	<p>Thank you for participating in the NEPA process.</p>
<p>Silver (Electronic)</p>	<p>I agree with Sadie. Please don't do these tests in such sensitive waters. ----- I am writing with grave concerns about the Navy's proposed use of sonar and undersea explosions in the Northwest Training Range. I live in the San Juan Islands – Endangered orca whale country. There are only 80 orcas left off the entire coast of Washington, Oregon, and California. Orcas already face many man-made threats along their migration routes, without more preventable and needless deaths. People come from all over the world to see the whales off the Pacific coast. Many of our coastal economies depend on eco-tourism and fishing, but our concern for the wellbeing of cetaceans goes far deeper – we love, appreciate, and respect these highly intelligent beings. Marine mammals are extremely sensitive to noise. Sonar destroys important habitat and disrupts the essential behavior of killer whales, blue whales, harbor porpoises and other marine wildlife. If you deafen a cetacean, you essentially kill it, destroying their navigational and communication abilities. Has the Navy considered the deafening of whales in its kill estimates? What about other cetaceans affected, and the loss of habitat and food supply caused by sonar and explosion testing? What are the real numbers when it comes to maimings and</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>deaths? In 2004 the Navy’s sonar was implicated in a mass stranding of as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. And in 2003 the USS Shoup exposed a group of endangered orcas to sonar in Washington’s Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound. There is no need for this torture of innocent marine mammals – and it IS torture. Who will be physically and fiscally responsible – the Navy, or the U.S. taxpayers – for cleaning up the carnage of whale and dolphin corpses, or worse, dying cetaceans that we’re powerless to help, washed up on our beaches? And how do we explain to a traumatized population, to our kids and grandchildren, WHY these magnificent creatures died – needlessly – at the hands of our own military? The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on the region’s valuable wildlife. Has it been scientifically proven that the impacts even can be mitigated? Our cetacean populations are sacred to us, and to the many First Nations Tribes and Bands along our coasts – who ultimately have final say in what happens to our waters, under National and Tribal Law. The waters of the United States, including marine environments, belong to First Nations and the people, under the Clean Water Act. What other effects on our waters will sonar testing and explosions have? What else will they kill, and in what estimated numbers? How else will they pollute? How else will they warm and acidify our oceans? What will they do to the marine food chain, and to coastal economies and Aboriginal cultures? Have these questions and many more, been considered, and satisfactorily answered? Have outside, unbiased Academic Marine Biologists weighed in on the EIS? Who really stands to make their fortunes, or increase them, on these weapons tests, against the will of the U.S. taxpayers footing the bill? As you continue to provide for our country’s defense, please find a way to train that respects and protects our natural resources and our ocean’s sensitive wildlife, and the people who see the value in cetaceans.</p>	<p>mammals from Navy activities.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species’ entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, “existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS’ identification of BIAs. The same marine mammal density data present in the Navy’s Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The Navy has conducted training in these operating areas regularly for decades. Though the intensity of live training may increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant.</p> <p>Most commercially important fish species are not believed to hear mid- and high-frequency sound sources that make up the majority of sound producing activities.</p>
<p>Silvernale (Oral)</p>	<p>I’m Dana Silvernale. We have -- so far, we have 100 percent consensus in this room. There is not anyone who’s spoken in favor of training in our area, or anywhere else on the planet for that matter. I think that’s the message that needs to go forward, that we want no project; that we want -- that the projects that you are planning are literally an assault on the people that you are sworn to protect. Not only the people, but our habitat, our environment, and the animals and the plants that we live with. And sonar is spoken of a lot because we have seen evidence of its damage. Not all of the evidence, of course, because so many of the species that are killed sink to the bottom of the ocean. We never see them. But we also have the effects of concussion. There’s not -- on fish. And there’s</p>	<p>Thank you for participating in the NEPA process. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>not been very much research on that. Very little, in fact. However, around the areas where they have been drilling pilings for piers and bridges and such, the concussion from that work has literally exploded the bladders of the fish which -- which keeps them afloat. The flat -- the bladder is in the upper part of the fish's body, and it keeps them oriented. And those concussions literally explode that bladder. So hence our salmon. This is really -- it's unnecessary; it's far, far too destructive to life everywhere. Our life on land, life in the sea. There's -- there's not sufficient reason to do it. We want you to bring back the message that we want no project. We want no testing. We want no sonar. We want peace.</p>	<p>EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy does not propose pile driving or drilling for piers under this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
Simpson (Electronic)	<p>I am proud of the US Navy for its recognizing that climate change is real and a grave threat to society. It needs, though, to carry this recognition to its logical conclusion. Climate change being a world-wide problem requires responses from society and its institutions that are adequate to the challenges presented. Radar and live munition training to prepare us to face enemy attack now have to take a back seat to real response to far more pressing problems over and above the fact that it is too late in the game to be placing species and systems under even greater pressure to survive. By many estimates, the ocean is losing its ability to sustain itself and its many lifeforms upon which we depend because of pollution, toxicity, acidity, sea-level rise and over-fishing. Vast areas are covered in plastic flotsam flotsam. I suggest that the Navy repurpose itself and turn its great power, technical capacities and heart toward the work of restoration of the health and productivity of our oceans and the provision of humanitarian relief to coastal societies and people worldwide which have been damaged and displaced by climate related events. Imagine the gain in prestige and status our Navy and our military in general would achieve in the world. What other institution anywhere might have the capacity to accomplish this?</p>	<p>Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
Sims – 01 (Electronic)	<p>A conversation with the Navy It has been awhile since I met with representatives of the Navy at Oak Harbor High School on February 26th, to begin a journey to understand “the way the Navy must consider the environmental impacts that may result from its proposed activities” Http://www.NWTTEIS.com, I was encouraged to make a statement at the time. I realized that I was hopelessly uninformed. I suspect a vast amount of the population is regarding the “machinery of war”, on almost all levels. My enjoyed meeting with Navy employees, and listened to the information they could afford me in such a brief time. I wanted them to know that we were on the same side, given my history of having lost every male member of our family for three generations to war, and to the hazards of war. The public meeting that followed was painful to watch, as members of the public emotionally protested how for them, the despoilers of their lives, on many levels was the</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Navy. The spokesperson for the navy, sat with head bowed not allowed to respond. From his body language I could see that this was not a pleasant task. The most frustrating thing about this meeting was my inability to get a real answer to my need to understand what alternatives there were to mitigate the Navy’s plans for protecting marine life. Page 10. - Observe the area prior to activities - visually whilst at the surface, and when possible monitored acoustically to detect the presence of marine mammals and sea turtles. Posting qualified Lookouts/Observing inland water range sites/establishing mitigation zones for marine species/Navigating safely/Reporting monitored results. All these solutions for “evasive action”, seems a little open ended, and easily open to abuse by any Navy personal who might not be as invested in protecting our water population. I did not get the feeling from what I read, that there were checks and balances in place to monitor the behavior of those giving the orders. It would seem the public is the only voice to report when it is obvious that standards are not met, promises and reassurances are not accurate or fulfilled. There have been reports from the “Orca Network” of navy craft in a mitigation zone. The Navy promises to protect “whistle blowers” within their ranks, and “we the people” need the same respect, attention to our comments, and protection. We are not reimbursed for our diligence. The “informational Material”, in the Northwest Training and Testing, Environmental Impact Statement/Overseas Environmental Impact Statement was not easy for the layperson to read and understand. For example: Page 9. Of http://www/NWTTEIS.com, “Marine Species Distribution Builder – distributes marine species as simulated animals, or “animats”, within the modeling environment in cells based on the bathymetry and relevant descriptive data. The size of cells and density of “animats” within each cell vary by species and location.” That was pretty much the level of communication through the entire statement. So who was the meeting for, and how does the Navy intend to help us, the uneducated, and anxious public, make the decision that the Navy has integrity, transparency, and are making efforts to protect our precious marine life from noise pollution, over fishing, habitat destruction, pollution, global warming, and so forth. This is a huge and much faceted issue, with no easy answers. The Navy is also dependent on other agencies for their honest input, and so it was very disturbing to read the following: http://www.biologicaldiversity.org/news/press_releases/2013/war-games-09-26-2013.html For Immediate Release, September 26, 2013 Contact: Steve Mashuda, Earthjustice, (206) 343-7340 x 1027 Hawk Rosales, InterTribal Sinkyone Wilderness Council, (707) 489-3640 Miyoko Sakashita, Center for Biological Diversity, (415) 632-5308 Marcie Keever/Fred Felleman, Friends of the Earth, (510) 900-3144/(206) 595-3825 Kyle Loring, Friends of the San Juans, (360) 378-2319 Jessica Lass, NRDC, (415) 875-6143 Court Rules That Federal Agency Failed to Protect Thousands of Whales and Dolphins From Navy Sonar West Coast Marine Mammals Continue to Be Harmed by Deafening Underwater Noise EUREKA, Calif.— A federal court has ruled that the National Marine Fisheries Service failed to protect thousands of whales, dolphins, porpoises, seals, and sea lions from U.S. Navy warfare training exercises along the coasts of California, Oregon and Washington. In an opinion released late Wednesday, Magistrate</p>	<p>during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When marine mammals have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy’s proposed activities are fully compatible with other uses of the ocean space around the Sound. The Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Judge Nandor Vadas, U.S. District Court for the District of Northern California, found that the agency’s approval of the Navy’s training activities in its Northwest Training Range Complex failed to use the best available science to assess the extent and duration of impacts to whales and other marine mammals. The decision requires the federal agency to reassess its permits to ensure that the Navy’s training activities comply with protective measures in the Endangered Species Act. The Society of professional Journalists “Code of Ethics.” “Test the accuracy of all sources and exercise care to avoid inadvertent error. Deliberate distortion is never permissible”. So whilst I struggled to understand the www.NWTTEIS.com, I did wonder if it had not been written for me to understand, who the Navy believed would be their audience when looking for input. Was it presented in such a way that the reader would overwhelmed enough to be silenced. Or did the writers just not look beyond their own audience, looking for support, and not another point of view.</p> <p>“Winning Through Intimidation” Mass Market Paperback – June 12, 1981, by Robert J. Ringer. Found on Amazon. I encourage you to read the reviews, especially the one on the right. “Battles are for ego-trippers; wars are for money-gridders.” [page 27] When it comes to winning, usually the person who is the best equipped to win shall win. That may mean the person who is the most knowledgeable, or the most skilled. Right? Yes, sort of. Because, as the author contends, people will often pretend to be something they aren’t. Learn to recognize this. “Don’t allow yourself to be intimidated by someone else’s knowledge-or apparent knowledge.” [page 35] So I learned that the oceans are full of submarines from a variety of nations, of different levels of real and lesser danger to us. All “pinging” one another to try and see where the other submarine is, and totally “messaging” with and “messaging up” the sonar of anything that needs to survive by this. So at what cost is our “protection”. Dave Gilson, Jan/Feb 2014, “Mother Jones”, wrote an interesting and easy to understand “field manual “Don’t Tread on Me” for the epic battle over defense spending. Illustrated for easy reading, just a few numbers are: Planes and helicopters, \$21.6 Billion Petroleum and oil, \$21.6 Billion Guided missiles, \$10.4 Billion Combat and assault vehicles, \$5.2 Billion Amphibious assault ships \$3.9 Billion Space vehicles \$3.6 Billion Submarines \$3.4 Billion Nuclear reactors \$2.5 Billion Unmanned aircraft \$2.5 Billion and: Dairy and eggs, \$4 Billion</p> <p>http://www.humanesociety.org/assets/pdfs/farm/hsus-the-impact-of-animal-agriculture-on-global-warming-and-climate-change.pdf Number of cows and calves slaughtered every 24 hours in the US: 90,000 Number of chickens slaughtered every minute in the US: 14,000 Food animals (not counting fish and other aquatic creatures) slaughtered per year in the US: 10 billion- more than one and a half times the world’s entire human population. All of these facts, when combined with the incredible suffering and pain caused to animals in the daily holocausts of factory farm environments, as well as the detriments to our own health when eating animals treated in this way, really do show factory farming to be an entirely unacceptable form of exploitation and profiteering, to which we must all say “No!”</p> <p>By Toby Köberle Melbourne, July 2005. My family and I said “no” to being part of the horror, and now enjoy a plant-based diet. http://news.asiaone.com/news/science-and-</p>	<p>for the Proposed Action, and would therefore be unreasonable.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>tech/climate-un-scientists-see-grim-future-if-no-action?page=0%2C0 "SPECIES LOSS: A "large fraction" of land and freshwater species may risk extinction, their habitat destroyed by climate change." So, I can say no more. There is nothing I can do to turn the tide of global change. War, overpopulation, greed, corruption, cruelty, have all contributed to breaking what was beautiful, "Mother Earth". I cannot stop you on your course, nor would I want to. I would just ask that you think about all aspects of what you are doing, and try and go about it "mindfully", with integrity, humanity, with transparency, and compassion, in the understanding that what lives you take you own, as has been the burden of so many of our young people who have taken their own lives. This is not a new story, we have done this to many civilizations, but never on this scale, and, and with such devastation to our global, and environmental habitats. In the words of Chief Seattle: http://theoriginalvangoghsearantology.com/2013/01/28/chief-seattles-1854-oration/ "A few more moons, a few more winters, and not one of the descendants of the mighty hosts that once moved over this broad land or lived in happy homes, protected by the Great Spirit, will remain to mourn over the graves of a people once more powerful and hopeful than yours. But why should I mourn at the untimely fate of my people? Tribe follows tribe, and nation follows nation, like the waves of the sea. It is the order of nature, and regret is useless. Your time of decay may be distant, but it will surely come, for even the White Man whose God walked and talked with him as friend to friend, cannot be exempt from the common destiny. We may be brothers after all. We will see." Sincerely Bridgit Margaret Montgomery Sims</p>	
<p>Sims – 02 (Electronic)</p>	<p>I submitted a letter yesterday. I noted that you have extended the date to April 15th. I will be resending the letter with some corrections. My husband needed dinner, and I did not proof it before hit the "send" button". Basically my eyes dropped a line on the military budget from "Mother Jones", so this needs to be redone, and I need to explain a little better in some areas. Thank you. Bridgit Margaret Montgomery Sims</p>	<p>Thank you for participating in the NEPA process.</p>
<p>Sims – 03 (Electronic)</p>	<p>Letter to the Navy - ammended It has been awhile since I met with representatives of the Navy at Oak Harbor High School on February 26th, to begin a journey to understand "the way the Navy must consider the environmental impacts that may result from its proposed activities" Http://www.NWTTEIS.com, I was encouraged to make a statement at the time. I realized that I was hopelessly uninformed. I suspect a vast amount of the population is regarding the "machinery of war", on almost all levels, so I decided to try and educate myself more before responding. I enjoyed meeting with Navy employees, and listened to the information they could afford me in such a brief time. I wanted them to know that we were on the same side, given my history of having lost every male member of our family for three generations to war, and to the hazards of war. The public meeting that followed was painful to watch as members of the public emotionally protested how for them, the despoilers of their lives, on many levels was the Navy. The spokesperson for the navy, sat with head bowed, not allowed to respond. From his body language I could see that this was not a pleasant task. The most frustrating thing about this meeting was my</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>inability to get a real answer to my need to understand what alternatives there were to mitigate the Navy’s plans to protect marine life from sonar noise and the use of explosives. The information in the Navy brochure Http://www.NWTTEIS.com did nothing to help me feel that marine life was a major concern. The concern seemed mostly to center around the comfort of the navy personal, and their ability to train. I really doubt that with all the present technology available this could not be done less expensively, and just as successfully with simulators. Perhaps this science could be improved, and on and the use of sonar and explosives limited to deep waters far away from shore? Page 10. - Observe the area prior to activities - visually whilst at the surface, and when possible monitored acoustically to detect the presence of marine mammals and sea turtles. Posting qualified Lookouts/Observing inland water range sites/establishing mitigation zones for marine species/Navigating safely/Reporting monitored results. All these solutions for “evasive action”, seems a little open ended, and easily open to abuse by any Navy personal who might not be as invested in protecting our water population. I did not get the feeling from what I read, that there were checks and balances in place to monitor the behavior of those giving the orders. It would seem the public is the only voice to report when it is obvious that standards are not met, promises and reassurances are not accurate or fulfilled. There have been reports from the “Orca Network” of navy craft in a mitigation zone. The Navy promises to protect “whistle blowers” within their ranks, and “we the people” need the same respect, attention to our comments, and protection. We are not reimbursed for our diligence. The “informational Material”, in the Northwest Training and Testing, Environmental Impact Statement/Overseas Environmental Impact Statement was not easy for the layperson to read and understand. For example: Page 9. Of http://wwwNWTTEIS.com, “Marine Species Distribution Builder – distributes marine species as simulated animals, or “animats”, within the modeling environment in cells based on the bathymetry and relevant descriptive data. The size of cells and density of “animats” within each cell vary by species and location.” That was pretty much the level of communication through the entire statement. So who was the meeting and the brochure for, and how does the Navy intend to help us, the uneducated, and anxious public, make the decision that the Navy has integrity, transparency, and is making efforts to protect our precious marine life from noise pollution, over fishing, habitat destruction, pollution, global warming, and so forth. This is a huge and much faceted issue, with no easy answers. The Navy is dependent on other agencies for their honest input and accurate scientific evaluation, and so it was very disturbing to read the following: http://www.biologicaldiversity.org/news/press_releases/2013/war-games-09-26-2013.html For Immediate Release, September 26, 2013 Contact: Steve Mashuda, Earthjustice, (206) 343-7340 x 1027 Hawk Rosales, InterTribal Sinkyone Wilderness Council, (707) 489-3640 Miyoko Sakashita, Center for Biological Diversity, (415) 632-5308 Marcie Keever/Fred Felleman, Friends of the Earth, (510) 900-3144/(206) 595-3825 Kyle Loring, Friends of the San Juans, (360) 378-2319 Jessica Lass, NRDC, (415) 875-6143 Court Rules That Federal Agency Failed to Protect Thousands of Whales and Dolphins From</p>	<p>been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When marine mammals have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around the Sound. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Navy Sonar West Coast Marine Mammals Continue to Be Harmed by Deafening Underwater Noise EUREKA, Calif.— A federal court has ruled that the National Marine Fisheries Service failed to protect thousands of whales, dolphins, porpoises, seals, and sea lions from U.S. Navy warfare training exercises along the coasts of California, Oregon and Washington. In an opinion released late Wednesday, Magistrate Judge Nandor Vadas, U.S. District Court for the District of Northern California, found that the agency’s approval of the Navy’s training activities in its Northwest Training Range Complex failed to use the best available science to assess the extent and duration of impacts to whales and other marine mammals. The decision requires the federal agency to reassess its permits to ensure that the Navy’s training activities comply with protective measures in the Endangered Species Act. The Society of professional Journalists “Code of Ethics.” “Test the accuracy of all sources and exercise care to avoid inadvertent error. Deliberate distortion is never permissible”. So whilst I struggled to understand the www.NWTTEIS.com, I did wonder if it had not been written for me to understand, who the Navy believed would be their audience when looking for input as to why marine mammals should not be harmed. Was it presented in such a way that the reader would overwhelmed enough to be silenced. Or did the writers just not look beyond their own audience, looking for support within their own ranks, and not another point of view and a humanitarian and globally concerned opinion? An interesting philosophy regarding arguaing with intent to win without truly approaching the best solution for all, take a look at: “Winning Through Intimidation” Mass Market Paperback – June 12, 1981, by Robert J. Ringer. Found on Amazon. I encourage you to read the reviews, especially the one on the right. “Battles are for ego-trippers; wars are for money-grippers.” [page 27] When it comes to winning, usually the person who is the best equipped to win shall win. That may mean the person who is the most knowledgeable, or the most skilled. Right? Yes, sort of. Because, as the author contends, people will often pretend to be something they aren’t. Learn to recognize this. “Don’t allow yourself to be intimidated by someone else’s knowledge-or apparent knowledge.” [page 35] So what did I learn, I learned that the oceans are full of submarines from a variety of nations, of different levels of real and lesser danger to us. It was hard to gather data on these submarines and their significance. These submarines are “pinging” one another for location and identification, some are testing explosives, and regardless of damage they cause “messaging” with, and “messaging up” the sonar of marine animals/fish that use this sensitive system in order to feed, socialize, navigate and survive in our our increasingly less than healthy oceans, continue regardless, to add this trauma and pollution. So at what cost is our “protection”. Dave Gilson, Jan/Feb 2014, “Mother Jones”, wrote an interesting and easy to understand “field manual “Don’t Tread on Me” for the epic battle over defense spending. Illustrated for easy reading, just a few numbers are: Planes and helicopters, \$32.6 Billion Petroleum and oil, \$21.6 Billion Guided missiles, \$10.4 Billion Combat and assault vehicles, \$5.2 Billion Amphibious assault ships \$3.9 Billion Space vehicles \$3.6 Billion Submarines \$3.4 Billion Nuclear reactors \$2.5 Billion Combat ships and landing vessels \$2.2 Billion</p>	

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Unmanned aircraft \$2.5 Billion and: Dairy and eggs, \$4 Billion I was pleased to read an article in the March 24th 2014 edition of the "Navy Times", by Patricia Kime, at pkime@military.com, "Paleo VS Vegan". Reading between the lines, I suspect Ms. Kime totally understands the need the military has to start thinking about the need for a plant based diet, not only for the health of the vast numbers of people it employs, but in order to try and mitigate some of the effects of the global disasters that we now see as an everyday reality. http://www.humanesociety.org/assets/pdfs/farm/hsus-the-impact-of-animal-agriculture-on-global-warming-and-climate-change.pdf Number of cows and calves slaughtered every 24 hours in the US: 90,000 Number of chickens slaughtered every minute in the US: 14,000 Food animals (not counting fish and other aquatic creatures) slaughtered per year in the US: 10 billion- more than one and a half times the world's entire human population. All of these facts, when combined with the incredible suffering and pain caused to animals in the daily holocausts of factory farm environments, as well as the detriments to our own health when eating animals treated in this way, really do show factory farming to be an entirely unacceptable form of exploitation and profiteering, to which we must all say "No!" By Toby Köberle Melbourne, July 2005. My family and I said "no" to being part of the horror, and now enjoy a plant-based diet, Not only we feel progressive in our humanitarian choice, but our cholesterol has gone down by 50%. http://news.asiaone.com/news/science-and-tech/climate-un-scientists-see-grim-future-if-no-action?page=0%2C0 "SPECIES LOSS: A "large fraction" of land and freshwater species may risk extinction, their habitat destroyed by climate change." So, what else can I say? There are so many of you, and I am only one voice. There is nothing I can do alone to turn the tide of global change. War, overpopulation, greed, corruption, cruelty, have all contributed to breaking what was beautiful, "Mother Earth". My voice alone cannot stop you on your course, and it is my hope that you and your leaders will start to think about your actions. I would ask that you think about all aspects of what you are doing, and try and go about it "mindfully", with integrity, humanity, with transparency, and compassion, in the understanding that what lives you take you own, as has been the burden of so many of our young people in your service, who have taken their own lives, because the burden has been too great. This is not a new story, this has been done to many civilizations, but never on the scale that we, by allowing bad choices have affected our global, and environmental habitats. What we are facing my be suicide on all levels. Lessons on war, and lessons by those who lead to be learned. What is necessary, what is practical, what will the outcome be? Question everything! http://en.wikipedia.org/wiki/Charge_of_the_Light_Brigade In the words of Chief Seattle: http://theoriginalvangoghsearantology.com/2013/01/28/chief-seattles-1854-oration/ "A few more moons, a few more winters, and not one of the descendants of the mighty hosts that once moved over this broad land or lived in happy homes, protected by the Great Spirit, will remain to mourn over the graves of a people once more powerful and hopeful than yours. But why should I mourn at the untimely fate of my people? Tribe follows tribe, and nation follows nation, like the waves of the sea. It is the order of nature, and regret is</p>	

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	useless. Your time of decay may be distant, but it will surely come, for even the White Man whose God walked and talked with him as friend to friend, cannot be exempt from the common destiny. We may be brothers after all. We will see." Sincerely Bridgit Margaret Montgomery Sims	
Sixto (Electronic)	"I am writing to oppose the Navy's proposed expansion of their Northwest Training Complex. This testing is taking place in ESA listed habitats for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life near our shoreline. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. . Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Skerski (Electronic)	Please do NOT renew permits for the navy to conduct sonar and bomb testing in Northern California and near the coast of Canada. By the navy's own admission, this harms whales and other marine animals. These exercises are not worth the harm to other beings. Please do not allow this testing ot continue. Amanda Skerski	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Skinner (Electronic)	Please do not continue/expand the Navy's sonar ranges. Numerous studies have concluded that sonar has already devastated marine mammals, most especially whales and dolphins, and that further use of sonar will decrease our rapidly depleted populations of these amazing beings. Surely humans, with our legendary intelligence, can think up something else other than sonar to use for detection of deep-water objects. Please stop the use of sonar. Sue Skinner	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Sklavos (Electronic)	The Navy's NW Training Range stretches from the inland marine waters of Puget Sound in Washington to Northern Mendocino County. The range extends seaward approximately 300 miles and encompasses an area the size of the entire State of California. These west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Some of the mid-frequency sonar systems the Navy employs are capable of generating sounds in excess of 235 decibels. A normal human conversation takes place at 60-70 decibels; a loud rock concert is about 115 decibels; permanent hearing damage for people can occur from short-term exposure to 140 decibels. The decibel scale is a logarithmic scale, and each ten-decibel rise along the scale corresponds to a ten-fold increase in power: a sound measuring 130 decibels is ten	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>times more intense than a 120 decibel sound, a sound of 140 decibels is 100 times more intense, and a sound of 150 decibels is 1,000 times more intense. A whale's keen sense of hearing is vital in every aspect of its life history, including foraging for food, finding mates, bonding with offspring, communicating with other members of their species, navigating through lightless waters and avoiding predators. Experts agree that exposure to sonar blasts can cause serious injury or death from hemorrhages or other tissue trauma. Whales can also suffer from temporary and permanent hearing loss, displacement from preferred habitat, and disruption of feeding, breeding, communication and other behaviors essential to survival. In 2003, the USS Shoup, exposed endangered Southern Resident killer whales to mid-frequency active sonar in Haro Strait west of San Juan Island in Washington State for several hours that peaked over 180 db and averaged 169 db. A video of the incident is available here: http://www.youtube.com/watch?v=O9gDk29Y_YY Under the Endangered Species Act, "Take" of a protected species means more than death of a single animal. "Take" also includes actions that harass or harm protected species, and harm includes "significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering." 50 C.F.R. § 222.102." The Marine Mammal Protection Act contains a definition of "Take" that applies to all marine mammals. A take includes actions that cause either "Level A" or "Level B" Harassment. Level A Harassment are acts that injure or could injure a marine mammal. Level B Harassment are acts that disturb or could disturb a marine mammal by causing disruption of natural behavioral patterns, such as migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered" The National Marine Fisheries Service has given the Navy a permit that allows 650,000 takes of marine mammals over a five-year period. This means that the agency believes there will be 650,000 instances when a marine mammal is harmed, and multiple takes of the same animal is specifically anticipated The California Coastal Commission ruled unanimously against the Navy in March 2013 saying that the military did not have adequate information concerning their potential impact and that they were underestimating their figures. There has been a long history of lawsuits and federal intervention. The Southern Resident Orcas of Puget Sound have endangered species recognition. The 80 Orcas that live in our waters face multiple challenges – PCB contamination that threatens their ability to reproduce, increasing ocean noise levels caused by increasing human activities, daily harassment from whale watching boats, problems finding an adequate food supply (they like chinook salmon), other toxicity sources from run-off, air pollution, and chemicals used to treat water in sewage treatment plants. The EIS draft that the Navy has offered concerned citizens to review acknowledges that Naval activities will add to the burdens Orcas face. Scientists working on Navy contracts (Ketten 2012) have presented findings that claim an inconsequential impact of Low and medium range sonar. What the USS Shoup was doing in Haro Strait in 2003 clearly shows whales being harmed by sonar.</p>	<p>to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWT Study Area are not the only areas used for feeding, migrating,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Hearing loss resulting from auditory fatigue could effectively reduce the distance over which animals can communicate, detect biologically relevant sounds such as predators, food fish, and echolocation. The duration, magnitude, and frequency range of hearing loss will affect survivability and reproduction. Alternatives presented in the EIS process include continuing to do what has been done over the last five years or doing more. There is no alternative that proposes doing less. Nor is there a comprehensive look at how the Navy's activities are adding impacts to already highly stressed ocean inhabitants. I strongly urge these shortcomings to be addressed and offer the following Alternative for consideration. Reduced Impact Alternative: Strengthen the protection the Endangered Species Act offers the Orcas by setting aside from training the Haro Strait, and extend the critical area to include known Orca hangouts down the Pacific Coast. Declare whale sanctuaries, birthing nurseries, and whale migration paths off-limits to sonar testing. Scheduling training to avoid times of the year when sensitive species are present in critical biological areas along this vast stretch of coast, including in places like the Olympic Coast National Marine Sanctuary on the Washington coast or biologically rich waters off of the Oregon and Northern California coasts; Employ sophisticated listening devices to make sure no cetaceans are in the path of the lethal low frequency active sonar. Propose a global network of marine reserves for buffering environmental variability and providing greater protection for marine communities. Chose sonar frequencies that are not used for cetacean communication. The Navy trains in the same infrequencies, 2–10 underwater kilohertz (kHz) used by Southern Residents for their whistles and calls. 180 db sonar in this frequency range could distract or permanently deafen a nearby killer whale Provide a clear analysis of the different types of sonar, low, medium and high frequency, how far the various sonars sound carries through the water, how loud they are, how they affect marine life Propose a serious and thoughtful dialogue with scientists, environmentalists, and elected officials about how to assure our military readiness while not destroying the life in the ocean. Explore the necessary national security components an international treaty would have to contain in order to eliminate the need for 235 decibel low frequency sonar which has been described as a rolling wall of sound that fills the ocean. Evaluate the impact of flying over cetaceans at low altitudes doing jet training exercises that last for hours and may involve dumping fuel into the ocean. Thorough reviews of the subject and available information are presented in Richardson et al. (1995), Efrogmson et al. (2001), Luksenburg and Parsons (2009), and Holst et al. (2011). The most common responses of cetaceans to overflights were short surfacing durations, abrupt dives, breaching, tail slapping and fleeing the area of the source of the noise. These "Takings" need to be included." Investigate the Environmental Superfund Site Naval Magazine Indian Island as a source for PCB contamination. Lighters unloading navy ships after ww2 may have dumped barrels of PCB's directly into the water rather than taking them to the boggy spit dump. Post a navy small boat (30') near the Orcas to warn boaters not to come too close to the whales Fund independent scientists & naturalists that are studying the orcas. Thank you for the opportunity to participate in this</p>	<p>or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	EIS process	<p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>Investigating the Environmental Superfund Site Naval Magazine Indian Island as a source for PCB contamination is outside of the scope of f this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
Small (Electronic)	I would like to express that I am strongly opposed to the Navy conducting sonar and/or explosive testing on the North Coast of California (or anywhere else for that matter). I believe these activities would be harmful to the animals and ecology of the planet. I also believe these trainings would be a misappropriation of badly needed resources. Please, don't do it!!!	Thank you for participating in the NEPA process.
C. Smith (Electronic)	Our proposed sonar testing disturbs marine life and should not be carried out.	Thank you for participating in the NEPA process.
H. Smith (Electronic)	As a citizen of Oregon and global citizen of the world I adhemently protest the Navy sonar blasting "testing" anywhere but especially not here in my own backyard. More attacks on our sentient marine life and devastation of our coasts therein is NOT what my taxes should be spent on. Not at all. This dirty secret of the Navy has been kept out of the media for the most part. It is obvious that is because public opinion is opposed to this sort of vile practice but if kept in the dark they are unable to fight it until it is too late. If the NAVY is so bored that they must blast the eardrums and brains of sea mammals and distort the echo location patterns of Cetaceans then maybe they should either take a vacation or help clean up our coastlines. You are here to help, not harm the world. Please, remember that.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		training and testing activities designed to reduce impacts to marine mammals from Navy activities.
J. Smith (Electronic)	Please don't consider conducting explosive testing in the Pacific. The fish and marine mammals that die senselessly because of this testing is just awful. http://earthfix.kcts9.org/flora-and-fauna/article/navy-looks-to-renew-permits-for-bombing-and-sonar/	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
R. Smith (Written)	<p>As a WWII Navy veteran I feel the local Naval command have not done adequate noise and environmental effects testing on our N.W. small town environment.</p> <p>This is not a new Naval environmental encroachment problem. I saw the "Sailors & Dogs Keep off the Lawn" signs. I, as everyone heard the battleship big gun practice (all night) off Long Beach, CA in the late 30s. I heard the complaints about the "Blue Angels," and the subsequent closing of Miramar Airfield due to noise.</p> <p>Whidbey Island Naval Air Station is a leading aircraft noise offender. During WWII – the PBVs stationed there were relatively quiet flying overhead. Today the striker aircrafts engine noise is unbearable when operation over our township.</p> <p>While serving on the "Valley Forge" (CV45) we had FM-2 Wildcats which were loud but acceptable. The noise was a part of their scare function. Today, when one of the newly assigned planes flies over – everything stops because it's too loud. Classroom teaching, store clerks – any oral communications stop. In a battle situation the noise is important – but not in a small town. This problem needs your immediate attention –more than the \$2.00 per day trick. P.S. Please do a decibel check.</p>	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
T. Smith (Electronic)	Stop unnecessary sonar testing, you know what your vessels are capable of already. Whales and dolphins are superior in intelligence. Including our own intelligence, we must protect them. The USA should not be another country responsible for suffering and deaths of cetaceans. Thank you	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		mammals from Navy activities.
Z. Smith (Electronic)	To Whome It May Concern, As our comments, submitted on behalf of NRDC and twenty other organizations, are too large to submit via this format, please find a copy of our comments posted today, April 15, 2014 via regular mail and emailed to Ms. Kler directly. I confirmed the acceptability of this with Mr. John Mosher. Thank you, Zak Smith Staff Attorney NRDC	Thank you for participating in the NEPA process.
Smoke (Electronic)	My comments could include the first 5 items on your list. Do not test your sonar, or anything else harmful off the coast of Washington, or anywhere for that matter. Our marine mammals are being , and have been killed due to sonar testing, etc. I firmly believe that. I will continue to work against your proposed actions.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Smoot (Electronic)	limit military sonar and make it off-limits in biologically sensitive marine areas, we are causing terrible harm to our ocean friends and this needs to stop Now!	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. As part of the Navy's effects analysis, the Navy considers all the

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.
Snow (Electronic)	I fear disturbance to our fishing industry. Our coastal communities have lost the timber industry. If the fishing is damaged or lost, it will put thousands of people out of work, and impoverish the coastal counties. We have beautiful runs of salmon and tuna, as well as a large crabbing industry. If you want to play war games, I want you to be at LEAST 100 miles off our shoreline. Vivienne Snow	The Navy has conducted training in these operating areas regularly for decades. Though the intensity of live training may increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant. Most commercially important fish species are not believed to hear mid- and high-frequency sound sources, which make up the majority of sound producing activities. As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around the Study Area and should not put people out of work or impact socioeconomic resources.
Solberg (Electronic)	Please do not allow any increases in marine environmental degradation to occur due to sonar and explosive detonation. Marine mammals and other marine life forms have enough stressors to deal with, and the steep decline of ocean life in general needs to be addressed. Adopt policies that serve to protect marine life as other countries have.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Spangler (Electronic)	Stop the insanity! Do you really want to be known as the organization that devastated our oceans and made the wonderful life that inhabited it extinct? How ignorant are you really?	Thank you for participating in the NEPA process.
Sponheim (Electronic)	The use of NBC Testing in our area impacts our fragile ecosystem. The Air Pollution caused by Navy/Air Force testing is immeasurable and exceeds the safe levels for human survival. The environmental impact far outweighs the benefits. Fly-overs below 3,000 feet usually discharge harmful and noxious fumes that cause human health problems. Climate studies involving Chemical dispersants have proven in many studies to produce immune deficiency in the affected population. We live in the convergence zone of the proposed	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>EIS impact zone. The projected estimates of 27 million marine mammals dying are alarming and should necessitate immediate termination of plans to continue testing near this area. The Puget Sound is very fragile. There are other areas like China Lake or Fallon AIR Force Base that would be more suitable for Air Force and Navy Testing. Consider the seriousness of these facts when reviewing this EIS Plan. Current Sonar testing and Noise Pollution has already proven to be above acceptable levels for sustainable living habitats for both marine mammal and human populations. In addition, the testing of torpedoes inside the Puget Sound will potentially cause detrimental impacts on both the marine habitat and the human population in the area. This contained area has a dense population, and a stray torpedo could cause serious damage. Please stop testing and training in the Puget Sound. We urge you to move training to further areas that are less polluted, like the middle of the Pacific Ocean.</p>	<p>(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around the Study Area. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
<p>Springer (Electronic)</p>	<p>The US military should not be exempted from any environmental regulations. The US military has a huge ocean to do their testing and training in and should judiciously select an area based on where it will do least harm to the environment and wildlife. All training operations in National Marine Sanctuaries or other legislatively-protected areas and habitats should be prohibited. Training operations scheduled to occur outside of legislatively-protected zones should not proceed if the presence of marine mammals or endangered species is verified. Vessels carrying out these operations should be required to have on board a biological observer from an independent agency (non-military and non-governmental) to ascertain the presence of marine mammals and if necessary cancel the operation.</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p>
Sremba (Electronic)	Stop this abuse now, It is not necessary.	Thank you for participating in the NEPA process.
Stanley (Electronic)	Please reconsider the proposed expansion of the US Navy Northwest Training and Testing. The negative impact to marine mammals, especially to migrating whale populations would be huge. Please help to be responsible guardians of our planet as well as our nation. Respectfully, Jan Stanley	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Stark (Electronic)	You Have NO business disrupting marine life in any way and in any form This destructive behavior on YOUR part must end and end NOW. Do force us to deOfund you..because we can and we will. SO knock this crap off !! GET IT?	Thank you for participating in the NEPA process.
Starr (Electronic)	I beg you to stop this madness. Your actions are killing our oceans greatest beings. This in turn kills the world you are so desperately trying to protect. The blood will be on your hands.	Thank you for participating in the NEPA process.
Stasch (Electronic)	Humans, not satisfied with maiming and killing land animals are now focusing on sea mammals. There must be another way to test sonar equipment and bombs other than torturing innocent animals who don't understand why they are being targeted. You are the United States Navy with great minds and imaginations. Please think of another way to satisfy your love of weaponry. History will thank you for being the good guys of the oceans. Thank yhou	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy fund monitoring and research that includes dedicated Marine Mammal Observers (see the reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Steele (Electronic)	With regards to the Environmental Impact Statement (EIS)/Overseas EIS (OEIS) prepared by the U.S. Navy to assess the potential environmental impacts associated with the military readiness activities of training and testing in the Northwest Training and Testing Study Area as required by the National Environmental Policy Act and Executive Order 12114, I have the following concerns: The proposed activities are expected to injure, disturb or kill more than 100,000 individual animals, including 29 different marine mammal species protected under the Marine Mammal Act. The proposed activities can cause whales and dolphins to abandon important habitat, halt foraging behavior and forgo critical feeding opportunities needed to survive. Similar testing and training projects have resulted in mass strandings elsewhere, which is not adequately addressed in the EIS. This proposal does not ensure adequate mitigation to prevent harm to sea life. In particular, on-ship "lookouts" are an insufficient means of detecting nearby marine mammals. Most of the proposed areas have been identified as areas of critical habitat, for foraging and feeding and should be avoided. Establishment of "exclusion zones" around these critical habitats would assist in protecting endangered species, such as the blue whale. We also encourage the Navy to explore more progressive alternatives to traditional	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or significant biological impact to marine mammals, fish, or wildlife at

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>training and testing. Simulations and other non-harmful training methods should be emphasized and utilized to the maximum degree.</p>	<p>those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species’ entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>information as well as, “existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS’ identification of BIAs. The same marine mammal density data present in the Navy’s Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Simulated Activities). As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p>
<p>Steinbach (Electronic)</p>	<p>I am not in favor of the this Proposed Action to conduct training and testing activities, to include the use of active sonar and explosives, within the NWTT Study Area. The Proposed Action also includes pierside sonar maintenance and testing within the NWTT Study Area. Doing so shows little to no regard for the safety of several at risk species of marine mammal and other wildlife.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>Stenberg (Electronic)</p>	<p>Your EIS that there will be zero mortality for marine mammals and other species of birds and fish from proposed Naval Training and Testing activities in the Pacific Northwest region is not only inaccurate, it is an out and out lie. It is disheartening that the U.S. Navy so disrespects both the public and the natural world, they would produce such a short-sighted and deceitful report. As you are well aware, the Navy has more honestly predicted huge destruction and harm to all forms of marine life resulting from similar activities in other regions. I propose establishing an international treaty banning submarine warfare entirely. It has become plainly evident that the first beings to suffer from mankind's madness for constant naval warfare will be the whales, dolphins and marine mammals. They simply are not able to withstand this constant onslaught of an arms race of silent submarines, and the super high-powered sonar and other weapons that are used to</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	detect them and destroy them. We either continue on the course towards the annihilation and extinction of the whales, or we come to our senses and ban submarine warfare entirely. The Navy could take a pro-active role in enforcing such a treaty, by making sure no nation continues on the path of using submarines to patrol the oceans in the name of war. Please take this comment seriously. The ocean is where life came from and all creatures rely on it for life.	during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Stephens (Electronic)	I agree with the following statements and ask that you not expand or add additional capabilities that harm the creatures of the ocean further. There is no need and I consider it a crime against nature and a crime against the American People. "I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Stillings (Electronic)	Please protect biologically sensitive areas from testing. Whales need to be protected from weapons testing, especially during birthing and migrating periods. How much longer can we continue to contaminate our oceans?	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
Stofsky (Electronic)	<p>I am commenting on the proposal to conduct Navy training in Eureka. I have family in the Eureka area, so I am a frequent visitor. This is one of the most beautiful and ecologically sensitive areas in the world. It is simply unthinkable that the Navy would conduct such activities as proposed. The environmental impact would be devastating, as well as impact the economy of the region. People are not going to visit this area if it is under siege for some Naval experiments in weaponry etc. There is no justification to even contemplate, much less carry through with this horrible idea</p>	<p>The Navy is not proposing to conduct training or testing activities in or near Eureka, California. The proposed Study Area begins 12 nautical miles off the coast of California, so the closest that any activities would occur to Eureka is at least 12 nautical miles. Historically, activities within 50 nautical miles of the coast of California are extremely rare, and that pattern is expected to continue under this Proposed Action.</p>
G. Stone (Written)	<p>I am a loss for words as to how offended I am concerning your need to train along our coast and inland waters. The pollution risk to anyone or anything in close proximity to these drills is extreme and another waste of my tax \$.</p> <p>I know 1st hand you cannot totally protect humans that might wander by accident into these zones. The wild animals mammals birds are unable to protect themselves.</p> <p>I owned a charter service for 12+yrs in the San Juans. On more than 1 occasion we were trying to get port in poor weather only to be turned back forced to take a long more dangerous route.</p> <p>I know for a fact many sea mammals will come close to boats curious only to be injured or killed a irresponsible tragedy.</p> <p>We now spend 60% of our budget on war implements and the constant drumbeat to spend more. The world sees us as bad guys enough.</p> <p>When your only business is fear and selling war to the poor (and getting poorer) citizens. Well that is called profiting from war and used to be against the law. SHAME on you and us for letting you do it.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>This is terrible for tourism its unsafe and morally wrong. I will continue to fight this short sighted and extremely expensive waste of resources. P.S. As a person of Indian heritage with family that fish for a living I fear damage to that industry and familys.</p>	<p>those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Since attendance within the National Park has been steadily increasing since 2010, concurrent with the Navy’s activities, it is unlikely these activities are negatively impacting tourism in the area. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
<p>M. Stone (Electronic)</p>	<p>“The use of deafening noises just does not belong in sensitive areas or marine sanctuaries where whales and dolphins use their acute hearing to feed, navigate, and raise their young.” “It is critical that NMFS establish NO sonar zones offshore of major coastal estuaries where the 81 remaining endangered Southern Resident orcas seek to find salmon if they are ever to recover.” Please stop destroying the Earth, the ocean and the residents thereof with all of your infernal noise; please stop wasting money on experiments that harm any living thing. It just isn't necessary and it is wrong.You have no right to kill(“Take”)70 whales per year. Whales are not enemies endangering our country.</p>	<p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>any adverse impacts on Sanctuary resources and qualities.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Storey (Electronic)	Your studies, funded by the US Navy continue to show many negative effects on cetaceans. I am asking you as a citizen to act on those studies, protect marine habitat from this devastating sound experiment. Cetacean populations are already in peril and we as tax payers owe it to our environment to protect it at all costs. Most tactical maneuvers can now be taught & worked with via computer and this is no exception.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Story (Electronic)	Puget Sound is home to many marine mammals including the Endangered Southern Resident Orcas. There aren't many of them left and they've suffered so much at the hands of man already. The Sonar and explosive testing is going to wipe them out if you continue. Please don't do this. Your responsibility is also to protect our animals not just the people of USA. Thank you Sincerely, Joanne Story	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>C. Strong (Electronic)</p>	<p>I am a marine scientist with 35 years surveying marine mammal and seabird population at-sea in Oregon and California. I am particularly concerned about the effect of high frequency and high intensity acoustic 'blasting' of the marine environment, particularly its effect on marine mammals that rely on sonar for foraging, communicating, and navigating. Your NWTTEIS document fails to address cumulative impacts to many marine mammal species. While mitigation measures including active real-time lookouts and avoidance of cetacean species will help, not all species can be detected by this means. It is inevitable that physical damage, particularly to acoustic senses and ability to orient, will occur. Cumulative impact includes loss of individual animals over many years is likely to result in population level effects to Blue whales, finback whales, sperm whales, humpback whales, whales and dolphins in the Ziphiidae family, as well as several pinniped species. There is complete overlap between the Offshore Testing and Training grounds off Oregon and Washington and the migratory route of Blue, Humpback, and Finback whales, and partial overlap with the foraging ranges of Sperm Whales, Ziphiid whales, Pacific White-sided Dolphins, and Dall's porpoise, among others. I recommend that autopsies on all marine mammal corpses found in the area of activity and on the beaches be performed with particular examination of eardrums and ear canals so assess if damage to the animals resulted from excessive sound. Beyond direct mortality, we as a scientific community know almost nothing about sublethal effects of high intensity and high frequency sounds on marine mammals as used during these naval tests. An adaptive mitigation regime should be included in the preferred alternative which alters the training program to minimize sublethal effects as they become known. Another mitigation measure that should be considered in your EIS is moving the offshore testing range completely beyond the continental shelf and slope, where the vast majority of productivity and marine life is concentrated.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>As stated by NMFS in the 2014 Reinitiated Biological Opinion, “the vast majority of impacts expected from sonar exposure and underwater detonations are behavioral in nature, temporary and comparatively short in duration, relatively infrequent, and not of the type or severity that would be expected to be additive for the small portion of the stocks and species likely to be exposed either annually or over the remaining period of the five-year MMPA regulations or in the reasonably foreseeable future.”</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>Because the Navy is continuing to improve mitigation measures, the Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
<p>M. Strong (Electronic)</p>	<p>PLEASE stop conducting sonar/explosives in a way that could threaten or injure ANY marine animals. It is inhumane and should be illegal. Respect ALL animals and their natural environment. Please.</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p>
<p>Stewart (Written)</p>	<p>This comment was originally submitted to Michael Payne, Chief Permits and Conservation Division in Silver Spring, MD.</p> <p>I have signed it, in addition to the original author, Nina Beety. She is more informed and literate on this issue than I, which is why I am sending you this copy of her letter in hopes that you will seriously consider this information and take it to heart. I am a private citizen, concerned about what we are doing to our oceans and their inhabitants - what we do to them will come back to haunt/harm us.</p> <p>Regarding: Request by the U.S. Navy for letters of authorization to the National Marine Fisheries Service -- Takes of Marine Mammals Incidental to Specified Activities; U.S. Navy Training and Testing Activities in the Northwest Training and Testing Study Area</p> <p>Comments:</p> <p>The United States Navy is planning a new 5-year training and weapons testing program in the ocean to begin in 2015 using sonar, electromagnetic devices, and explosives. This particular one is for the Pacific Northwest.</p> <p>On a proposal of this scope, a 30-day comment period is completely inadequate. The comment period must be extended to guarantee input from the public most affected by these experiments on the ocean.</p> <p>Due to lack of publicity, most Americans don't even know this proposal is under consideration. Public hearings are only public if adequate notice is given so that the public knows about these hearings. Scheduling meetings in Eureka for a proposal that affects the Pacific Ocean guarantees lack of access for the majority of California and U.S. residents, particularly those located on the coast.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>As described in Section 3.11 (Cultural Resources), Section 3.12 (Socioeconomics), and Section 3.13 (Public Health and Safety) of the EIS/OEIS, the Navy's proposed activities are fully compatible with</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Therefore, because of the significant nature of this proposal and the importance of the ocean environment for everyone,</p> <ul style="list-style-type: none"> • Extend the comment period another 60-90 days for both the request for letters of authorization and the draft environmental impact statement. There has been little time for the public to find out about this proceeding. • Conduct formal public hearings, as opposed to the informal open house format for the Eureka March 6 meeting • Hold hearings on this proposal in San Francisco as well as hearings in Central and Southern California coastal communities. • Schedule public hearings throughout the United States • When the U.S. government proposes something of this nature, there must be notices posted in newspapers throughout the United States, particularly in the coastal areas. <p>I request that the National Marine Fisheries Service NMFS deny the authorization for “incidental take” of marine animals. This is not incidental. The ocean environment is under threat from many sources. Sea life populations are increasingly harmed.</p> <p>How much more destruction of the ocean can occur before a complete and permanent collapse of the ecosystem for all species takes place?</p> <p>The draft Environmental Impact Statement says the training is necessary to “protect the United States from its enemies, protect and defend the rights of the United States and its allies to move freely on the oceans, and provide humanitarian assistance and disaster relief to failed states:”</p> <p>What enemies could possibly duplicate the contamination and harm caused by the United States government to the ocean, the entire earth, and the people not only of the United States, but everywhere? Whose rights are being defended and who has the right to travel freely? These rights are reserved for the U.S. government and its industrial arnes, not for most military personnel, not for the people, not for the creatures of the earth, certainly not for the earth.</p> <p>Actions by the United States government and military to date that impact the ocean and its ecosystem include:</p> <p>The massive destruction and contamination from atomic weapons tests at the Bikini Atoll and in Nevada which is with us still, spread throughout the earth, including the ocean, creating an enormous ongoing disease legacy.</p> <p>The continued contamination of communities and waterways from nuclear weapons testing and development at sites such as Lawrence Livermore Laboratory in the Sao Francisco Bay Area.</p> <p>The destruction to islands such as Vieques, and the proposed taking of Pagan Island for bombing and weapons test ranges. http://www.globalresearch.ca/us-to-destroy-paradise-</p>	<p>other uses of the ocean space around the Study Area. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>Prior to a training exercise, the Navy and USCG issue NTMs and NOTAMs to announce an exercise and to notify the public of potential hazards in the exercise area. In addition, scheduled training will be communicated to the stakeholders, mayors, resource agencies, and fishermen using telephone tree and e-mail (developed by the Navy with stakeholders’ input) to send, facsimiles to mayors and fishermen and notices on the NOAA and local channels, and emergency management offices. Because of the footprint of the proposed activities, the Navy feels the public meeting locations are appropriate for this project. In addition to the meeting venues, the public can download and review the document and make comments to it on the website, which is available throughout the world.</p> <p>Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p> <p>The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the Navy’s notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS. “1:59 AM CST March 26, is equivalent to 11:59 PM, March 25th, in accordance with the public notice. The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in Appendix B – Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>island/5355976</p> <p>Partnership in the destruction of the Jeju Island ecosystem, selected as one of the Seven Wonders of Nature, and site of 9 of UNESCO 66 Geoparks, for a U.S./South Korean military base.</p> <p>The Farallon Islands Nuclear Waste Site - the largest offshore dump in the United States. Also a commercial fishing area. The U.S. Navy dumped approximately 48,000 barrels of radioactive waste (over 2 Yi million gallons) into the Pacific Ocean off the Farallon Islands (30 miles west of San Francisco) from the 1940s to 1970. Sailors were ordered to shoot holes in any barrels that floated. The Navy also scuttled the radioactively contaminated U.S.S. Independence there which was used in atomic weapons experiments in the South Pacific. http://www.sfwkly.com/2001-05-09 news/fallout/full.</p> <p>http://socket.kongshem.com/200711 O/farallon-islands-nuclear-waste-dump.html?m= 1</p> <p>The U.S. Navy dumped thousands of tons of radioactive waste in the Atlantic Ocean from the U.S.S. Calhoun County, as well as two atomic bombs, a contaminated truck, and the ship itself in 1963. Floating barrels were also shot with holes until they sank. http://www.tampabay.com/news/military/veterans/the-atomic-sailors/2157927</p> <p>Use of depleted uranium weapons and chemical weapons such as white phosphorus.</p> <p>Agent Orange used in Vietnam, including coastal areas, contaminating the ocean and the drinking water of Navy sailors. Those sickened sailors are still unable to get benefits from the U.S. military. Vietnam and the Vietnamese people suffered permanent contamination, with resulting birth defects and disease and environmental destruction. They have not been even financially compensated.</p> <p>U.S.S. Ronald Reagan and its crew contaminated by the Fukushima explosions. Many of the crew are gravely ill, and are being denied benefits by the U.S. military. This radioactive ship is now being loaded with new crew and sent back to Japan.</p> <p>Hanford, Washington radioactive contamination of the Columbia River and the ocean.</p> <p>Enough death and destruction has been perpetrated on the earth and the ocean that will be with all inhabitants for thousands or millions of years.</p> <p>These are just a few examples. How many others? How great is the destruction and ongoing damage to the ocean just from the United States government alone?</p> <p>And how many other nations are dumping, exploding, using destructive sonar, and otherwise killing and contaminating the ocean?</p> <p>When does it cross the boundary from unintentional and incidental, to intentional and monumental?</p> <p>How much more destruction of the ocean can occur before a complete and permanent collapse of the ecosystem for all species takes place?</p> <p>Since the military routinely tests on animals, it is questionable that there won't be</p>	<p>postcards, press releases, and newspaper display advertisements.</p> <p>The majority of comments received during the scoping phase from Washington came from Whidbey Island (Clinton, Freeland, Oak Harbor, Coupeville, Greenbank) and Friday Harbor, with Seattle following after that. No public comments were received from Portland, Oregon, and only one comment each was received from San Francisco and Sacramento, California. Previous Navy experience with other Northwest projects is that meetings held in larger population centers are often poorly attended. The Navy held one public meeting for this project in a large population center (Everett, Washington, near Seattle), and that meeting was the least attended of all eight public meetings. In addition to the meeting venues, the public could download and review the document, and make comments to it, on the website, which is available throughout the world.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>intentional “takes” by the experimental testing it plans to conduct.</p> <p>One specific comment:</p> <p>As described in the NWTT Draft EIS/OEIS (U.S. Department of the Navy 2014a), there are non-impulsive sources of low source level, narrow beam width, downward directed transmission, short pulse lengths, frequencies beyond known hearing ranges of marine mammals, or some combination of these factors that are not anticipated to result in takes of protected species and therefore were not modeled. P. 1-11</p> <p>This is completely inaccurate. The U.S. government well knows the harm that can be caused by electromagnetic frequencies (including radiofrequency electromagnetic radiation) at low levels. The statement that U.S. Navy use of EMF/RF will not cause harm because it is beyond hearing range would be laughable if it weren't so egregious.[1]</p> <p>The harm by the U.S. government and military will not stop unless we stop it. There is no end to this destructive use of technology in the ocean or the environment. It is its own rationale. And the people in laboratories live to create more of these weapons, with no regard for the consequences other than solving theoretical “harm” and “kill” equations.</p> <p>Future military activities, whatever the stated reasons, that impact the ocean cannot be tolerated, especially given the increasingly fragile nature of the ocean. The Fukushima disaster is causing immense harm to the Pacific ecosystem and beyond. Can we permit anything to increase that harm?</p> <p>Many have spoken out against these weapons and this destruction for many years. Will you advocate for sanity and stop this destruction by refusing to grant these letters of authorization?</p> <p>If you care about the future, a healthy ocean and environment, and the seventh generation from now, tell the U.S. Navy and the U.S. government, “No!”</p> <p>[1] USAF Institute for National Security Studies. Report: Nonlethal weapons: Terms and references (1997)</p> <p>“Transmission of long wavelength sound creates biophysical effects, nausea, loss of bowels, disorientation, vomiting, potential organ damage or death may occur.”</p> <p>Cited in Wind Turbines Make Waves: Why Some Residents Near Wind Turbines Become Ill</p> <p>Magda Havas and David Colling</p> <p>http://www.ravenl.net/mcf/pro-freedom.co.uk/the_military_use_of_mind_control.html</p> <p>Eldon Byrd, a scientist for the Naval Surface Weapon Centre, USN, in one of his lectures in 1986 on the effects of microwaves stated: "We can alter the behaviour of tissues, cells, organs and whole organisms you can cause up to six times higher foetus mortality and birth defects in laboratory animals, and these fields are so weak you can hardly detect them ... You can do genetic engineering with ELF [extremely low frequency] weak</p>	

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>magnetic fields without micro-surgical techniques that are currently employed to do genetic engineering. It is known how to induce malignant diseases in human cells and how to cure them. You can entrain human beings' brain waves across a room with a very weak magnetic field.'</p> <p>http: mindjustice.org/2005update.htm#Byrd</p> <p>Byrd also stated: By using very low :frequency electromagnetic radiation-the waves way below radio frequencies on the electromagnetic spectrum-he found he could induce the brain to release behavior-regulating chemicals. "We could put animals into a stupor," he says, by hitting them with these frequencies. "we got chick brains-in vitro-to dump 80 percent of the natural opioids in their brains," Byrd says. He even ran a small project that used magnetic fields to cause certain brain cells in rats to release histamine. In humans, this would cause instant flulike symptoms and produce nausea.</p> <p>"... the technology has progressed to the point where even genetic engineering with fields is possible and demonstrable. That the technology to inflict mind control on human beings exists is beyond question"</p> <p>A dedicated former soldier, whose experiences during and after Desert Storm are chronicled in my book, Bringing The War Home, Hank stays in close touch with his unit serving "in theater" in Iraq. When I asked how many "poppers" are being used to irradiate Iraqi neighborhoods, he checked and got back to me. There are "at least 25 of these that have been deployed to theater, and used. Some have conked out and been removed, so I do not know how many are currently active and broadcasting."</p> <p>Microwaving Iraq: 'Pacifying' Rays Pose New Hazards In Iraq, William Thomas, 2005</p> <p>Hank also blames those at the top for hospital counts of upwards of 65,000 children killed since the 2003 invasion. He is concerned that innocent Iraqi families and unsuspecting GIs alike are being used as test subjects for a new generation of "psychotronic" weapons using invisible beams across the entire electromagnetic spectrum to selectively alter moods, behavior and bodily processes.</p> <p>"The "poppers, are capable of using a combo of ULF, VLF, UHF and EHF wavelengths in any combination at the same time, sometimes using one as a carrier wave for the others," Hank explains, in a process called superheterodyning. The silent frequencies daily sweeping Fallujah and other trouble spots are the same Navy "freqs that drove whales nuts and made them go astray onto beaches."</p>	
Stubbs (Electronic)	<p>I read in the Pilot newspaper where you want to drop bombs into the ocean for training. And you only killed or displaced ocean inhabitants in Hawaii when you did this in 2004. So now you want to drop 30 bombs (at the cost of how much?) in the ocean hereon the Pacific coast and hope you don't kill anything living. What are you thinking or aren't you. The US has our tax dollars working overtime for it's war machines. Think outside the box. What would happen if we used that money for education, roads, and anything else that</p>	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>we the taxpayers might see in our daily lives. And now the biggest expense could go for PEACE. Which all that money we spend on bombs we could educate our citizens for Peace and then it might even spread to the whole world. In the meantime, let the whole world fight their own battles. We stick our nose in everybody else's business. We must be getting something for it or we wouldn't do it. To bad this note will be deleted, but as a taxpayer I got my say.</p>	
<p>P. Sullivan (Electronic)</p>	<p>To whom it may concern, Regarding the proposed Naval tests in Puget Sound area: I am the daughter of a retired Air Force serviceman and proud of our military history and strength. I am an educator, volunteer and photojournalist and have written about the stellar coordination and cooperation that occurs when volunteer, private and military entities unite to protect our environment and marine animals, citing the outstanding work done in Hawaii, for example, to save cetaceans and Hawaiian Monk seals. This potential for a unification of mission and objectives is evident in the proposed Navy testing in the Puget Sound, the home of critically endangered resident Orca (killer whales) as well as millions of marine animals who will be maimed or killed as a direct result of mid frequency sonar exercises. The science and expert opinions are submitted, and should not be ignored if we are to truly serve our country's best interests. We should make every attempt to protect our marine environment and seek alternatives to keep our military at full readiness. I thank you for your dedication and service and trust you will maintain the highest level of integrity while protecting our fragile marine environment. There are better ways to practice readiness other than killing, maiming and destroying all life in the sea. I know that you want to do what is right. I have spoken with servicemen who admit the goal is not to kill marine life. It is evident that mitigation measures are insufficient and science has been ignored in the push for homeland security. Alternatives exist or can be developed. Please take the honorable route and offer or devise new ways of practice and training that do not destroy all that we have left in an already fragile and threatened ocean, particularly the proposed site in the Pacific Northwest. Very truly yours, Patricia Sullivan</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. The Navy funds monitoring and research that can include dedicated Marine Mammal Observers (see the reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
<p>T. Sullivan</p>	<p>Why would you renew a. Permit to allow explosives and sonar in a known area of resident</p>	<p>The Navy shares your concern for marine life, but this concern must</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	whales that are already endangered. It doesn't make any sense. Please do not allow this to happen it will have a devastating effect on sea life. We already know it causes death to any cetaceans around	be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
J. Sundberg (Electronic)	I am very concerned about ways to protect the health of marine mammals in coastal waters. It is critical that NMFS establish no sonar zones offshore of major coastal estuaries where the 81 remaining endangered Southern Resident orcas seek to find salmon if they are ever to recover. Studies from 2010 and 2011 show that whales, orcas and other marine mammals are far more sensitive to sonar and other noise than previously thought.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>R. Sundberg (Electronic)</p>	<p>Under the marine mammals protection act these whales, dolphins,etc. must be protected from sonar noise and ordinance explosions. There need to be safe zones for them. Please do all in your power to keep them safe. Their migration pathways and feeding areas should not be used for training exercises be the Navy. Thank you.</p>	<p>effort, were completed and published in March 2015.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
Sunseri (Electronic)	So you think it's a good idea to set off bombs (explosives) and use sonar here in waters off the north coast. Great . . . BUT no body wants you all to do that but you probably will anyway. Please note that I and my family of at least fish/nature people - we don't want the explosives off the coast of California for - What anyway. Training - Train in your back yard.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Swanson (Electronic)	I have recently learned the Navy plans to bomb the habitat that belong to the southern Orcas in Washington. I am appalled by this plan of action. I plan on taking a vacation this summer to Washington so I can enjoy seeing Orcas in the wild. How can you harm these innocent beings in their natural habitat. You are also destroying tourism in the state of Washington.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
Taberski (Electronic)	I am not a radical just thinking there must be other places you can do these test....hmmm	Thank you for participating in the NEPA process.
Takada (Electronic)	The sonar programs, for which the Navy is trying to renew permits, is harmful to and threatens the livelihood of marine mammals, such as whales and dolphins. I urge you to reconsider, and cancel the renewal permit request.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Tamlin (Electronic)	I'm getting in touch to request that the proposed 100 mid range active sonar tests from North California up to the Canadian border do not take place. I'm sure we have enough skill and equipment to protect the USA and world. The marine mammals are already	The U.S. Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	struggling for survival. Please don't make it any harder for them. many thanks Lisa Tamlin UK resident but feel that the oceans belong to the whole planet .. but mainly the animals that live in them!	Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Tam-Semmens (Electronic)	I strongly oppose to the Navy's proposed expansion of your Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales.	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Tanno (Electronic)	Why there no state for Puerto Rico on drop down? Boricua!!!! I see you train here in my backyard but I dont see these orcas you say are there. San Juan Islands are my home my whole life, I love this place, I know the fish, dolphins, but I never see any orcas that you say are here. I think you guys dont know what your talkin bout - there are no whales or killer whales here. Check your facts fools.	Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project. The activities in the NWTT EIS/OEIS take place on the

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		west coast of the United States (as shown in Chapter 1, Purpose and Need; and Chapter 2, Description of Proposed Action and Alternatives), and do not occur near Puerto Rico.
I. Taylor (Electronic)	I write to register my strong opposition to the Navy's proposed 2014 - 2018 sonar exercises. The Navy's own EIS draft admits that the exercises will harm marine mammals 2.8 million times over five years. These exercises imperil our fragile marine ecosystems, and are inhumane. Visual detection methods are insufficient to prevent harm on a massive scale. Please reconsider these proposed exercises. At the very least, use your sophisticated listening devices to ensure no cetaceans are in the path of your lethal sonar. And engage in a dialogue with scientists and environmentalists to figure out less destructive and harmful ways of ensuring military readiness. Thank you for your consideration.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
J. Taylor (Electronic)	Dear Commander, While I understand and support the military, please reconsider sonar/ explosives testing anywhere near the Salish Sea (San Juan Islands, Puget Sound). Our resident Orca pods, dolphins and other wildlife are endangered. Please don't test here. Thank you, James Taylor	Thank you for participating in the NEPA process.
S. Taylor (Electronic)	Please protect our seas and save our sea animals before it's too late. There is too much evidence to ignore that the testing harms sea life, whales, dolphins, and others.	Thank you for participating in the NEPA process.
Tays (Electronic)	I am a resident of Humboldt County and am extremely concerned about the Navy's plans to conduct sonar and explosives testings off the West Coast in the so-called "NWTT Study Area." The area of the ocean where you plan to do your training and testing exercises is teeming with marine life and, therefore, I am ABSOLUTELY OPPOSED to your plans to conduct these activities because of the negative impacts on important and sensitive marine life. I am submitting this email so you count me as one more person and voice against your training and testing activities that will harm and kill whales, dolphins and other important marine life in our oceans.	Thank you for participating in the NEPA process. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Terhune (Electronic)	Dear The Navy, I am extremely upset about your insistence to disrupt the whales and dolphins and many others I'm sure with your ridiculous sonar experiments. This is the 21st Century and I firmly believe these acts are barbaric and outdated. What good is protecting us from imaginary invading submarines at the expense of the loss of our sea inhabitants now and for our future generations. Sincerely, Lynne and Scott Terhune	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Tham (Electronic)	Please stop using Sonar. It is harmful to marine mammals as they will get stranded and die in shallow waters. Furthermore, they could be separated from their families due to the confusion sonar causes.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		mammals from Navy activities.
Thies (Written)	Our oceans are in trouble. The oceans are hungry due to overfishing. The oceans are polluted with our trash & chemicals. On top of this, along comes the Navy with explosives & sonar testing. Enough already! I oppose this testing.	Thank you for participating in the NEPA process.
Thomas (Oral)	I thank the Navy for this opportunity to speak. I hadn't prepared anything to say. I was planning to donate my time to Kirsten Massebeau, but if that could be allowed. That's not allowed. Then I'll give this short anecdote about another occurrence in 1963 during the Cuban Missile Crisis in the United Nations (inaudible). Adlai Stevenson, our delegate. The assembly was being provided a Russian delegate. And when Adlai began questioning about their activities in Cuba, the chair was happy to let the clock run out. They informed Adlai Stevenson that his time was up and he took a seat. And the chair then called upon the delegate from (inaudible) who rose and said, I want to hear what Adlai Stevenson was talking about. Adlai Stevenson rose again and looked the Russian delegate in the eye and said, "Mr. Delegate, I am prepared to wait here until hell freezes over until you tell me what's going on." At that point he motioned his advisors to come in with the huge photographs that had been taken by a U-2 spy plane. That's a very important principle when there's something important to be said, that people can donate their time. I'd like to share that anecdote with you as a moment of history. Thank you.	Thank you for participating in the NEPA process.
Thompson (Electronic)	The U.S. Government, and the Navy in particular, have got to stop bombarding these beautiful, intelligent animals with sonar! This is torture for them. Why are we so arrogant to think we can do whatever we want to the creatures on this planet. We need to find a better way. Please stop killing and torturing these creatures.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Thurston (Electronic)	STOP creating havoc in the lives of marine species. The Navy should put critical marine habitats off-limits to sonar and explosives testing and schedule training to avoid times of the year when sensitive species are present in places like the Olympic Coast National Marine Sanctuary, something it is not willing to do despite the scientific community's view	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>that these would be the most effective means of reducing harm. The Navy is being very irresponsible, to not be willing to even “reduce harm” - Eventually the Navy needs to go further and STOP creating any harm. As one of the main participants on OUR oceans - the navy could become a leader in protecting this precious habitat FOR ALL SPECIES living with ease and health. This is their (whales, and all marine mammals) ONLY home. STOP harming our fellow planet inhabitants. Listen to the science and create a planet worth living on.</p>	<p>testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area’s physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary. <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.
Timm (Electronic)	Please do not practice war exercises off the Northern California Coast because I feel it will have a negative effect on the environment and our fisheries. Please also extend the public comment period. Thanks Bill	Thank you for participating in the NEPA process.
Timmons (Electronic)	Much of the opposition to your program would be minimized if you would take steps to minimize the effects of your sonar etc. Avoid the animals as much as possible and be aware of breeding seasons etc. Thank you. i	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Todd (Electronic)	There is a better way. Protecting our whales and dolphins should be a priority.	Thank you for participating in the NEPA process.
Tomlinson (Electronic)	While the Navy's technological development is very important to both our national security infrastructure and our national technological know-how, the implementation of high-power sonar in enclosed, sheltered waters has the potential to devastate the local marine mammal population, some members of which are listed as an endangered species. The bathymetric profiles of the inland waters have the potential to generate harmonic resonance, thereby increasing the amplitude of an already very powerful signal. While this may serve in the testing of such technology, there are other territories where this testing may be undertaken without the clear impact to our local marine mammals. If such testing must be done here, it must be obligatory to track the current marine mammal populations as one form of mitigation, esp the three resident Orca pods, but also gray whales, minke	The bathymetry of the areas where the Navy proposes to conduct acoustic or explosive training or testing was considered and was built into the acoustic model used as one tool in the analysis. The proposed activities are similar to those conducted in the same area for decades. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	whales, humpbacks, porpoise and dolphins that traverse these waters, as there are seasonal fluctuations in their presence and certain time periods may prove to be less hazardous to these populations than others.	mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).
Tomseth (Electronic)	I recently heard on public radio about the navy planning to test again in the N. Pacific. What can we do to protest?	Thank you for participating in the NEPA process.
Tooch (Electronic)	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Toombs (Electronic)	I am shocked to hear of the Navy's five year training and weapons testing plans along the North Coast. I find it appalling in this day and age that the Navy is unable to find more technologically advanced ways to test instead of destroying the planet and doing damage to ecologically sensitive areas. I implore you to find better ways to test equipment. Destruction of the planet is not a viable solution for the defense of our country.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>a decade. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p>
<p>Tors (Electronic)</p>	<p>I am a hydro farmer here in WA and I'm nervous this is going to affect my crops. Man, this is some crazy testing you all are doin; it's affecting our crops man. The man is affecting our crops. Man. And I'm not bein paranoid man, just ask around, theyll drill tiny holes in teeth. I feel them drillin sometimes too. My mouthguard protects but it's not fair man. You and your big planes, and your ships. You gotta tell the little guys like me man, my crops shake underwater and the drainplug gets loose man. Tinfoil on my windows shake and it all starts goin down. the drain. My crops won't survive you Navy. I'm goin to your hearings, I want answers. Its the chemvapes and shaking, I see the ships. Theyre out there man, out there shaking the ground man. and my house shakes. And then the tub drain unplugs. My crops go down the drain. I put a brick on it too man. But it moves the brick. My mom said its not her, she knows better than to lie to me. I know it's the Navy. Im in the bathroom, I need a response real quick- I gotta go to the store n get Pringles.</p>	<p>Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
<p>Tracy (Oral)</p>	<p>My name is Sheila Dawn Tracy and this is the third time I've come to speak to the Navy about its weapons testing. And I wanted to say that I forced myself to go into the other room to talk to your presenters, even though I am spiritually, morally and intellectually opposed to weapons testing. And I wanted to say that I found them very dedicated and intelligent and actually, I did get some information from them. But the thing I feel is that I am really -- feel really sad that every time the Navy comes I feel angry at the Navy. I don't have good feelings about you. And I talked to Mr. John Dowling who's at the door and he said oh, well, read my report, because I told him that in my experience when I woke up this morning I was hearing NPR talk about the gas reserves in Ukraine and already we're starting to talk about the resources of another country and oh, how can we get them, you know. And so really, to me the Navy -- and as I told one of the presenters, I don't consider our Department of Defense a reality. I consider it the Department of Offense and you're offending our marine creatures and you're offending me and you're offending my children. So what I really want is what Mr. Dowling said. I want the Navy to come here and say wow, we're developing a green fleet for energy efficiency. Wow. Does anybody know that? Oh, my goodness. That's what I want to hear. I don't want to hear that you're going to be taking marine life so that we can prepare for the next great war. I don't want to hear that anymore. One thing that is very disturbing to me is that this is going to go on forever. There's always going to be people to be trained. There's always going to be new weapons. There's no end in sight. I don't want to be 90 years old and come here and say I still don't believe that you guys should be doing this and I still don't want a million more sea creatures to be tested, you know, and to be harmed and we know that they will be harmed. So let's see. I want the U.S. Navy to deal with the Pacific Gyre, the Pacific Gyre.</p>	<p>Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>I want that plastic, that ball of plastic to be removed. That is what's really a harmful thing. That's a real harmful thing. That's not a fantasy war game that you're going to be playing. Okay? That's what I want. I want good news next time you come here. And let's see. And I want to feel good about my Navy. I do. And I want my children to feel good about my Navy, you know, I would like the kids to be doing some real, you know, good green work with the armed services and not it always being an agent of war. Thank you.</p>	
<p>Tracy-01 (Written)</p>	<p>I am opposed to the NWTT Draft EIS/OEIS for the following reasons</p> <p>I believe testing violates the Marine Mammal Protection Act and the National Marine Sanctuaries Act as testing will have adverse effects on marine mammal populations and other species protected by the Endangered Species Act.</p> <p>We have state sanctuaries established recently by MLPAL which makes areas off limits to harvesters. The Navy should not have a right to test in these areas. Deeper waters would create less harm as they would not be in the path of migratory routes of whales.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent,

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p>
Tracy-02	<p>I also think there is a flawed public comment process under NEPA. In 2010 Alt 2 is the NO ACTION ALTERNATIVE. In the Final Draft 3 alternatives are given. In 2015 no action is not an alternative. Is the Navy misconstruing no action to be something other than that? Is this predetermined a violation before the Final EIS?</p>	<p>The Navy is completing this EIS/OEIS in compliance with current law, primarily the National Environmental Policy Act (NEPA). Under NEPA a baseline of current activities is required to be analyzed as the No Action Alternative. In addition to NEPA, the Navy continues to comply with other applicable environmental laws and with a number of regulatory requirements, such as the Marine Mammal Protection Act, the Endangered Species Act, the Coastal Zone Management Act, and the Magnuson-Stevens Fishery Conservation and Management Act.</p> <p>The alternatives carried forward meet the Navy’s purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Tracy-03	<p>Finally, I believe the construct of defense becomes moot with the current arsenal of nuclear weapons. IF there is a war, it will be nothing we could imagine or prepare for given the capability to destroy with nuclear weapons. It reminds me of the foolishness of hiding under our desks in school in the 1950’s to protect us from nuclear fallout. Absurd. We must put our best minds and resources to treaties which will protect us from the possibility of war. Negotiation and diplomacy, not weapons and force will ultimately be the best protection for our children’s generation and the global community. We must begin with not polluting our ocean with more toxic materials.</p> <p>The 9% mitigation effectiveness is enough evidence that mitigations are not a sufficient tool in repairing possible harm done by testing. As a community, we have spent millions of \$ in restoring our fish runs, once an invaluable source of income for the fishing industry. With drought conditions upon us, any further harassment of salmon in the ocean will do irreparable harm to a struggling industry. In 2013, both tribal and nontribal fisher saw a loss of 97% revenue from a five year annual average of 4.1 million. These jobs are needed to sustain the economic base of all coastal communities.</p> <p>Please reconsider the necessity of such tests. It is a never ending cycle that benefits no one but the weapons industry. It is time to seriously develop the concept of a peace time economy and use the Navy as the instrument to protect our great Pacific Ocean. – to get</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar’s detection would travel beyond the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>rid of the Pacific gyre and not assault the precious balance of the ocean and the greater ecosystems of which we are dependent for our sustenance.</p>	<p>distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected. The Navy has conducted training in these operating areas regularly for decades. Though the intensity of live training may increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant.</p> <p>Most commercially important fish species are not believed to hear mid- and high-frequency sound sources that make up the majority of sound producing activities.</p> <p>The impacts of the training and testing activities in NWTT on tourism (ex. fishing tourism) are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p>
<p>Travers (Written)</p>	<p>This communication is written to inform the US Navy that I adamantly oppose the training and testing of sonar anywhere along the Pacific Coast. It is absurd to claim this testing is necessary for our protection, for us to move freely on the oceans. What needs to move freely on the ocean are the mammals for whom the waters are truly home.</p> <p>Technology in electronics is so advanced, simulation is surely the progressive, inspired tool to be used for training.</p> <p>Creatures living and migrating in the ocean, Pacific or otherwise, should not suffer, die or decline because we cannot invest in peace. This is a home invasion of the worst kind—it is SO WRONG, SO CRUEL and we will in the end suffer for it.</p> <p>I beg you to forget your expensive, destructive bad boy toys!!</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Regarding the use of simulation, Navy already uses simulation in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities). The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Treuherz (Electronic)	I am highly concerned of the well being of marine mammals and other wildlife from the affects of the upcoming and ongoing Northwest Training and Testing. I am very sorrowful and disappointed in the lack of precautionary measure that the Naval forces are taking. Please train during the least harmful seasons when wildlife is less at risk due to sonar damage. -A concerned citizen, Utah	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Troy (Electronic)	After reading information on how the Navy believes turtles, fish, mammals, and invertebrates will be affected by their training exercises I feel that the Navy is not taking the issue seriously. I feel that rather excuses are casually being made in order to move on and train without a real recolonization for environmental impact short term and long term. For the sake of our children who will inherit these seas I am wholesomely against the training programs hereby proposed by the Navy unless they are done in a respectable and empathetic manner to the environment, meaning utmost care to wildlife being clear of the area, cleaning up pollutants, and abstaining from unnecessary sonar and explosives.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Mary Tucker (Electronic)	I care deeply about the Navy's proposed sonar testing off the coast of Washington. I am a Washington resident & am aware of the endangered status of our already dwindling resident Orca whale population. It is also a region where transient pods migrate annually. My understanding is that there is no reliable way to be certain the region is clear of all marine mammals that could sustain permanent injury or harm from such testing. Alternatives to this kind of testing and to the region in which it is to be done need to be explored and further evaluated long before any such activity is ever to take place. My	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>sincere hope is that it need never take place. Our diverse marine life is part of the legacy we leave behind for our children and future generations. Please recognize it for the treasure it is. I thank you for your consideration.</p>	<p>Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Michele Tucker (Electronic)</p>	<p>Why on earth wouldn't you do what you can to limit the damage of Naval Sonar training & testing activities by banning these activities when seasonal migrations bring concentrations of whales into coastal waters? It's good science, it's good PR, & it's the right thing to do.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS'</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.
P. Tucker (Electronic)	Please do not allow expansion of the NW training range. I am deeply concerned about the well-being of the orcas and other marine mammals who exemplify our connection to the ocean. They are legally and morally entitled to protection from harassment. We are just beginning to understand the profound effects of human-caused noise on orcas, porpoises, seals, and other species of Puget Sound - and these effects, particularly of explosions but also of other audio interference with their habitat's soundscape - seem clearly negative. On these bases, I strongly object to the proposed expansion of the training range.	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Turner (Electronic)	"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".</p>	<p>been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Turnoy (Electronic)</p>	<p>I am writing with grave concerns about the Navy's proposed use of sonar and undersea explosions in the Northwest Training Range. I live in the San Juan Islands – Endangered orca whale country. There are only 80 orcas left off the entire coast of Washington, Oregon, and California. Orcas already face many man-made threats along their migration routes, without more preventable and needless deaths. People come from all over the world to see the whales off the Pacific coast. Many of our coastal economies depend on eco-tourism and fishing, but our concern for the wellbeing of cetaceans goes far deeper – we love, appreciate, and respect these highly intelligent beings. Marine mammals are extremely sensitive to noise. Sonar destroys important habitat and disrupts the essential behavior of killer whales, blue whales, harbor porpoises and other marine wildlife. If you deafen a cetacean, you essentially kill it, destroying their navigational and communication abilities. Has the Navy considered the deafening of whales in its kill estimates? What about other cetaceans affected, and the loss of habitat and food supply caused by sonar and explosion testing? What are the real numbers when it comes to maimings and deaths? In 2004 the Navy's sonar was implicated in a mass stranding of as many as 200 melon-headed whales in Hanalei Bay, near Hawaii. And in 2003 the USS Shoup exposed a group of endangered orcas to sonar in Washington's Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound. There is no need for this torture of innocent marine mammals – and it IS torture. Who will be physically and fiscally responsible – the Navy, or the U.S. taxpayers – for cleaning up the carnage of whale and dolphin corpses, or worse, dying cetaceans that we're powerless to help, washed up on our beaches? And how do we explain to a traumatized population, to our kids and grandchildren, WHY these magnificent creatures died – needlessly – at the hands of our own military? The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on the region's valuable wildlife. Has it been scientifically proven that the impacts even can be mitigated? Our cetacean populations are sacred to us, and to the many First Nations Tribes and Bands along our coasts – who ultimately have final say</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>in what happens to our waters, under National and Tribal Law. The waters of the United States, including marine environments, belong to First Nations and the people, under the Clean Water Act. What other effects on our waters will sonar testing and explosions have? What else will they kill, and in what estimated numbers? How else will they pollute? How else will they warm and acidify our oceans? What will they do to the marine food chain, and to coastal economies and Aboriginal cultures? Have these questions and many more, been considered, and satisfactorily answered? Have outside, unbiased Academic Marine Biologists weighed in on the EIS? Who really stands to make their fortunes, or increase them, on these weapons tests, against the will of the U.S. taxpayers footing the bill? As you continue to provide for our country's defense, please find a way to train that respects and protects our natural resources and our ocean's sensitive wildlife, and the people who see the value in cetaceans.</p>	<p>employment associated with tourism is not expected to occur.</p> <p>The Navy has conducted training in these operating areas regularly for decades. Though the intensity of live training may increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
Tyler (Electronic)	Do not increase any testing of sonar devices. They have killed enough marine life and our Navy is already, by far, the best in the world. Have some compassion for other living creatures, for God's sake.	Thank you for participating in the NEPA process.
Utegirl (Electronic)	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbours, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defence mine countermeasure training exercise in Puget Sound and analysing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	and Pacific Northwest. This is 21st century and the navy testing belong to 20th century. It's time to end the Navy's war on whales, dolphins and all of the marine animals.	those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Vacca (Electronic)	Please, discontinue the use of sonar for military training and the use of other military operations that destroy whale populations, hurt and even kill orcas. We must protect and preserve our planet's most valuable resources.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Vadnais (Electronic)	I'm writing in to comment on the Navy's EIS/OEIS for expansion of the NW Training Range. I am firmly against expanding the range as it deeply affects endangered Southern Resident orca habitat. Please do not expand the training range and find another way to achieve the training needs, if they've evolved in a way that is not currently met, without expansion of the range. Respectfully, Jeanne Vadnais	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Van Blair (Electronic)	I am very much against anything with negatively impacts the health of the wild sea animals. Need I say more? Signed Mariana Van Blair	Thank you for participating in the NEPA process.
Van Camp (Electronic)	No!!!!	Thank you for participating in the NEPA process.
van Deventer (Electronic)	My father was in the Navy and I appreciate all the brave men and women who serve. However, I do not support your continuing use of sonar explosions in our oceans. The evidence is clear that these tests are excessively damaging to marine life, especially migrating whale populations who depend on their hearing to navigate the water in search of food, and by which a calf can find it's mother. Even temporary losses of hearing can mean death. More than ever, the real enemies to be fought by our armed services are the forces which are destroying our environment. What greater threat could there be to humanity than that? Please, I urge you to stop these tests now. Thank you. Sincerely, Elizabeth Van Deventer PhD	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Van Kerckhove (Electronic)	"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales". Thank you for taking care of the future of the Earth. Annick Van Kerckhove	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). The alternatives carried forward meet the Navy's purpose and need to

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Van Note (Electronic)	Given that there are already international debates about whaling, it does not suit the United States' military's image for it to conduct explosive testing or exercise its sonar in the Southern Resident Orca (Killer Whale) habitat. Within the next year, this particular species is expected to be listed as highly endangered due to the irresponsible whaling conducted by nordic countries and Japan. With the draw down in Iraq, it is easy for the press to attack our military. Please find another way such as developing an underwater/underground test facility.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
van pelt (Electronic)	Please use exclusion zones when doing the navy training exercises that threaten dolphin and whale foraging and feeding zones. Lets protect these animals and other marine wildlife so our children and grandchildren may see them. Using exclusion zones will allow the navy to do their job and protect marine life. A win win!	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS'</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.
Van Strum – 01 (Written)	<p>Re: Request for extension :</p> <p>For the following reasons, I support and supplement requests by Lincoln and Lane County (Oregon) commissioners and California legislators for an extension of time to respond to both the Navy draft NWTT EIS/OEIS and the Navy request for a NOAA Letter of Authorization to maim, kill, harass and otherwise disrupt marine mammals:</p> <p>1. The opening page of the Navy EIS website states, "Comments will be accepted from January 24, 2014 until March, 25, 2014." The public comment page, however, with the box to enter comments, states, "Commenting Period Ends on 1: 59 AM CST, Wednesday, March 26, 2014." The inability to specify accurately the dates and days of the week reflects the competence level of the EIS, as well as potentially denying public comments sent in good faith after March 25.</p>	<p>The public scoping period began with the issuance of the Notice of Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the Navy's notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS. "1:59 AM CST March 26, is equivalent to 11:59 PM, March 25th, in accordance with the public notice. The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in Appendix B – Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements.</p>
Van Strum – 02 (Written)	<p>2. The search function of the CD Navy's draft EIS provided by the Navy is dysfunctional to the point of utter uselessness, as it cannot find items that clearly exist in the document (e.g., "EOD", and "marbled murrelet," which ironically is pictured on the cover of both volumes); the same dysfunction occurs in downloads of the document from the Navy website. Since the Navy has provided only CDs of the draft EIS instead of hard copies to most people for public comment, this nonfunctioning search engine renders the document effectively useless.</p> <p>3. The hard copy of the EIS supplied to a chosen few remote libraries contains no index, rendering it effectively useless except to someone who can spend eight hours a day for three months going through its 2000+ pages, page by page, to find the scattered references in a hopelessly disorganized, unwieldy, poorly written document. Both the hard copy and the CD provided by the Navy are therefore effectively useless, precluding the remotest semblance of informed public comment.</p>	<p>The electronic (PDF) version of the NWTT EIS/OEIS, which is downloadable from the NWTTEIS.com website, has a fully functioning search capability.</p>
Van Strum – 03 (Written)	<p>4. Unable to find discussions of Unexploded Ordnance Disposal (EOD) on the CD, I filed a Freedom of Information Act request with the Navy for information on EOD in the NWTT on February 15, 2014 (attached), but to date have received no response, thus making it impossible to comment on this important issue.</p>	<p>The Navy conducted a full analysis of the potential impacts of military expended materials on marine resources and has proposed several mitigation measures to help avoid or reduce those impacts. The analysis is contained throughout Chapter 3 (Affected Environment and Environmental Consequences) of the Draft and Final EIS/OEIS (e.g., Section 3.3.3.2.1, Impacts from Military Expended Materials discusses</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		marine habitats). For example, military expended materials related to training exercises under Alternatives 1 and 2 would not impact more than 0.00009 percent of the available soft bottom habitat annually within any of the range complexes. The Navy has standard operation procedures in place to reduce the amount of military expended materials (Section 5.1.4.2, Weapons Firing Range Clearance), including recovering targets and associated parachutes to the maximum extent practical. In addition, the Navy has developed mitigation areas (Section 5.3.3.2, Seafloor Resources) to avoid and reduce potential impacts of military expended materials on seafloor habitats, including coral and hardbottom habitats.
Van Strum – 04 (Written)	5. The draft NWTT EIS/OEIS in a number of places relies on and incorporates by reference other Navy environmental documents that are unidentified and/or no longer available, either on the Navy web site or anywhere else, for example, page 2-3 of the draft EIS: “The Study Area includes only the at-sea components of the training and testing areas and facilities The remaining land-based portions of the range complex are addressed in previous National Environmental Policy Act (NEPA) documentation, and that analysis remains valid The previous NEPA analysis remains valid because both the Proposed Action and the conditions related to land areas in this analysis are the same as analyzed in previous NEPA documents. These land areas are not subject to reauthorization under the MMPA or ESA, and therefore are not part of the Study Area or this EIS analysis.” (emphasis added) (The statement quoted does not even identify what previous “NEPA documentation” they’re talking about. No citation whatsoever, much less any hint of who determined it to be valid. If the statement intends to refer to the 2010 EIS, it is relying on a document not available to the public as it is no longer on the Navy website.) The Navy’s repeated reliance on unidentified documents unavailable to the public totally precludes informed public comment.	The NWTRC EIS is available on the NWTT Website under “Documents and References” >> “Related Links.” This link will take you to the Navy’s Environmental Planning Documents website where any number of previous Navy planning documents are located, including the NWTRC EIS/OEIS: http://www.navfac.navy.mil/products_and_services/ev/products_and_services/environmental-planning/at_sea_compliance.html . The Navy has added the citation to the NWTRC EIS/OEIS in the section that is quoted in this comment in the FEIS/OEIS.
Van Strum – 05 (Written)	6. The draft NWTT EIS/OEIS makes extraordinary claims with no apparent data supporting them, e.g., p. 5-49 the Navy proposes to “eliminate the marbled murrelet mitigation measures described above. There is no evidence to support that marbled murrelet hearing is within the frequencies ranges of the sound sources used (e.g., sonar and countermeasures) in these tests “ Such a blanket assumption -- based on no data whatsoever and instead relying on the absence of data--about a species poised on extinction is inexcusable. The lack of any documentation makes it impossible for the public to provide informed comment, and the Navy’s “don’t look, don’t tell” policy toward environmental impacts violates both the letter and the spirit of NEPA. For the above reasons as well as those cited by Oregon and California officials, the Navy should withdraw both its requests for LOA and its draft EIS/OEIS until these and other serious deficiencies precluding meaningful public comment are corrected and the	As stated in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, in addition to evaluating mitigation zones based on marine mammals and sea turtles, the Navy also evaluated ranges for specific effects to the marbled murrelet. This evaluation included explosive ranges to TTS and the onset of auditory injury, non-auditory injury, slight lung injury, and mortality. For every source proposed for use by the Navy, the recommended mitigation zones included in Table 5.3-2 exceed each of these ranges. The USFWS will also be provided an opportunity to supplement our mitigation measures as part of our consultation agreement. See Chapter 5 for specific exclusion zones for the Marbled Murrelet.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	corrected versions of the CD and hard copies are distributed to all previous commenters and requesters with an appropriately extended deadline for comments.	
Van Strum – 01 (Electronic)	I am trying to see if this works. This is a test to see if this comment form works. http://www.birds.cornell.edu/brp/brp-in-the-news	Thank you for participating in the NEPA process.
Van Strum – 02 (Electronic)	<p>_____ April 14, 2014 Kimberly Kler, Environmental Planner NWTT EIS/OEIS Project Manager Naval Facilities Engineering Command, Northwest, EV21.KK 1101 Tautog Circle Silverdale, Washington 98315 Michael Payne, Permits & Conservation Division Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway Silver Spring, Maryland 20910-3225 Re: Comments on Draft NWTT EIS/OEIS Expecting the U.S. Navy's war machine to protect the environment is like expecting Ted Bundy to practice public hygiene rules, so it is no surprise that the Navy's environmental impact statements are no more than expensive paper tigers. However, the current 2014 draft NWTT EIS/OEIS exceeds its predecessors in inaccessibility, unreadability, disorganization, deception, omissions, and flagrantly undocumented conclusions. My comments supplement the excellent, thoroughly researched comments on this draft by NRDC and its partners, adding to their reasons why the 2014 draft NWTT EIS/OEIS should be withdrawn and the NEPA process be started over: 1. Defective and inadequate distribution of the draft NWTT EIS/OEIS The opening page of the Navy EIS website (http://nwtteis.com) proclaims in big red letters: THE PUBLIC COMMENTING PERIOD ON THE DRAFT EIS/OEIS HAS BEEN EXTENDED UNTIL APRIL 15, 2014. The public comment page, however, with the box to enter comments, states, "Commenting period ends on 1:59 AM CST Wednesday April 16, 2014." http://nwtteis.com/GetInvolved/OnlineCommentForm.aspx The automated public comment response further confuses the issue: Public involvement is a fundamental part of the development of the Northwest Training and Testing (NWTT) Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). The Navy welcomes and appreciates your comments. Please go to the website (www.NWTTEIS.com) to submit your comments and to learn more about the project. All comments must be received online by 11:59 p.m. CST on Tuesday, April 15, 2014, for consideration in the NWTT Final EIS/OEIS. Thus, even the most diligent reader finds the comment period to be anywhere from 11:59 p.m. Central Standard Time on Tuesday April 15, to 1:59 a.m. Wednesday April 16 (and how many commenters to a northwest eis live in the Central Time zone?) As I pointed out in my March 17 request for extension, the first version of the NWTT EIS/OEIS had a remarkably similar dysfunction, the opening page stating the original comment period deadline to be March 25, and the comment page stating it was March 26. The extended deadline even further confuses commenters, displaying the Navy's total disregard of our comments about this confusion, and potentially denying public comments sent in good faith on April 16. As I also pointed out in</p>	<p>As stated in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, in addition to evaluating mitigation zones based on marine mammals and sea turtles, the Navy also evaluated ranges for specific effects to the marbled murrelet. This evaluation included explosive ranges to TTS and the onset of auditory injury, non-auditory injury, slight lung injury, and mortality. For every source proposed for use by the Navy, the recommended mitigation zones included in Table 5.3-2 exceed each of these ranges. See Chapter 5 for specific exclusion zones for the Marbled Murrelet.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p> <p>The Navy and NMFS jointly are still in ongoing consultation with the OCNMS regarding the effects of the Proposed Action on Sanctuary resources. The Navy concludes its continued activities are not likely to result in the loss, destruction, or adverse changes to the viability of Sanctuary resources. Several points support this determination:</p> <ul style="list-style-type: none"> • Less than two percent of proposed training and 15 percent of proposed testing activities would occur within or immediately adjacent to the OCNMS. • The NWTT Final EIS/OEIS shows that training and testing activities have minimal temporary impacts on the quantity or quality of the Study Area's physical environment, and minor to no impacts on marine or shore birds, fish, sea turtles, or invertebrate marine life. • Although explosives have the potential to affect the physical and biological resources, the Navy does not use explosives within the OCNMS. • The Navy concludes any marine mammal behavioral reactions to NWTT training and testing activities would be transitory, infrequent, non-cumulative, and impacts are not expected to decrease overall individual fitness or result in long-term population-level impacts on any given population, and consequently will not result in any adverse

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>my March 17 request for extension, the search function of the CD of the draft NWTT EIS/OEIS provided by the Navy is dysfunctional to the point of utter uselessness, as it cannot find items that clearly exist in the document (e.g., “EOD”, and “marbled murrelet,” which ironically is pictured on the cover of both volumes); the same dysfunction occurs in downloads of the document from the Navy website. (I understand from tech support that the CD and downloads only work with Adobe Acrobat, an expensive software, but do not work with the free & easily downloaded Adobe Reader; this was certainly not the case with CDs and downloads of the 2009-2010 NWTT EIS, which worked perfectly on Adobe Reader; by requiring commenters to pay for Adobe Acrobat in order to use the 2014 CD or downloads, the Navy has denied access to many or most potential commenters.) Since the Navy has provided only CDs of the draft EIS instead of hard copies to most people for public comment, this nonfunctioning search engine renders the document effectively useless. The hard copy of the EIS supplied to a chosen few remote libraries contains no index, rendering it effectively useless except to someone who can drive hundreds of miles and spend eight hours a day for three months going through its 2000+ pages, page by page, to find the scattered references in a hopelessly disorganized, unwieldy, poorly written document. Both the hard copy and the CD provided by the Navy are therefore effectively useless, precluding the remotest semblance of informed public comment.</p>	<p>changes to the sanctuary.</p> <p>Finally, all Department of Defense (DoD) military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When marine mammals have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather).</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>The document is formatted for download and use by many versions of Adobe Acrobat and Reader, even the older versions. The electronic (PDF) version of the NWTT EIS/OEIS, which is downloadable from the NWTT EIS/OEIS website, has a fully functioning search capability.</p> <p>The public scoping period began with the issuance of the Notice of</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Intent in the <i>Federal Register</i> on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. Sections I.2.1 and I.2.2 describe the Navy's notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS. The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in Appendix B – Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements.</p>
Van Strum – 03	<p>2. Omission of data on ocean disposal of ordnance Concerned about reports of artillery shells and other munitions being jettisoned to avoid port procedures (e.g., “Navy cannot find records to quell claims of continued open sea dumping,” Public Employees for Environmental Responsibility 2010 News Release, www.peer.org), and unable to find discussions of Explosive Ordnance Disposal (EOD) on the CD, I filed a Freedom of Information Act request with the Navy for information on EOD in the NWTT on February 15, 2014, but to date after two months I have received no information, thus making it impossible to comment on this important issue.</p>	<p>Please Section 3.1 (Sediments and Water Quality) for a discussion of possible chemical impacts from training and testing in the Study Area. Hazardous materials are also discussed in Section 3.1 of the NWTT EIS/OEIS. Please also see Section 2.1.2.2.1 (Explosive Ordnance Disposal Ranges) for a comprehensive discussion of the Proposed Action and training and testing activities that are proposed to occur with regard to explosive ordnance. Overall, chemical, physical, or biological changes in sediment or water quality would not be detectable and would be below or within existing conditions or designated uses.</p> <p>The Navy does not propose any activities such as “dumping debris on the seafloor, or spreading toxic chemicals.” In the course of the Navy proposed activities (listed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS), which do include the use of sonar and similar sound sources as well as underwater detonations, some expended materials are left behind in the ocean. The potential impacts of these actions was thoroughly analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS.</p> <p>Based on the analysis, and decades of experience conducting similar activities in the same area, there is no evidence of any habitat areas being degraded.</p>
Van Strum – 04	<p>3. Repeated reliance on unidentified and/or unavailable documents As previously noted in my March 17 request for extension, the draft NWTT EIS/OEIS in a number of places relies on and incorporates by reference other Navy environmental documents that are unidentified and/or no longer available, either on the Navy web site or anywhere else, for</p>	<p>The NWTRC EIS is available on the NWTT Website under “Documents and References” >> “Related Links.” This link will take you to the Navy’s Environmental Planning Documents website where any number of previous Navy planning documents are located,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>example, page 2-3 of the draft EIS: “The Study Area includes only the at-sea components of the training and testing areas and facilities.... The remaining land-based portions of the range complex are addressed in previous National Environmental Policy Act (NEPA) documentation, and that analysis remains valid. The previous NEPA analysis remains valid because both the Proposed Action and the conditions related to land areas in this analysis are the same as analyzed in previous NEPA documents. These land areas are not subject to reauthorization under the MMPA or ESA, and therefore are not part of the Study Area or this EIS analysis.” (emphasis added) (The statement quoted does not even identify what previous “NEPA documentation” they’re talking about. No citation whatsoever, much less any hint of who determined it to be valid. If the statement intends to refer to the 2010 EIS, it is relying on a document not available to the public as it is no longer on the Navy website.) The Navy’s repeated reliance on unidentified documents unavailable to the public -- see, e.g., Abstract; pp. ES-8, 1-3, 1-12, 2-3, 2-3, 2-32,2-42, 2-44, 3.0-28, 3.2-9, 4-3 -- totally precludes informed public comment and participation.</p>	<p>including the NWTRC EIS/OEIS: http://www.navfac.navy.mil/products_and_services/ev/products_and_services/environmental-planning/at_sea_compliance.html. The Navy has added the specified citation to the NWTRC EIS/OEIS in the section that is quoted in this comment in the FEIS/OEIS.</p>
<p>Van Strum – 05</p>	<p>4. Repeated claims and conclusions based on absence of data As also noted in my March 17 request for extension, the draft NWTT EIS/OEIS makes extraordinary claims with no apparent data supporting them, e.g., p. 5-49 the Navy proposes to “eliminate the marbled murrelet mitigation measures described above. There is no evidence to support that marbled murrelet hearing is within the frequencies ranges of the sound sources used (e.g., sonar and countermeasures) in these tests....” Such a blanket assumption about a species poised on extinction -- based on no data whatsoever and instead relying on the absence of data -- is inexcusable. The lack of any documentation makes it impossible for the public to provide informed comment on this and other issues (for examples of missing data supporting Navy conclusions of no significant impact, see, e.g., pp. 3.9-60, 4-39, 4-37, 3.9-69, 3.9-68, 3.9-65, 3.9-61, 4-8, 5-72, 4-33, 3.1-48, 3.1-65, 3.2-13, 1.4-9, 1.4-13, 3.4-28, 3.4-29, 3.4-50, 3.4-52, 3.4-67, 3.4-82, 3.4-74, 3.4-82, 3.4-89, 3.4-95, 3.4-110, 3.4-145, 3.4-152, 3.4-163, 3.4-171, 3.4-180, 3.4-262, 3.4-267, 3.5-3, 3.5-14, 3.5-27, 2-50, 2-51, 3.1-35, 3.1-35, 3.1-47, 3.4-55, 3.4-64, 3.4-75, 3.4-79, 3.4-83, 3.4-95, 3.4-113, 3.4-233, 3.5-15-16, 3.5-20, 3.5-47, 3.9-61, 3.9-11, 3.9-10, 3.8-28, 3.8-27, 3.8-25, 3.8-24, 3.8-21, 3.8-13, 3.8-36, 3.9-141, 3.9-143, 3.9-151). See also, cavalier conclusions on pp. 3.8-66&67, 3.9-54, 4-34, 4-35, 4-36, 4-38, 4-41, 4-45&46, repeating ad infinitum the Navy mantra on cumulative impacts: no data, therefore no further analysis warranted. The Navy’s “don’t look, don’t tell” policy toward environmental impacts violates both the letter and the spirit of NEPA.</p>	<p>The Navy used the best available science in the creation of this document. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations or marbled murrelet populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy’s specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.</p>
<p>Van Strum – 06</p>	<p>5. Blanket refusal to avoid marine protected areas On the issue of marine protected areas, the Navy shows its true colors. The NWTT EIS/OEIS devotes some 22 pages to marine protected areas (e.g., 6.1.2, 5-67, 6.9-6.26, ES-5, ES24), giving the clear impression that the Navy would respect and avoid harming such valuable marine resources. Not so: the Navy actually has no intention of preserving protected areas, its intent to rule the waves overriding all environmental concerns with a cascade of spurious excuses, see, e.g., p. 5-55-56: “Avoiding marine protected areas for the purpose of mitigation would increase safety risks to personnel, be impractical with regard to implementation, and would not be warranted... . Limiting access to marine protected areas would restrict access to training and testing locations and would increase transit time, which would result in an increased risk to personnel safety, particularly for platforms with fuel restrictions (e.g., aircraft)...would therefore result in an unacceptable increased risk to personnel safety. ...Ultimately, limiting access to training and testing locations that overlap, are contained within, or are adjacent to marine protected areas would reduce realism of training by restricting access to important real world combat situations, such as bathymetric features and varying oceanographic features. As described in Section 2.5.1.1 (Alternative Locations), the ability to use the diverse and multidimensional capabilities of each range complex and testing range results in the Navy’s ability to develop and maintain high levels of readiness. Major exercises using integrated warfare components require large areas of the littorals, open ocean, and certain nearshore areas for realistic and safe training. Limiting training and testing to specific locations and avoiding all marine protected areas would be impractical to implement with regard to the need to conduct activities in proximity to certain facilities, range complexes, and testing ranges.” In other words, the Navy’s convenience trumps the last few safe havens and remnants of marine productivity, spitting in the eye of NEPA and the dedicated agencies and volunteers who worked so tirelessly to create those protected areas. The Navy failed to evaluate, as required by NEPA, the impacts of its absolute refusal to avoid marine reserves on the</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 ((Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>marine environment (fish, bird, invertebrate, mammal, and plant populations) and on commercial & recreational fishing. The Navy's responsibility to comply with NEPA cannot be met by simply deciding its own perceived needs exempt it from the law.</p>	<p>5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
<p>Van Strum –</p>	<p>6. The Vanishing Hazardous Materials Page 3.3-17 of the 2010 EIS states that</p>	<p>The number used by the commenter in regard to potentially toxic</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
07	<p>“overboard discharge” is permitted of such hazardous materials as ethylene and propylene glycols, ethyl, isopropyl and butyl alcohols, sodium metaborate, potassium silicate, mercapto-benzothiazole, diammonium citrate, DETU, MIL-D-16791 detergent, Nalcool 2000, Nalfleet 9-111, Paxcool, Catcool, triethanolamine, naphtha, 2-butoxyethanol, cadmium, chromium, heavy metals and cyanide. The 2014 NWTT EIS/OEIS omits any mention of such overboard discharges. Therefore, on February 15, 2014, I filed a Freedom of Information Act request for information on at-sea disposal of hazardous materials by Navy ships, but to date have received no information. The Navy’s omission or apparent concealment of this information speaks volumes about the integrity and intent of the 2014 MWTT EIS/OEIS, particularly given numerous news reports of such Navy practices, e.g., http://wrenchbiscuit.hubpages.com/hub/The-United-States-Navy-and-the-Polluted-Oceans http://www.independent.co.uk/news/uk/home-news/exclusive-worlds-most-pristine-waters-are-polluted-by-us-navy-human-waste-9193596.html https://www.fas.org/man/gao/gao9538.htm http://www.nationaldefensemagazine.org/archive/2001/April/Pages/Pollution-Prevention7076.aspx https://www.commondreams.org/views/05/0327-21.htm http://www.nap.edu/openbook.php?record_id=9190&page=1 http://ban.org/library/Dishonorable%20Disposal_BAN%20Report.pdf http://doni.daps.dla.mil/Directives/05000%20General%20Management%20Security%20and%20Safety%20Services/05-00%20General%20Admin%20and%20Management%20Support/5090.1C%20CH-1.pdf The 2014 NWTT EIS/OEIS acknowledges, p. 3.1-50, that “Under Alternative 1, the amount of potentially toxic metals expended during training activities would be approximately 28,312 lb. (12,842kg).” The world waits breathlessly to hear whether that figure is per day, per week, per month, per year. Assuming it is per year, one looks in vain for any breakdown identifying the toxic metals and how much of each toxic metal is expended. And because the Navy conveniently omits mention of its overboard discharges of heavy metals, there is no way even to guess the total, combined amount of expended toxic metals and overboard discharges of toxic metals being released into already stressed marine ecosystems. Given the extreme toxicity and bioaccumulative potential of many toxic metals, the willful omission of the Navy’s actual disposal practices unquestionably fails NEPA’s requirements for full disclosure of actions that may impact the human and global environment.</p>	<p>metals expended during training activities represents the total amount expended for the 5 years that the NWTT EIS/OEIS would be valid.</p> <p>Please Section 3.1 (Sediments and Water Quality) for a discussion of possible chemical impacts from training and testing in the Study Area. Hazardous materials are also discussed in Section 3.1 of the NWTT EIS/OEIS. Please also see Section 2.1.2.2.1 (Explosive Ordnance Disposal Ranges) for a comprehensive discussion of the Proposed Action and training and testing activities that are proposed to occur with regard to explosive ordnance. Overall, chemical, physical, or biological changes in sediment or water quality would not be detectable and would be below or within existing conditions or designated uses.</p> <p>The Navy does not propose any activities such as “dumping debris on the seafloor, or spreading toxic chemicals.” In the course of the Navy proposed activities (listed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS), which do include the use of sonar and similar sound sources as well as underwater detonations, some expended materials are left behind in the ocean. The potential impacts of these actions was thoroughly analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS.</p> <p>Based on the analysis, and decades of experience conducting similar activities in the same area, there is no evidence of any habitat areas being degraded.</p>
Van Strum – 08	<p>7. Mitigation is a cruel joke As NRDC’s comments point out, “All of the mitigation that the Navy has proposed for sonar impacts boils down to the following: a very small safety zone around the sonar source, maintained primarily with visual monitoring by personnel with other responsibilities, with aid from shipboard passive monitoring when personnel are already using such technology. Under the proposed scheme, operators would power-down the system if a marine mammal is detected within 1,000 yards and shut-down the system if a marine mammal or sea turtle is detected within 200 yards. DEIS at 5-28.” The</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Navy’s lookouts are not only looking out for marine mammals and “debris, a periscope, surfaced submarine, or surface disturbance,” but are also posted for man-overboard precautions and supervision of other personnel, all while also navigating the ship. (p. 5-2). The current requirements for Lookouts are, “While underway, surface vessels shall have at least two Lookouts with binoculars; surfaced submarines shall have at least one Lookout with binoculars.” (p. 5-19) As the recent, months-long search for a large passenger jet in the Indian Ocean demonstrates, even from an aircraft, much less from shipboard, it is nearly impossible to spot surface objects except on a perfectly calm, windless sea. (see, e.g., http://www.latimes.com/world/asia/la-fg-malaysia-plane-20140321,0,209255.story#axzz2wZVLOk1k, “Even at low altitude with radar and infrared sensors that detect variations in temperature, debris can be difficult to find, said Robert Ditchey, a commercial airline executive and former Navy pilot who flew a submarine-hunting P-3 Orion. Even a whale breaching the surface may be invisible from an overhead search aircraft, depending on sunlight, water clarity and wave height, he said.”) As NRDC further documents, visual detection rates for marine mammals generally approach only 5 percent at best. Yet the 2014 NWTT EIS/OEIS cavalierly states, with no documentary support or explanation whatsoever, “The Navy is proposing to revise the mitigation measures for this activity as follows: while underway, vessels will have a minimum of one Lookout.” (p. 5-19) To find out how effectively the two-lookout system had worked, I filed a Freedom of Information Act request on February 17, asking for a list of the dates and locations of every Navy operation halted by the sighting of a marine mammal or any other animal. To date, the Navy has provided no information in response, suggesting rather strongly that such occasions are extremely rare or nonexistent. Certainly reducing by half a mitigation measure that already was only at best five percent effective hardly meets the bare requirements of NEPA for effective mitigation measures.</p>	<p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar’s detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
<p>Van Strum – 09</p>	<p>8. A question of competence Reducing by half its only five-percent-effective Lookouts will inevitably double the risk to more than just marine mammals. Reducing its navigation capabilities by half will severely affect the already compromised ability of Navy vessels to avoid collisions with other vessels, coral reefs, rocks, land, and other common obstacles, adding significantly to the Navy’s recent record of collisions with tankers, with other Navy vessels, with its own drones, to say nothing of running aground on a protected coral reef in the Philippines, running aground in Sochi, crashing its helicopters with stunning frequency, dropping bombs on the Great Barrier Reef, deploying littoral combat ships that crack, can’t survive combat, and have dysfunctional weapons, while in this two-year period, 48 Navy commanders are stripped of command: http://news.msn.com/world/us-naval-ship-runs-aground-in-philippines http://usatoday30.usatoday.com/news/nation/story/2012-05-16/navy-ships-collide/55025270/1 http://www.dailyrepublic.com/archives/navy-crews-faulted-for-dipping-helicopters-in-lake-tahoe/ file:///C:/Users/Sherlock/Downloads/17%208%202013%20U.S.%20Navy%20Cruiser%20i</p>	<p>Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>n%20Port%20After%20Drone%20Crashes%20Into%20It%20November%2018,%202013%20APNews.pdf file:///C:/Users/Sherlock/Downloads/17%208%202013%20U.S.%20Navy%20Divers%20R ecover%20U.s.%20Bombs%20Dropped%20Over%20Australia%20Barrier%20Reef%20S eptember%201,%202013%20PHYS.ORG%20News.pdf file:///C:/Users/Sherlock/Downloads/17%208%202013%20U.S.%20Navy%20Helicopter% 20Crash%20Landed%20Southwest%20of%20Yokosuka%20Naval%20Base%20Japan% 20December%2016,%202013%20Stars%20&%20Stripes.pdf http://www.navy.mil/submit/display.asp?story_id=76730 http://hamptonroads.com/2014/02/navy-relieves-commander-after-grounding-near-sochi http://hamptonroads.com/2014/03/navy-will-study-sea-dragon-engine-problems http://www.wired.com/2013/01/littoral-combat-ship/ http://www.gao.gov/products/GAO-13-738T file:///C:/Users/Sherlock/Downloads/17%209%202012%20U.S.%20Navy%20Stars&Stripe s%20News%2025%20Navy%20Commanders%20Dismissed%20December%2027,%202 012%20Other%20Years.pdf file:///C:/Users/Sherlock/Downloads/217BN%201%202012%20U.S.%20Navy%20Drone% 20Crashes%20in%20Maryland%20CNN%20June%2011,%202012%20Photographs%20 Video%20Links%20CNN%20News.pdf file:///C:/Users/Sherlock/Downloads/217BN%201%202012%20U.S.%20Navy%20Ground s%20Helicopter%20Drones%20After%20Two%20Crashes%20in%20a%20Week%20Apri l%2010,%202012%20Los%20Angeles%20Times.pdf file:///C:/Users/Sherlock/Downloads/217BN%201%202012%20NATO%20Confirms%20U. S.%20Navy%20Drone%20Helicopter%20Crashed%20in%20Libya%20June%2021,%202 012%20Los%20Angeles%20Times.pdf Against such a record, the prospect of Navy ships, submarines, helicopters, and aerial or aquatic drones crashing into each other, into local fishing boats, into coastal waters, rivers and estuaries, and into coastal towns and settlements, becomes far more likely under the Navy’s plan to reduce by half its already nonfunctional navigation procedures in the NWTT range. There can be no impact more compellingly relevant to the human environment than the increased likelihood of such crashes, yet the 2014 NWTT nowhere mentions the Navy’s recent history of such navigational disasters and incompetent command, or considers the impacts likely to ensue from halving its navigation lookouts. Conclusion For the above reasons I join and support NRDC and its associates in demanding that the Navy withdraw its 2014 NWTT EIS/OEIS and start the NEPA process again. Submitted by Carol Van Strum</p>	
<p>Vance (Oral)</p>	<p>God bless the United States Navy. God bless life in our ocean. It was an honor to go to high school near the Naval Academy in Annapolis, Maryland. It was an honor to work for the National Oceanic and Atmospheric Agency while I was a graduate student at the University of Maryland and it was glorious to swim in Subic Bay in the Philippines, as it was glorious to go scuba diving off the rock of Okinawa with angel fishes large as my</p>	<p>Thank you for participating in the NEPA process.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	head. God bless America.	
Vanderlaan – 01 (Electronic)	There is NO NEED for Navy Experimental Weapons Testing in Pacific Ocean. SAVE THE WHALES. The LAST thing anyone needs is new weapons... The proposed Navy testing is said to harm Whales, Dolphins and Seals... Loud underwater noises will cause deafness... Who could possibly be in FAVOR of such testing? The Defense Contractors that stand to profit from sales of new weapons. That's who. Why don't those companies design something useful instead? All that engineering talent wasted... They could design cars that get 200 MPG or better solar/wind generators or better computers or ANYTHING! It must be horrible to work at a weapons design firm and at the end of your workday know that all your effort has made the world a worse place to live. What are their Names of the Businesses and where are they located?	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Vanderlaan – 02 (Electronic)	At the Eureka Public Meeting someone suggested using Computer Simulations instead of actual testing. That would work. Sperry Simulation Systems has made a career of building Airplane Simulators and Atomic Power Plant Control Room Simulators. They could build a Boat simulator that would look exactly like the real boat and COLLECT TESTING DATA.	Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
VanZandt (Electronic)	Please do not renew your permits for bombing and sonar exercises in the northwest. Please protect the Orcas, whales and other sea life and and their habitat!!!! Sincerely, Megan	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Veirs	Please accept this letter as public input to the US Navy on their Range Expansion EIS.	See the discussion of the event in Section 3.4.3.1.8 (Stranding) and in

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
<p>(Written)</p>	<p>The EIS makes the following statement and many other repeated similar statements: “The primary constituent elements of the southern resident killer whale’s designated critical habitat are not expected to be impacted by the proposed Navy activities involving use of sonar and other active acoustic sources. “ - B4.3 .2.1.3 Then you conclude (in a variety of places) making statements such as: The alternative: “May affect, but is not likely to adversely affect, sei whale, Western North Pacific gray whale, and southern resident killer whale” (pg. 3 .4-148) But, when the USS Shoup went in front of my house (May 5, 2004) blasting its sonar to my hydrophones the Southern Resident Killer Whales certainly suffered adverse effects. They could not forage. They could not communicate. They split up their normal family related physical relationships and they did not return to 'normal' for several days. Such effects are short of stranding and death but they surely are “adverse” and the Navy should not be permitted to perform such actions within the acoustic hearing range of the Southern Resident Killer Whales. Look, the Navy KNOWS that sonars and explosives can and have harmed and killed marine mammals and that the Southern Resident Killer Whales use sound and need to use sound and have ears that can be injured or destroyed by sonars and explosions and your EIS clearly states this. (“Determination of Acoustic Effects on Marine Mammals and Sea Turtles for the Northwest Training and Testing Environmental Impact Statement/Overseas Environmental Impact Statement”, NUWC-NPT Technical Report, 2014) Your document says “Would have no effect on southern resident killer whale critical habitat” many times. Well, that is not the point of environmental protection. Environmental protection, especially of listed endangered species, must protect the animals whether or not the region of the animals has been labeled “critical habitat”. The Navy cannot pull a fig-leaf over its private parts and act to affect, injure, or kill the Southern Resident Killer Whales - WHERE EVER THEY MAY BE! And, if the Navy says it doesn’t know where these whales are, then they should be charged with finding out. If the Navy cannot find and track whales which travel in groups from 10 to 80 and protect those whales by not using sonars and explosives within acoustic hearing of these animals then this is a pitiful sort of a defense agency that spends billions of taxpayer dollars and can’t even find multiple 10 ton sea creatures that come to the surface every minute or less to breath. You say: “other testing activities occur offshore, where they are only present briefly during their annual migration period. The acoustic analysis predicts the Eastern North Pacific Southern Resident stock would not be exposed to sonar and other active acoustic</p>	<p>the cited U.S. Department of the Navy (2013c), “Marine Mammal Strandings Associated with U.S. Navy Sonar Activities” technical report available at the website www.NWTTEIS.com. See the NWTT EIS/OEIS cited U.S. Department of the Navy 2004 for accurate details regarding the reported behaviors of the “J” pod killer whales. The killer whales of J-pod were exposed to multiple stimuli, and it is impossible to assess a precise sound level at which the animals reacted due to all the other stimuli such as the presence of whale watching vessels. Furthermore, the Navy did use the estimated received levels from the Haro Strait/USS SHOUP incident in the development of the behavioral response function. See the cited Fromm 2004a, b; U.S. Department of the Navy 2004; National Marine Fisheries Service 2005b for the propagation analysis for the Haro Strait event. The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). Regarding comment point #(1) - As presented in Section 3.4.2.15 (Killer Whale (Orcinus orca)), Navy did not state that SRKW’s don’t have 'annual migration periods. What the EIS/OEIS text presents is, “In most areas of their range, killer whales do not show movement patterns that would be classified as traditional migrations. However,</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>sources associated with testing activities, which would exceed the current impact thresholds. Activities involving the use of sonar and other active acoustic sources would have noeffect on southern resident killer whale critical habitat. “ (pg. 3.4-153)</p> <p>This is patently false. (1) First the SRKW's don't have 'annual migration periods". 25 or more years of data show that the whales may be in the off-shore continental shelf water during any and all months of the year. (2) You say “exposure won't exceed current impact thresholds”. Is the Navy committing to not using sonar etc during the night? When LI 12 died (Feb 2012) both US and Canadian Navy ships were using sonar and explosives (sonar and explosions were recorded by my hydrophones). Did the two Navys refrain from emitting loud underwater sounds at night? I don't think so! (3) You say activities would have “no effect”. That is clearly false! At a minimum it will prohibit the whales use of their own voices and echolocation clicks and it is likely that Southern Resident Killer Whales will again die while the Navy is operating.</p> <p>Alternative B suffers from the same failures and is not any better for the whales than the No Action Alternative</p> <p>In the same paragraph you state:</p> <p>“May expose marine mammals up to 98,220 times annually to sound levels that would be considered Level B harassment “</p> <p>and</p> <p>“Would have no effect on southern resident killer whale critical habitat”</p> <p>Again, you are hiding a hundred thousand Level B harassments from the Southern Resident Killer Whales with your 'critical habitat' subterfuge but the whales can't hide from your pervasive sounds.</p> <p>And regarding firing of weapons etc. you say:</p> <p>“The southern resident killer whale is the only species with critical habitat located in the Study Area; however, these activities would not occur in the southern resident killer whale's designated critical habitat (National Marine Fisheries Service 2006).”</p> <p>But again you KNOW that the whales are often in the continental shelf areas and that your weapons will harm or kill these whales by their acoustic impacts if not their blasts. Just because NOAA has not yet declared the continental shelf critical habitat does not excuse the Navy from responsibility for the safety of these endangered animals. We know and the Navy knows that the Southern Resident Killer Whales are in the near-shore waters of Washington, Oregon and California as well as Vancouver Island at times during every month of the year. The Navy must not carry out loud acoustic activities when the endangered Southern Resident Killer Whales are within acoustic range.</p>	<p>there are often seasonal shifts in density, both onshore/offshore and north/south.” The sentence was not specific to SRKW and the use of the term “movement” is consistent with the terminology NMFS uses in describing the movements of killer whales between geographical areas; see for example Carretta et al (2013; the 2012 Pacific Stock Assessment Report). As is also evident from the text of the presentation in the EIS/OEIS and the referenced Pacific Navy Marine Species Density Database (U.S. Department of the Navy. 2014), Navy is fully aware of the distribution of SRKW and the other stocks of killer whale in the NWTT Study Area.</p> <p>The remainder of the comment is addressing the killer whale critical habitat. The analysis is correct in that the Navy’s activities are not expected to have any effect on current killer whale critical habitat. The analysis is not stating “no effect” on killer whales. Under the ESA, the Navy is required to examine its effects both on the species and on its critical habitat.</p>
<p>Vergote (Electronic)</p>	<p>My comments pertain to the safety and lives of marine animals and the Navy sonar/explosives. Everywhere ivturn humans are doing something that will destroy a</p>	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>habitat ..destroy animal life. It is ridiculous that we have to sign petitions to force companies to do the RIGHT THING! It does not take a genius to understand if you are using sonar or explosives that it will have a HARMFUL EFFECT ON THE SURROUNDING HABITAT AND THE LIFE WITHIN!!! *** DO THE RIGHT THING....PROTECT LIVES...DON'T HARM THEM!</p>	<p>Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p>
<p>Vernale (Written)</p>	<p>Please do what you can to halt the sonar testing. Please don't hurt our sea creatures any more. The tests have already been done. The sounds are TORTURE to the whales and dolphins. They are the lifeline of us and the planet earth. If they die, we die. Why progress into war? Why do we need more testing?</p> <p>Please stop. Please don't. It hurts them terribly. It handicaps them and in the end will hurt us. Please be amazed by these creatures and convince the Navy to just STOP. No sonar. It is torture and abuse.</p> <p>Please stop. No more testing.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Verschuyt – 01 (Written)</p>	<p>I would like to preface my comments with a brief statement: I do appreciate a strong defense. I believe that “mutually assured destruction” is a time-proven way to prevent a major conflict. I also realize that terrorism is a very difficult enemy to fight. I do appreciate the efforts of the US Navy to address this goal. It is a difficult challenge to be successful on all fronts, including the protection of those people you are to defend, on the local, micro level. It is this last point that I would like to offer constructive criticism I concern about:</p> <p>1) The limits of growth of NAS Whidbey: I have seen an increase in flights and noise, and I suspect pollution, from the Navy activities over the 20 years that I have been here. The Growler aircraft seems much noisier to me. The lower frequency noise is more penetrating and bothersome. This airplane is half rocket ship I half airplane. People come to Cape Kennedy to see a rocket launch – a very noisy event. But if these same people had to experience that noise as frequently as the citizens of North Whidbey do, they probably would not like it.</p> <p>So the question of growth is key to the proposed EIS I Training proposal. The Navy facilities may well have the physical room to grow. I believe that the surrounding community is already beyond its limit of noise and pollution tolerance. Many people from the surrounding community have voiced that opinion. This EIS should study carefully that</p>	<p>Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p> <p>In a separate EIS, the Navy proposes to homebase up to 36 additional EA-18G Growler aircraft at NAS Whidbey Island. The Navy announced the preparation of the EIS on 5 September 2013 and invited the public to participate in the NEPA process by submitting comments to define the scope of the Draft EIS analysis. On 10 October 2014, the Navy revised the scope of the on-going EIS and invited the public to submit additional scoping comments. The Navy is currently preparing its Draft EIS that is scheduled to be released in spring 2016. For more information, please visit the project website at www.whidbeyeis.com.</p> <p>The NWTT EIS/OEIS considers the cumulative impacts to the environment from other relevant past, present, and reasonably foreseeable future actions (federal, state, local and private) in addition to the proposed action. Section 4.3.3.17 (Environmental Impact</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>limit of growth, and the tolerance by the surrounding community. I suggest real world , on the ground noise monitoring in many locations up to a 10-mile radius from the Coupeville and Ault Field runways. I offer my own parcel as one such monitoring station.</p> <p>The AICUZ, computer generated, average noise level study does not accurately represent real world conditions. Peak sound level readings, along with their duration should be measured , made available to the public, and should comply with OSHA requirements at a minimum. The computer analysis does not seem to compensate for flight path deviations, or for flight altitude that is lower than FAA requirements.</p> <p>2) Your "Information Manual" addresses pollution from commuters to Ault Field. Allowing Island Transit bussing priority entry to Ault Field would allow these same busses to maintain schedule, and would encourage the use of public transit. This bus route was deleted in history because the busses could not maintain schedule.</p> <p>Another aspect of pollution increased by training is from the aircraft activities themselves, and the fuel storage on Base. I have smelled jet fuel, an acknowledged carcinogen, when 7 miles distant, when Field Carrier Landing Practice (FCLP) was occurring. Jet engines are designed to run most efficiently, and cleanest, at a higher altitude than the average altitude during FCLP. These aircraft are "flying dirty" which contributes further to pollution.</p> <p>All cars and trucks today require evaporation emission controls to minimize hydrocarbon pollutants. I would like to know how the Navy is doing their best to control their hydrocarbon pollution. I understand that fuel dumping still does occur, on average once per month I'm told. It does not matter if fuel dumping occurs at 8000' altitude or if it makes a puddle on the ground - it is hydrocarbon pollution both ways. It needs to be controlled.</p> <p>3) Aircraft flight paths should be over water whenever possible. It's safer for pilots and residents, and it has less of a noise impact. That may well mean a slightly longer flight path.</p> <p>4) Aircraft flight altitude. The incident noise on the ground decreases with the square of the altitude. Twice the altitude results in one quarter the incident sound . Yet aircraft commonly fly over my home at less than the FAA required minimum altitude. And I am located about 5 miles from the Ault Field runway. The Sub surveillance aircraft are comfortable flying 200' above the water to deploy their listening devices. So clearing the treetops closely is not uncomfortable for these pilots.</p> <p>When I spoke to several personnel at the EIS public meeting, I was surprised to learn that many did not know what FAA flight altitude restrictions are. FAA requires an altitude that is 1000' above any highpoint of land within a 2000' radius. Many thought the FAA limit was 1000' above sea level. This is a very basic requirement that should be taught in training the first day. There are points of land 500' in elevation quite close to the base. Flying at 500' above these high points (yet still 1000' above sea level) instead of the required 1500' above sea level (1000' above the high point), means a difference of</p>	<p>Statement for the EA-18G Growler Airfield Operations) discusses the potential for cumulative impacts from the ongoing Growler homebasing EIS and concludes that the training and testing activities proposed in the NWTT EIS/OEIS adequately account for the potential homebasing activity.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>doubling the altitude, thereby decreasing incident noise by one quarter.</p> <p>5) Altitude, flight paths, incident peak and average noise levels should be made available on line to the public, updated weekly. Individual pilots should be monitored and held accountable when deviations occur.</p>	
<p>Verschuyt – 02 (Written)</p>	<p>6) Sonar affects on marine mammals: I have sea kayaked with an area whale 8' to each side of me, and one beneath my kayak. Any of those animals could have flipped their tail and sent me and my kayak 20' into the air, breaking my back in the process. That didn't happen. These are very intelligent creatures that must be respected. They rely on sonar to feed themselves, to locate, and to find each other.</p> <p>I was told at the EIS Training meeting that the Navy sonar levels reach 230 db at 30 meters from the ship. 130 db in air would not only physically hurt us, it would destroy our hearing. This is a logarithmic scale. I would think that 230 db at 30 meters in water is enough energy to melt the meat off the whale's bones, not only ruin their sonar capabilities. I suggest that the Navy do a www.scholar.google.com search of "sonar decibel whale damage". Many of these referenced scientific studies indicate that the Navy is doing great harm. Standing on the ship's deck to look for whales is not adequate protection. Objectively review other's science.</p> <p>Sonar has other weaknesses: Active sonar gives away the source's position to the enemy. I have four suggestions:</p> <p>a) Sonar generating drones could travel in a 2-mile radius with the mother ship, emitting lower level sonar that could be less detrimental to marine mammals. And the exact position of the mother ship would not be conveyed.</p> <p>b) Sharks "read" their environment by sensing electronic qualities of their surrounding prey. They don't use sonar. In this day of extremely sensitive electronics, couldn't the technology giant of the world (USA) develop the electronics to do the same as the sharks - to detect ship, subs, and divers in the area of vulnerability? And thereby do no harm to the marine mammals. Offer a less capable version to all countries, and the harm to marine mammal sonar would end!</p> <p>c) I believe that sonar is less capable of detecting "soft clad" objects like marine mammals. How about "soft cladding" our own subs?</p> <p>d) A ring of low-intensity sonar buoys positioned 30 meters below the surface, protecting our coasts, could surface periodically to relay data to satellite and shore. They could operate on wave power.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p>
<p>Verschuyt – 03 (Written)</p>	<p>7) Transparency to the public: Individual flight path, altitude, calculated incident noise level could be graphically displayed to the public, updated every two weeks following on the internet. In this age of computers, once setup, this could add very little cost to the Navy's operation, and disclosed after the fact, would not affect security. This would serve</p>	<p>Prior to a training exercise, the Navy and USCG issue NTMs and NOTAMs to announce an exercise and to notify the public of potential hazards in the exercise area. In addition, scheduled training will be communicated to the stakeholders, mayors, resource agencies, and fishermen using telephone tree and e-mail (developed by the Navy</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>as an accurate real estate disclosure.</p> <p>Pollution data should also be monitored and made available to the public, including fuel dumps, base fuel storage, and general aircraft operation pollution in the area.</p>	<p>with stakeholders' input) to send, facsimiles to mayors and fishermen and notices on the NOAA and local channels, and emergency management offices.</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual, include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
<p>Verschuyll – 04 (Written)</p>	<p>8) Increased training at NAS Whidbey results in more personnel, and in turn, more school children. I think the Federal government should match local cost per student for each student who lives in housing without a property tax contribution, and that impact fees should be paid to the school district as the student is being taught, not up to 3 years later. Schools cannot borrow money, and shouldn't need to.</p> <p>9) Many community functions from which Navy personnel benefit, are supported by sales taxes generated in the County. The Federal government should reimburse the local community for sales taxes not collected at the Navy Exchange, Commissary and other facilities. This Navy "perk" is part of personnel compensation, and should be born by all Americans, not just those of Island County or the local community.</p> <p>Pollution data should also be monitored and made available to the public, including fuel dumps, base fuel storage emissions, and general aircraft pollution in the area.</p> <p>10) Finally, I would like to stress the "carrying capacity" of NAS Whidbey. Not only the NAS Whidbey facilities capability, but the surrounding community quality of life must be considered. I believe that the latter has been exceeded right now, even without the projected two Growler squadrons increase and without the projected training of pilots from foreign countries. Is it possible to "spread the wealth" - to base some of the Navy training elsewhere? This could bring noise and pollution levels back to the tolerable range.</p>	<p>Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.</p>
<p>Verschuyll (Oral)</p>	<p>Compared to some of these other people, I'm a newbie here. I've only been here 20 years. But I've seen, what is apparent to me, an increase in noise and traffic. And I live in a fairly quiet area of Oak Harbor on Northeast Hammond. I have a few things that I'd like to comment on tonight in the way of food for thought and constructive input. I'm just going to go through these. Simulators: Do you folks have the best simulators that you could bring forth and are available to minimize noise and safety issues? I know that for commercial aircraft there are some pretty fancy simulators out there. They do a lot of</p>	<p>As stated in the Final EIS/OEIS in Section 2.5.1.4 (Simulated Training and Testing), the Navy currently uses computer simulation for training and testing whenever possible (e.g., command and control exercises are conducted without operational forces); however, there are significant limitations and its use cannot completely substitute live training or testing.</p> <p>The NWTT EIS/OEIS does not include airfield activities under the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>training and that could protect not only the residents around the base but also pilots, and it would decrease costs for the aircraft operation. Do you have, as part of your training proposal, limits that someday you can see for yourself that you can't just grow and grow and grow on the impacts of the community and you need to spread to other places and maybe have more elbowroom? Do you define, do you analyze what those limits are to what is too much perhaps? I realize that you're there to protect Americans and our country and I applaud you for that, but I think that you need to do it on the micro as well as the macro level. What about foreign country training? Two additional Growler responders are proposed for this training. Smith Island is a possible fuel area landing practice. I know it's not long enough in itself, but there are some very shallow waters to the northeast of it that might be used for a touch-and-go landing strip. That would solve a lot of noise and problems. I'm concerned about air quality. I've had experiences hiking in Deception Pass and I could smell the jet fuel. I know that's a known carcinogen, and I think we've got to watch that. I know in the newspaper that you limited flights during weekends and festivals for Coupeville, and I wonder if you could afford that same courtesy to the folks around Oak Harbor. Thank you for listening to my comments.</p> <p>After listening to what people have said, some things have come to mind and some thoughts. I have two that I'd like to share. One is that taken to an extreme the good things become bad and there's a cutoff point where you can overdo anything, I don't care how much you love it. Up here it's nice and then it becomes not nice. So there are limits in life to things that happen. I think when there are complaints from Port Townsend and La Conner and Camano Island and Coupeville and Oak Harbor, you start to wonder. So I'm here to ask you to analyze that. There was one gentleman that spoke about it needs to be done. I think spreading the wealth, the load and the training over more parts of the country would decrease the load on this area and still might serve the Navy's needs. My second thought is, we all have a tendency to justify our own actions. As an old man, I can say I recognize that. So if you study from within and justify what you do to the marine mammals or increasing training because you've got good reason to want to increase training, you need to have an objective analysis of what you're doing made by an outside party in order to come to a balance that looks at it not only within but from outside the area. Thank you.</p>	<p>Proposed Action. Those activities, which are covered under separate analysis, are included in the NWTT Cumulative Impacts chapter.</p> <p>Regarding air quality, the potential impacts from the proposed activities are discussed in Section 3.2 (Air Quality). Based on the analysis presented in Section 3.2 (Air Quality) and the analysis presented in Section 4.4.4.1 (Greenhouse Gases), the changes in air quality would be measurable, but would still be below applicable standards and guidelines; therefore, the incremental contribution of the proposed activities to cumulative greenhouse gas impacts would be low.</p>
<p>Verschuyt – 01 (Electronic)</p>	<p>4) Aircraft flight altitude. The incident noise on the ground decreases with the square of the altitude. Twice the altitude results in one quarter the incident sound. Yet aircraft commonly fly over my home at less than the FAA required minimum altitude. And I am located about 5 miles from the Ault Field runway. The Sub surveillance aircraft are comfortable flying 200' above the water to deploy their listening devices. So clearing the treetops closely is not uncomfortable for these pilots. When I spoke to several personnel at the EIS public meeting, I was surprised to learn that many did not know what FAA flight altitude restrictions are. FAA requires an altitude that is 1000' above any highpoint of land within a 2000' radius. Many thought the FAA limit was 1000' above sea level. This is a</p>	<p>The NWTT EIS/OEIS does not include airfield activities such as those described in the comment; these are not part of this Proposed Action. Those activities, which are covered under separate analysis, are included in the NWTT Cumulative Impacts chapter.</p> <p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>very basic requirement that should be taught in training the first day. There are points of land 500' in elevation quite close to the base. Flying at 500' above these high points (yet still 1000' above sea level) instead of the required 1500' above sea level (1000' above the high point), means a difference of doubling the altitude, thereby decreasing incident noise by one quarter. 5) Altitude, flight paths, incident peak and average noise levels should be made available on line to the public, updated weekly. Individual pilots should be monitored and held accountable when deviations occur. 6) Sonar affects on marine mammals: I have sea kayaked with an orca whale 8' to each side of me, and one beneath my kayak. Any of those animals could have flipped their tail and sent me and my kayak 20' into the air, breaking my back in the process. That didn't happen. These are very intelligent creatures that must be respected. 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I think the Federal government should match local cost per student for each student who lives in housing without a property tax contribution, and that impact</p>	<p>is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).</p> <p>It is important to note that the sound levels used in underwater sounds are referenced to 1 micropascal (μPa), whereas sound in the air is referenced to 20 μPa, so comparing in-air sound levels and in-water sound levels is not as simple as comparing decibel levels of each. For example, see Tables 3.0-3 and 3.0-4 in the NWTT Final EIS/OEIS, where a gunshot in air (referenced to 1 μPa) is measured at 140 dB, and a dolphin click in the water (referenced to 20 μPa) is measured at up to 219 dB.</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p> <p>The Navy conducted a full analysis of the potential impacts of military expended materials on marine resources and has proposed several mitigation measures to help avoid or reduce those impacts. The analysis is contained throughout Chapter 3 (Affected Environment and Environmental Consequences) of the Draft and Final EIS/OEIS (e.g., Section 3.3.3.2.1, Impacts from Military Expended Materials discusses marine habitats). For example, military expended materials related to training exercises under Alternatives 1 and 2 would not impact more than 0.00009 percent of the available soft bottom habitat annually within any of the range complexes. The Navy has standard operation procedures in place to reduce the amount of military expended materials (Section 5.1.4.2, Weapons Firing Range Clearance), including recovering targets and associated parachutes to the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>fees should be paid to the school district as the student is being taught, not up to 3 years later. Schools cannot borrow money, and shouldn't need to.</p>	<p>maximum extent practical. In addition, the Navy has developed mitigation areas (Section 5.3.3.2, Seafloor Resources) to avoid and reduce potential impacts of military expended materials on seafloor habitats, including coral and hardbottom habitats.</p>
<p>Verschuyf – 02 (Electronic)</p>	<p>Public comments – NW Training and Testing EIS Dear Ms. Kler: I would like to preface my comments with a brief statement: I do appreciate a strong defense. I believe that “mutually assured destruction” is a time-proven way to prevent a major conflict. I also realize that terrorism is a very difficult enemy to fight. I do appreciate the efforts of the US Navy to address this goal. It is a difficult challenge to be successful on all fronts, including the protection of those people you are to defend, on the local, micro level. It is this last point that I would like to offer constructive criticism / concern about: 1) The limits of growth of NAS Whidbey: I have seen an increase in flights and noise, and I suspect pollution, from the Navy activities over the 20 years that I have been here. The Growler aircraft seems much noisier to me. The lower frequency noise is more penetrating and bothersome. This airplane is half rocket ship / half airplane. People come to Cape Kennedy to see a rocket launch – a very noisy event. But if these same people had to experience that noise as frequently as the citizens of North Whidbey do, they probably would not like it. So the question of growth is key to the proposed EIS / Training proposal. The Navy facilities may well have the physical room to grow. I believe that the surrounding community is already beyond its limit of noise and pollution tolerance. Many people from the surrounding community have voiced that opinion. This EIS should study carefully that limit of growth, and the tolerance by the surrounding community. I suggest real world, on the ground noise monitoring in many locations up to a 10-mile radius from the Coupeville and Ault Field runways. I offer my own parcel as one such monitoring station. The ALCUZ, computer generated, average noise level study does not accurately represent real world conditions. Peak sound level readings, along with their duration should be measured, made available to the public, and should comply with OSHA requirements at a minimum. The computer analysis does not seem to compensate for flight path deviations, or for flight altitude that is lower than FAA requirements. 2) Your “Information Manual” addresses pollution from commuters to Ault Field. Allowing Island Transit bussing priority entry to Ault Field would allow these same busses to maintain schedule, and would encourage the use of public transit. This bus route was deleted in history because the busses could not maintain schedule. Another aspect of pollution increased by training is from the aircraft activities themselves, and the fuel storage on Base. I have smelled jet fuel, an acknowledged carcinogen, when 7 miles distant, when Field Carrier Landing Practice (FCLP) was occurring. Jet engines are designed to run most efficiently, and cleanest, at a higher altitude than the average altitude during FCLP. These aircraft are “flying dirty” which contributes further to pollution. All cars and trucks today require evaporation emission controls to minimize hydrocarbon pollutants. I would like to know how the Navy is doing their best to control their hydrocarbon pollution. I understand that fuel dumping still does occur, on average once per month I’m told. It does</p>	

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	not matter if fuel dumping occurs at 8000' altitude or if it makes a puddle on the ground – it is hydrocarbon pollution both ways. It needs to be controlled. 3) Aircraft flight paths should be over water whenever possible. It's safer for pilots and residents, and it has less of a noise impact. That may well mean a slightly longer flight path.	
Verschuyl – 03 (Electronic)	9) Many community functions from which Navy personnel benefit, are supported by sales taxes generated in the County. The Federal government should reimburse the local community for sales taxes not collected at the Navy Exchange, Commissary and other facilities. This Navy “perk” is part of personnel compensation, and should be born by all Americans, not just those of Island County or the local community. Pollution data should also be monitored and made available to the public, including fuel dumps, base fuel storage emissions, and general aircraft pollution in the area. 10) Finally, I would like to stress the “carrying capacity” of NAS Whidbey. Not only the NAS Whidbey facilities capability, but the surrounding community quality of life must be considered. I believe that the latter has been exceeded right now, even without the projected two Growler squadrons increase and without the projected training of pilots from foreign countries. Is it possible to “spread the wealth” – to base some of the Navy training elsewhere? This could bring noise and pollution levels back to the tolerable range. Respectfully submitted, Tim Verschuyl	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
Verschuyl – 04 (Electronic)	I was never told that my NWTT EIS comments would be limited to 500 characters. That is inadequate. Please furnish an email address where I can offer my comments as an attachment. I have gone through much effort to make 10 comments. You may categorize them each appropriately if you like. I would like to have some confirmation that my constructive comments have been heard. This system is not giving me that confirmation.	Thank you for participating in the NEPA process.
C. Viertel (Electronic)	I do not believe that using sonar explosives in an environment where many animals depend on the use of sonar for their survival is ethical or moral. Damage and death to whole species could be the result. Sadly, even though there is a public comment provided because the Navy is required to, I doubt that there is the moral courage existing within this project to put the higher good of other earth species ahead of a military project	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
W. Viertel (Electronic)	The deafening and killing of marine mammals by increased Naval sonar and weapons training activities is immoral and unacceptable. To propose otherwise is to demonstrate that the Navy has lost sight of its central mission, to serve and protect, which applies not only to the citizenry but to our marine environment in which the citizenry lives as well. The Navy needs to remember for whom they work and stop this cruel and damaging activity.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Vogele (Electronic)	Stop any and all ocean seismic testing!	Thank you for participating in the NEPA process. However, this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
Volckmar (Electronic)	Avoid this training in the actual ocean. It will be cheaper and totally ecologically safe if you do it on simulators. You will avoid harm to living beings and to the Navy's reputation. My comment pertains to all of the subjects in the subject list.	Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Volk (Electronic)	The Tea Party and the Occupy Movement are united in their bipartisan stand against the Federal Reserve in league with the military/industrial complex profiteering from the irreparable damage being done by enlarged Naval weapons exercises in the Atlantic, Pacific, West Coast to Hawaii, and California to Alaska missile exercises destroying numerous species of whales. The Federal Reserve and its cronie the military/industrial complex are ignoring the Will of the People by profiteering from this needless environmental destruction.	Thank you for participating in the NEPA process.
von Sager Meister (Electronic)	I don't know why I'm bothering with this as I'm old enough to have witnessed all government agencies and military branches doing exactly as they damn well please with little regard for the results of rigorous scientific research, costs to humans and/or other organisms nor long (or short for that matter)-term damage to anything at all as long as their interests are served. Time to pay attention folks...believe it or not-we're all in this together.	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Vosburgh (Electronic)	PLEASE no more sonar testing!! You are killing everything!!	Thank you for participating in the NEPA process.
Vrsaljko (Electronic)	If there is evidence that underwater noise might be harming ocean life, it should be stopped. If there is a less invasive method of sounding that could be researched, that ought to be supported. Protecting wildlife is a major part of protecting me, if that's the motive in all of this. Sincerely, -Anthony V.	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. The Navy funds monitoring and research that can include dedicated Marine Mammal Observers (see the reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Waid (Electronic)	Madness....madness....madness!!! UNNECESSARY, corrupting...and ultimately,...profoundly COUNTERPRODUCTIVE madness!!! STOP IT NOW!!!	Thank you for participating in the NEPA process.
Wainwright (Electronic)	My comments center around the Whidbey Air Naval Base in Oak Harbor. I realize that this is a Naval Base, but one which concentrates on planes rather than ships. I never understood the reasoning behind the need to use explosives and sonar on a base that has nothing to do with the sea in its programs. I feel that there are many Naval Bases that undoubtedly qualify for the need to experiment with such weapons.....but a Naval AIR Base??? And on Whidbey Island which attracts tourists because of its whale population??? This would ultimately destroy an attraction which supports many retail shops and accommodations. I feel the impact on the economy would be devastating.	<p>This Navy's Proposed Action includes continuing to train and test with sonar and explosives, as it has for decades. Regarding explosives, the Navy maintains Explosive Ordnance Disposal (EOD) units at most Navy facilities, Naval Air Station Whidbey Island (NASWI) included. It is important for those units to maintain training currency locally. Other Navy units in the area utilize explosives, and for safety it is important that EOD personnel are trained to render safe any explosives used.</p> <p>Regarding sonar use, many of the aircraft stationed at NASWI include</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>anit-submarine warfare as their primary mission area, requiring them to train frequently using air-deployed sonar systems called sonobuoys. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>WAITE (Electronic)</p>	<p>Sonar is deadly to whales, and pier side testing kills whales. When will the Navy drop 30 year old sonar in favor of modern technology. We are fighting the same battle in Coastal Georgia, but this time our whale population is only 450 and the habitat is critical. Stop it.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Wakefield (Electronic)</p>	<p>There is no dispute that the Navy’s use of mid-frequency sonar can kill, injure, and disturb marine mammals. The Navy’s analysis that says “99.9 percent of the animals affected will experience only temporary behavioral effects that do not result in injury” has not been proven. It is conjecture. The Navy’s mid-frequency sonar has been implicated in mass strandings of marine mammals in, among other places, the Bahamas, Greece, the Canary</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Islands, and Spain. Even when sonar and explosive use does not result in these or other kinds of physical injury, it can disrupt feeding, migration, and breeding or drive whales from areas vital to their survival. The double whammy of sonar/explosions combined with radiation from the Fukushima Daiichi nuclear disaster could create hitherto unknown disastrous effects. Has that been taken into account? I am sure it has not. This testing program is immense ... and very costly. The tax-paying public will pay to replace all the bombs, missiles and other arsenal used for these live fire exercises; we will pay heavily for the environmental degradation of ocean, land and air; we will pay very heavily for the collapse of the marine mammal, fish and bird populations. The DOD budget needs to be cut. Expensive, damaging non necessary exercises like this should be one of the first to go.</p>	<p>is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Walat (Oral)	<p>Thank you for having me here tonight. I think my major concern is the impact on the environment and it's primarily what we don't know. We do know that we have some really important threatened and endangered species here, including the southern resident orcas. We know that their population decreases all the time. We don't know really what's causing that. With the lack of that information, I feel like we need to be extremely prudent with adding introduced environmental stressors. It seems to me that there has been evidence that acoustic, really loud noises and other acoustic disturbances has had an effect in the past on marine mammal groups. We also know that while I greatly appreciate what the Navy and the military do, we know that wars come and go and extinction is forever. So while that may sound trite, the impacts that are happening may be around for a long time. So whatever the Navy can do that limits this impact, I think is really important that you do that. It's a matter of, while I think it's great the Sailors can be home and not have to go out to sea; to me, it's more important to protect species than it is to do that. Also, I think the alternatives provided in the information is really not clear to be able to assess what the difference is, what this change is in new weaponry and new systems. So I don't know what that means; maybe somebody here can tell me. Thank you.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Walkeapaa (Electronic)	<p>"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales". Listen to what it sounds like, then imagine that underwater where it is amplified, and it explodes your ear drum and you have no doctor or help. This is cruelty to many animals and endangered species.</p>	<p>EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
<p>Walker (Electronic)</p>	<p>Please take into consideration the protection of marine life as you do your military testing. I feel confident that there are places that are considered shelters where marine life colonize that you could avoid while doing your warfare exercises. We all have a responsibility to protect the life of those around us, including marine life. Thank you kindly, Catherine</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.
Walters (Electronic)	I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I am also opposed to all and any use of Sonar/Mines/Explosives in the Oceans. The destruction to our marine eco system which includes all living plants, marine life and continental shelves and slopes will be the ultimate destruction to our planet. There are no alternatives for testing in the Ocean waters. Sincerely, Kathleen Walters Resident of Earth	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Walton (Electronic)	Please do not cause harm to Marine Life they deserve better! Thank you	Thank you for participating in the NEPA process.
Warkentin (Electronic)	Every day I look at the sky and pray that our military will stop the poisoning of the atmosphere, the killing of animals and humans, for what? It appears that you have now slipped into serving international banker elites and scientists getting their jollies feeling false power, when in fact they really are the saddest most pathetic sort of human being who has never experienced the beauty of love and nature. I would ask you to please stop serving this worst side of human nature and just think for a minute how beautiful it could be if the poisoning and "full spectrum dominance" of nature and humanity would stop and you would start contributing to the protection of love and beauty. The possibilities could be the most wonderful thing one could ever imagine. Most sincerely, Wanda Warkentin	Thank you for participating in the NEPA process.
Warner	I am writing to oppose the Navy's plans to renew/resume bombing activities in the Pacific Northwest. There is mounting evidence that marine mammals are injured and killed by	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	<p>these activities. I am particularly concerned about the impacts on the endangered Southern Resident Killer Whales who are in precipitous decline due to a number of environmental circumstances. It is time that the Navy find ways to test its defense systems in ways that no longer harm the environment and the animals and people that rely on these environments for our survival.</p>	<p>as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Warnock (Electronic)	<p>The Navy's NW Training Range stretches from the inland marine waters of Puget Sound in Washington to Northern Mendocino County. The range extends seaward approximately 300 miles and encompasses an area the size of the entire State of California. These west coast waters are some of the most biologically significant and productive marine areas in the world, home to both abundant and threatened species of marine life, including six endangered whale species (blue, fin, humpback, sei, sperm, and Southern Resident killer whales), threatened Steller sea lions, threatened and endangered salmon and steelhead, and endangered leatherback sea turtles. Some of the mid-frequency sonar systems the Navy employs are capable of generating sounds in excess of 235 decibels. A normal human conversation takes place at 60-70 decibels; a loud rock concert is about 115 decibels; permanent hearing damage for people can occur from short-term exposure to 140 decibels. The decibel scale is a logarithmic scale, and each ten-decibel rise along the scale corresponds to a ten-fold increase in power: a sound measuring 130 decibels is ten times more intense than a 120 decibel sound, a sound of 140 decibels is 100 times more intense, and a sound of 150 decibels is 1,000 times more intense. A whale's keen sense of hearing is vital in every aspect of its life history, including foraging for food, finding mates, bonding with offspring, communicating with other members of their species, navigating through lightless waters and avoiding predators. Experts agree that exposure to sonar blasts can cause serious injury or death from hemorrhages or other tissue trauma. Whales can also suffer from temporary and permanent hearing loss, displacement from preferred habitat, and disruption of feeding, breeding, communication and other behaviors essential to survival. In 2003, the USS Shoup, exposed endangered Southern Resident killer whales to mid-frequency active sonar in Haro Strait west of San Juan Island in Washington State for several hours that peaked over 180 db and averaged 169 db. A video of the incident is available here: http://www.youtube.com/watch?v=O9gDk29Y_YY Under the Endangered Species Act,</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy-marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>“Take” of a protected species means more than death of a single animal. “Take” also includes actions that harass or harm protected species, and harm includes “significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering.” 50 C.F.R. § 222.102.” The Marine Mammal Protection Act contains a definition of “Take” that applies to all marine mammals. A take includes actions that cause either “Level A” or “Level B” Harassment. Level A Harassment are acts that injure or could injure a marine mammal. Level B Harassment are acts that disturb or could disturb a marine mammal by causing disruption of natural behavioral patterns, such as migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered” The National Marine Fisheries Service has given the Navy a permit that allows 650,000 takes of marine mammals over a five-year period. This means that the agency believes there will be 650,000 instances when a marine mammal is harmed, and multiple takes of the same animal is specifically anticipated The California Coastal Commission ruled unanimously against the Navy in March 2013 saying that the military did not have adequate information concerning their potential impact and that they were underestimating their figures. There has been a long history of lawsuits and federal intervention. The Southern Resident Orcas of Puget Sound have endangered species recognition. The 80 Orcas that live in our waters face multiple challenges – PCB contamination that threatens their ability to reproduce, increasing ocean noise levels caused by increasing human activities, daily harassment from whale watching boats, problems finding an adequate food supply (they like chinook salmon), other toxicity sources from run-off, air pollution, and chemicals used to treat water in sewage treatment plants. The EIS draft that the Navy has offered concerned citizens to review acknowledges that Naval activities will add to the burdens Orcas face. Scientists working on Navy contracts (Ketten 2012) have presented findings that claim an inconsequential impact of Low and medium range sonar. What the USS Shoup was doing in Haro Strait in 2003 clearly shows whales being harmed by sonar. Hearing loss resulting from auditory fatigue could effectively reduce the distance over which animals can communicate, detect biologically relevant sounds such as predators, food fish, and echolocation. The duration, magnitude, and frequency range of hearing loss will affect survivability and reproduction. Alternatives presented in the EIS process include conti</p>	<p>(www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures identified in Navy instructions such as the Environmental Readiness Program Manual include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p>
Wasserman (Electronic)	We must protect our marine life!! Please consider conducting training exercises at least 100 miles away from our shoreline! Thank you! Janet Wasserman	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive mitigation measures to protect the marine environment while training and testing for nearly a decade.</p> <p>As explained in Section 2.5 (Alternatives Development) of the</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.
Waters (Electronic)	Bombing and use of sonar in the waters off western Washington puts endangered species of Orca whales at risk. My comment is to not proceed until further research is conclusive on how to protect Orca Whales and other marine wildlife from these intrusive exercises.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Waters (Written)	I am writing to strongly oppose Any & All Naval testing in our and All oceans. The Environmental impacts are detrimental to our oceans it's inhabitants and the extended effects to our above water environment and Humans! You play with fire and eventually you burn. Where is your human conscience? Aren't you ashamed of the damages already done by you?	Thank you for participating in the NEPA process.
Watts (Electronic)	Just a quick note to express my serious concerns about sonar testing in the waters off of the Pacific Coast. Knowing that much research has shown the devastating effects of this activity on various marine species makes me join with those who wish to halt it until safer alternatives can be found. Thank you. Marilyn Watts Ocean Park, WA	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Weaver (Written)	With no restrictions in place the NMFS gave the Navy in 2010 a 5 year permit to increase military training exercises, despite knowing the terrible and sometimes fatal harm to marine mammals by sonar. That permission should not be extended in 2015 or in the future pertaining to the specific use of sonar.	Thank you for participating in the NEPA process.
Weiss (Written)	The main financial income within the NWTT study area is tourism & fishing. Both would be absolutely jeopardized by NWTT. This includes the yearly MENDOCINO WHALE FESTIVAL in march. Is our government really prepared to put most of our local population on welfare? A couple of years ago a dead blue whale landed on these shores. Its death was linked to sonar explosions which disoriented the whale. Also, we are known for one of the most hazardous coasts in the world. Please reconsider the proposed action. IT IS INSANE!	Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Wessman (Electronic)	I suffer from Electromagnetic Sensitivity Disorder and Jammers that are plugged into APU's create a strong electromagnetic field that causes me a great deal of pain. I can site many areas of the US where 2% of the population are bothered by this medical condition. I have no objection to training, other than potential sealife problems, but would	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	offer a mitigation potential for me and others who suffer from EMS, which is often accompanied by Fibromyalgia, an illness the NIH has recently recognized as not being psychiatric in nature. Mitigation for me would be the purchase of my home, situated near the PX in Marysville, WA at a price of \$549,000 to re-locate me to another area. My home would be more than suitable for military command personnell and is located centrally to where said personnell must be. Thank you for your consideration. Lynda Wessman	this project. Electronic Warfare (EW) training and EW Range enhancements were analyzed in the Navy's NWTRC EIS/OEIS, completed in 2010. When more information became available on mobile and fixed signal transmitters for the EW Range, the Navy prepared the EW Range EA to analyze placement and operation of those transmitters. The Navy completed the EA and issued a Finding of No Significant Impact on 28 August 2014. The introduction of the land-based transmitters to enhance existing training will not harm people, animals, or the environment. The Navy has decades of experience building and operating signal equipment, with no adverse effects to people, animals, or the environment.
Westhusing (Electronic)	Please stop the practice of using explosives and high frequency sound waves in the ocean. Our oceans are in extreme peril with food sources drying up and marine animals dying. It has to be stopped now. You are the ones who can stop it now. Thank you. Jana Westhusing	Thank you for participating in the NEPA process.
Weston (Oral)	Good evening. My name's Chris Weston. I'm a landowner, taxpayer, activist, citizen. It's my pleasure here to address you. I believe that it's important that we consider the impacts of our -- all of our actions on the environment that we live in. The military, unfortunately, is a fact of life. I wish it weren't so. I hope within my lifetime we'll get to the point where we don't have a military. I don't believe that we need to have a military. But we do have a military. And therefore we have such meetings with the Navy. And in fact, my grandfather served in the Navy; other members of my family as well. However, why do we need to persist in causing damage to marine mammals? Okay. I spent a fair bit of time before this assembly talking with the experts, with Commander Matthew, as well as Conrad and Joy and others. I recognize that you try to use the best science to minimize the possibility of causing marine damage, based on how you choose where to -- to drop the munitions. However, my contention is that not enough is done. Of course we need to minimize use of actual live munitions to the absolute minimum. That has been mentioned repeatedly by other speakers. Simulation ought to be used to the greatest extent possible and to minimize the actual munitions. My concern is, because your studies show that there would be zero take, that means zero deaths and damage, I believe that there's been insufficient study to understand the true impacts on the marine mammals. Furthermore, we understand in science that there's always a chance of error. There's never a hundred percent probability that you're not going to cause damage. So there will always be some chance of damage. I believe in science. I believe that we can learn to utilize technology. When you absolutely have to do munitions, there should be warning methods. I understand that there have been attempts to create warnings for other species. I believe they've been insufficient. I believe that we can do this. If we can put a man on the moon,	The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications). Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	we can communicate warnings to other species. There will be a time -- this is my prediction -- there will be a time when marine mammals will be considered to be people. This is the land where we do not consider corporations to be people, but we do consider marine mammals to be people. Thank you.	presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
Ann White (Oral)	Hi. I -- I just -- I like the Navy. I grew up in a Republican family, and, you know, we're -- I like to be protected. But you guys have been, you know, causing great harm to sea creatures for a long time. When I was in Hawaii 20 years ago, I remember you doing the sonar and the whales were beaching themselves. And this has gone on over and over and over. And there's so much information about this. And I just, you know, what juncture are you going to -- you know, I mean, why do you have the simulation if you're not going to use it? I -- I -- I mean, really. You know. Anyway, I just can't believe it. You know, I'd like to respect you, but I'm -- you know, and -- but it's all falling apart. I don't know what else to say. I hope you rethink this and use your simulation and leave everything alone, because we're destroying the ocean.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. Regarding the use of simulation, Navy already uses simulation in training and testing whenever possible; please see the discussion presented in Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities).
A. WHITE (Electronic)	There is no reason to use the North Coast for sonar testing and other disruptive and dangerous actions. You could contain these activities up in Washington and not endanger and harm ocean inhabitants up and down all of the West Coast. Do you really think it is right to spend tax dollars destroying our already at risk ocean? I would like to have respect for the Navy and hope you will think about this matter carefully and use some common sense. Sincerely. ANN WHITE	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
M. White (Electronic)	Are you kidding me? We already have a very sensitive habitat for our local whale populations. No sonar testing in sensitive cetacean areas should be allowed. Just no. That is all. I can't believe anyone would even be discussing this possibility.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>considered dynamic and subject to change based on any new information as well as, “existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS’ identification of BIAs. The same marine mammal density data present in the Navy’s Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>
T. White (Electronic)	I support the planned Navy exercises and hope that some of it is visible from shore.	Thank you for participating in the NEPA process.
Whitesavage (Electronic)	Let's kill the ocean. That is what the Navy will be doing if they continue with their proposed sonar testing. This practice blatantly violates the Environmental Protection Act. This planet cannot support a human population with a dead ocean. Killing off the top predators such as whales and dolphins, seals and other cetaceans with sonar testing and explosives will do just that. National security should focus on measures that can heal our environment and maintain healthy ocean fisheries. It is ridiculous for the most powerful military force on earth to concentrate on military maneuvers when a greater threat is environmental. No amount of military force will feed a starving planet when our oceans are gone. My tax dollars at work? I am disgusted and frustrated with this senseless inane violent military plan. I support the NRC in this fight.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Wieland (Electronic)	I'm concerned about the impacts of the proposed activities on all marine mammals, particularly the endangered Southern Resident Killer Whales. Some of these activities would take place in what has already been designated as critical habitat for these whales, whose population currently numbers 80, it's lowest count in over a decade. From recent winter satellite tagging efforts by NOAA, it is clear that they also spend a lot of time in the	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>Strait of Juan de Fuca and near shore along the outer coast. We are learning more every year about the negative impact of sonar and other loud underwater noise on marine mammals. These whales often travel together in large groups and are facing many other challenges - quite simply, a single catastrophic event involving sonar or other explosives could easily wipe out any chance this distinct population segment has for recovery. While I understand the importance of training our nation's troops and testing new equipment, I strongly believe these activities need to be balanced with preserving one thing that makes our nation great in the first place: our amazing whales and other wildlife. I urge a "No Action" decision, unless significant measures are put into place to protect the Southern Residents and other marine mammals. For instance, visual and acoustic monitoring for whales should occur before activities commence, and sonar or explosive related exercises should stop if the whales enter the area. I hope you will take these comments into consideration. Thank you.</p>	<p>is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>As part of the Navy's effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species' entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, "existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information."</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS' identification of BIAs. The same marine mammal density data present in the Navy's Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p> <p>The mitigation measure that the comment suggests, of visual and acoustic monitoring for whales prior to activities commencing does occur. Lookouts can visually detect marine species so that potentially harmful impacts to marine mammals and sea turtles from explosives, sonar and other activities use can be avoided. Lookouts can more quickly and effectively relay sighting information so that corrective action can be taken. Support from aircrew and divers, if they are involved in the activity, will increase the probability of sightings, reducing the potential for impacts. For more information on Lookout Procedures, please see Chapter 5, Section 5.3.1 of the EIS/OEIS. When marine mammals have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals. Actions may include changing speed or direction, subject to environmental and other conditions (e.g., safety, weather). The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Wienecke-Friedman (Electronic)	To Whom it May Concern, Please find a more suitable location for training exercises. The expanded NW training range would have a very negative effect on the resident orcas of the region. Their population is already so fragile, they do not need one more obstacle. Thank you, Jennifer	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>As explained in Section 2.5 (Alternatives Development) of the EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the Proposed Action, and would therefore be unreasonable.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.mil/speciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p>
Wiggins (Electronic)	You cannot do this. You will immense harm to marine life and animals especially dolphins, whales and Orcas. We do not need any more extinction or suffering of these animals. Thank you, Jana	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
J. Williams (Electronic)	I believe that this arrangement - the plans to use the Pacific Ocean for sonar and weapons testing. As we all know, sonar testing has been known to disrupt the behavioral patterns of migratory sea life, especially whales and dolphins. That, and the detonation of under water missiles and bombs is an obvious and indiscriminatory killer that we cannot tolerate. It appears very sneaky that the Navy is trying to have this done with as little noise as possible, being "swept under the radar" so to speak. I only happened to hear about it from a friend the night before the event, as it was not well advertised.	<p>The Navy made significant efforts at notifying the public to ensure maximum public participation during the scoping process. The public scoping period for the NWTT EIS/OEIS began with the issuance of the Notice of Intent in the Federal Register on 27 February 2012. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 27 April 2012. On 28 February 2012, postcards were mailed to 1,925 organizations and individuals on the NWTT project mailing list, which was compiled, validated, and updated from previous Navy NEPA projects in the Northwest. Postcards included the scoping meeting dates, locations, and times. Three press releases were distributed by the Navy Region Northwest Public Affairs Office to media outlets, elected officials and other potentially interested parties.</p> <p>The news releases were distributed on 27 February 2012, 5 March 2012, and 15 March 2012, respectively, and announced the intent to prepare an EIS/OEIS and provided notice of the open house information sessions. The press releases included information about the Proposed Action and its purpose and need; open house information session locations, dates, and times; and project website and comment submittal information. A notification flier was distributed to 37 locations in Washington, 18 locations in Oregon, 26 locations in Northern California, and 7 locations in Alaska to be posted in areas frequented by the local community. The flier provided information on the Proposed Action, open house information session locations, dates and times, project website and information on comment submittal. The fliers were mailed on 8 March 2012 and follow-up phone calls were made to ensure posting. Nine scoping meetings were held on March 13, 14, 15, 16, 19, 20, 22, 23, and 27, 2014 in the cities of Oak Harbor, WA; Quilcene, WA; Silverdale, WA; Aberdeen, WA; Tillamook, OR; Newport, OR; Eureka, CA; Fort Bragg, CA; and Ketchikan, AK, respectively.</p>
J. and D. Williams	We find it unbelievable that the Navy must kill, injure and disrupt the lives of countless marine animals for more and more testing and teaching. Don't you remember what you have learned from past testing. Why is killing more animals acceptable? Who gave you	No mortalities of marine mammals are anticipated as a result of the Proposed Action. The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	the right to kill these animals placed on this earth for all of us to enjoy and appreciate. Why is it o.k. for you to do this? Why more explosives under the water? Don't you know what they will do from past testing? Will they not do the same damage this time as last time? Isn't this redundant, and a waste of our military dollars as well as the waste of live animals and destruction of their waters? Who is minding the store at the U.S. Navy? Shame on all of you. Very truly yours,	training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Wilson (Oral)	Hey, guys. I just want to say thanks for your service to the country and giving them the years that you have, giving us the years you have, working on your jobs. That being said, I do have concerns. One of you guys' representatives informed me, in connection with my concerns, these actions, that only 10 percent would happen in our nearby coastal waters and the rest would happen up north in Alaska and Washington and Oregon. I'm still concerned about up north too, as well as, when those practices turn into actual war around the world, what's going to happen out there, you know? And I guess I got a quote for you. "Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves. All things are bound together. All things connect." I think that's kind of apropos.	We share your concern for the environment, and are renewing our impact assessments as the state of the science improves.
Wolski (Electronic)	"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific	Your opposition to the Proposed Action is noted; however, the Navy's concern for the environment and specifically marine life must be balance with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Northwest. It's time to end the Navy's war on whales".	<p>to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marin-species-monitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Wood (Electronic)	Please no sonar and explosives testing that can impact marine mammals. I strongly oppose the U.S. Navy's I proposal to increase training and weapons testing activities – including sonar and explosives – off the coasts of Alaska, Oregon, Washington and Northern California. The proposed training and testing is scheduled to take place from 2015 to 2020. Multiple studies show that impacts from this sort of testing can cause whales and dolphins to abandon important habitat, halt foraging behavior and forgo critical feeding opportunities they need to survive. This testing and training should be done in a far more environmentally responsible way that eliminates the unnecessary infliction of harm to countless whales, dolphins and other marine species by excluding areas critical to marine mammal foraging and feeding.	Your opposition to the Proposed Action is noted; however, the Navy's concern for marine life must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.
Woodard (Electronic)	Many marine mammals rely on their sense of sound and sound perception for survival, which these sound testings will severely disrupt. Mass strandings and dead sea mammals washing ashore have been found in many other zones for underwater sound testing activities. We should focus instead to preserve the unique and beautiful marine ecosystems in the Northwest.	The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Currently sonar is the best technology for locating small objects in the water that we possess. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.</p>
WoodConstable (Electronic)	I am highly concerned about the sonar testing and what it apparently does to whales. We need to find a balance between protecting the whales and training our troops. In the area of the Southern Resident Killer Whales, the mysterious death of L112 from blunt force trauma while traveling through active military practice zones suggests that we may not be heading in the right direction.	<p>Please see Section 3.4.3.1 (Acoustic Stressors) to understand how sound and sonar may affect whales and other marine mammals. Note that there had been no Navy training using sonar for at least 2 weeks prior to the stranding and that the cause of death for L112 in February 2012 was most likely the result of a vessel strike, although the investigation by NMFS remains open (see the NMFS website for more details [www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/l112_stranding_report_2.html]). Also note that it is incorrect to characterize the shipping lanes just north of the Columbia River as "active military practice zones" since there was no training ongoing in that area. There are only a few Navy vessels intermittently operating out of the Puget Sound area, while conversely there are annually thousands of commercial vessels moving in those shipping lanes. In short, the death of L112 has no relation to the proposed continuation of Navy training and testing in the area. Regarding your overall concern with the use of sonar, please see the science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities). Based on the research and monitoring that has been accomplished over the last 8 years, the Navy believes that long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area.</p>
D. Worley (Electronic)	Please do not undergo weapons testing, especially in regions that are utilized by so many critically endangered cetaceans and pinnipeds. It does not reflect well on the military whose job it is to protect this nation and its peoples. These animals are a part of this	Thank you for participating in the NEPA process.

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	country and are very important to its people. Thank You.	
E. Worley (Electronic)	Dear Navy, I am making a comment to urge you not to go through with your proposed sonar testing on the north coast of California! I feel that this will be detrimental to the marine mammals. Please, please do not harm or kill these animals. Thank you, Elena Worley	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>The Navy is not proposing to conduct training or testing activities in or near Eureka, California. The proposed Study Area begins 12 nautical miles off the coast of California, so the closest that any activities would occur to Eureka is at least 12 nautical miles. Historically, activities within 50 nautical miles of the coast of California are extremely rare, and that pattern is expected to continue under this Proposed Action.</p>
Wright (Oral)	Good evening. I'm Jeff Wright, and I'm humbled speaking after Rockey speaking on behalf of the -- for the first nations of the first peoples in this hemisphere, and I think of all the people who speak here tonight his words should be taken above all of the rest of us. I hope that you will pay particular attention to his comments. Speaking of comments, it is difficult to condense in three minutes the two feet of documents, one foot of document in two separate documents. I have not yet received documents that I've requested each time that I've been to these hearings, although I think that that will be forthcoming. I hope so. The concern I have is that every time the process goes through I'm left off the list. I don't have a computer... ask Ed Snowden why. The comment period, and I'm understanding that there may be some extension, but I think that we all need more time to go through those huge documents and have some semblance of being able to narrow it down to a three-minute commentary and even writing. I think somebody could get arthritis just writing comments on this document. The costs were bought up. The costs of the document and getting out the hard copy. Not to be mean or sarcastic -- well, I don't know how else to put it, but when you weigh the cost of those documents, as much as they are, versus the costs of these war games, versus the cost of the whole military industrial	<p>The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>complex, I think it's incomprehensibly minuscule to make that comparison, and I would hope that that shouldn't even be an issue as far as costs. Anybody who requests hard copy documents should be given them forthwith yester second. The Tsunami. I observed that Tsunami from Fukushima. Interestingly enough, we're almost to the -- we're on the cusp of the three-year anniversary of that. I watched it from the Noyo bridge here. I saw that Tsunami come in 11 hours from the other side of the Pacific Ocean. It turned the Pacific Ocean into a sloshing bathtub. And it made me realize how tiny this marvel that we're floating in, this universe really is. The reason I bring it up is because of what is now coming ashore up in Vancouver Island, the Cesium-137, Cesium-134 from the Fukushima nuclear power plant going into the otters up there. And the point being here that what crosses a whole ocean is comparable to the "Sonarmi" -- if I may make a play on the word Tsunami with Sonar, how it affects and gets across the ocean to the sea creatures, to the whales, dolphins and so forth. All the creatures are affected by it. I'm very concerned about how that may affect these creatures and that really needs to be looked at very seriously. I think that there's a virtual alternative that hasn't been looked at. In other words, war games could maybe be done more on computers. And to wrap up, I'd like to point out that you -- you all, when you're on your naval missions, spend too much time away from home and it adversely affects your family. You all need to be home with the human species at home to be with your family and to better all of us. I'd like to see the mission be chasing BP out of the Gulf coast and protecting us all. Thank you.</p>	
<p>Wygal (Electronic)</p>	<p>I beg of you to please use exclusion zones to protect what few whales and dolphins we have left. If you kill them you/we are no better than the Japanese and their lame excuse of "scientific purposes". Sincerely, Jessica P. Wygal</p>	<p>No mortalities are anticipated as a result of the Proposed Action. The Navy acknowledges that its actions may harm individual marine mammals; it is not expected to harm populations.</p> <p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures including the avoidance of specific areas. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the NWTT Study Area and the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.4 (Mitigation Measures Considered but Eliminated) presents Navy consideration of similar area</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		restrictions. The Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in identified biologically important areas.
Wyner (Oral)	Thank you for being here, but it's a little disappointing that questions aren't answered, but maybe there will be a hearing. That would be a question. Will there be a time when questions that are asked will be answered in a public forum so that we have questions? Not everybody is here at this meeting tonight so one of the questions would be can the time be extended? I know it ends on the 25th, but I'd like to really recommend that the time for public hearing be increased and maybe everybody can write to their senators and legislators and say we need more time and more public input. Some people are just finding out about it now. One of the questions would be along the testing route -- testing route the migratory whales go up, but if there's testing in San Diego with the bombs and whatever explosives then they go up to Mendocino, there's testing of the bombs, then they go up to Oregon. Each time it's not just one testing that they're facing but it seems like there's a cumulative effect from California to Alaska. So I'm wondering along with individual testing, testing spots is the cumulative exposure to all that, the testing, being evaluated? Is it being monitored and how so? And is there an independent group monitoring, not just Navy or Navy contractors and people working for the Navy? So I'm just wondering will that be addressed. Thank you very much.	<p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis (Chapter 4). The Navy has returned to the analysis in Chapter 4 due to concerns raised in public comments, and the Chapter has been revised in response to those public comments.</p> <p>The original 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and was extended on 25 March 2014 (79 FR 16317, also in Appendix B, Federal Register Notices) for an additional 21 days. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements.</p>
D. Young (Electronic)	The U.S Navy must finally adapt to changing seas and a dying ocean. We must make sure the navy stops killing and finally starts saving our seas. We must realized by saving the whales, we will also save humans. Enough of this harmful practice.	Thank you for participating in the NEPA process.
K. Young (Electronic)	"I am writing in opposition to the Navy's proposed expansion of their Northwest Training Complex. I want to begin by opposing pier side sonar testing that would take place in an ESA listed habitat for resident orcas not to mention the many other cetaceans, marine mammals, and ocean life living close to the shorelines. Increasing these tests dock side is out of the question. There is no limit to the damage and deaths it will cause. I also oppose and increase in underwater charges, increased war games using sonar, and explosion of underwater mines. "Alternative 1 includes some activities that were not analyzed in previous documents. New activities being considered include: "Use of new and existing unmanned vehicles and their acoustic sensors, in support of homeland security and anti-terrorism/force protection. This type of training is critical in protecting the nation's military and civilian harbors, ports and shipping lanes. Use of 0.50-caliber blanks in Puget Sound in support of force protection training of the Navy's Maritime Expeditionary Security Force. Addition of a biennial maritime homeland defense mine countermeasure training exercise in Puget Sound and analyzing the amount of time acoustic sensors are used during that event". All of the above expansions are unacceptable. I am supporting NO ACTION ALTERNATIVE and a slow departure of the Navy from the Puget Sound area and Pacific Northwest. It's time to end the Navy's war on whales".	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. To clarify, the proposed action includes pierside</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>testing only occurring at Naval base locations when ships are docked there. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navy.marinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under U.S.C. Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.</p>
Youngblood (Electronic)	<p>Dear Sirs, I do NOT want to see weapons testing occurring on the North Coast of California. I live on the North Coast and this area is one of the few pristine habitats left in the U.S. The practice of weapons testing would disrupt wildlife, the fisheries industry, and the residents of this region. PLEASE, find another spot to test your weapons, OR, use weapons that have already been tested. Our ability to kill and destroy is not in question. Our ability to preserve and protect vital marine habitat is very much in question. Thank you for your service to our fine nation. I truly appreciate that you are trying to do what is best. But this isn't it. ~Karla Youngblood</p>	<p>As described throughout Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS, the Navy's proposed activities would have no significant impacts to any resources, including marine, terrestrial, or socioeconomic resources. All proposed training and testing near Northern California would occur at least 12 nm off the coast and typically 50 nm or further.</p>
Yseth – 01 (Electronic)	<p>I understand the importance that the navy plays in protecting this country. However, it would be a great disservice to the Pacific Northwest to renew bombing and sonar permits. The bombing range is in a protected marine habitat that house porpoises, sea lions, gray and humpback whales, as well as an endangered population of orcas. When dropping bombs, there is now way to tell what animals may be injured. There is no way to ensure their safety. Also, sonar exercises severely limit an orcas ability to hunt for and locate food, a vital skill for survival in the wild. Please consider the wellbeing of these intelligent marine mammals. Thank you.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS. The Navy has conducted training and testing in the Study Area regularly for decades. Though the intensity of live training may increase slightly, the events are of relatively short duration. We believe we have shown in Chapter 3 that marine ecosystems will not be affected as a result of the Navy's activities.</p> <p>Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
Yseth – 02 (Electronic)	<p>Please do not expand the NW Training and Sonar. It is in the critical habitat of endangered southern resident orcas, and it cannot be proven that navy exercises do not harm orcas.</p>	<p>The Navy shares your concern for marine life, but this concern must be balanced with the purpose and need for Navy training and testing as detailed in Chapter 2 (Description of Proposed Action and</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		<p>Alternatives) of the EIS/OEIS. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p>
<p>Zavala (Electronic)</p>	<p>I am asking you to NOT renew your permits for testing in the waters where Orca whales live. I have visited the Orca whales on Ferry Boats in Puget Sound and via whale watching excursions into the San Juan Islands and Victoria Canada. The Orca whales there had babies and members kidnapped years ago for SeaWorlds forced captivity and slavery and now the Resident Orca population is down to only 80 whales. After dead orca were found with their bellies slices and rocks put inside to sink them, outrages locals enacted laws to make it illegal to take any more or the area whales. They are the most protected orca. But The whales have PCBs in their fat and so have been chemically contaminated. In short, for many reasons they are an endangered species. The Navy is now one of the reasons they are endangered as your underwater testing causes whales near testing to beach themselves after receiving internal injuries. This is a beautiful area where the whales live but salmon population is down so whales struggle to feed themselves and forage in many different areas just to survive. There is no knowing where the whales may be at any given time because they must change in order to find enough food. There should be no more testing and no facility built that would endanger the natural ecosystem of the Salish sea. Puget sound is already contaminated enough and the areas around the San Juan Islands are pristine , I have seen them and they would be spoiled by Navy testing sites or Navy construction. The whales live in the ocean and have no choice but to do so. The Navy has a choice and should stop testing and NEVER renew testing permits. I do not say this lightly. I care very much for the Orca whales I have seen and the ones I have never seen. All of the Orca taken from Puget sound by Seaworld are dead except for Lolita in Miami Florida whom we are trying to return to her endangered group. Lolita will need a safe place to swim free of Navy testing, after 40 years of performing for tourists in Miami. She deserves better than what the Navy will supply with continued deadly bombs in the water and sonar testing. Please stop now before it is too late. There have been no new Orca babies born this year. It is a sad urgent situation. There are so many things making it harder for these poor Orca to survive and the Navy needs to take</p>	<p>The Navy shares your concern for the environment and specifically marine life, including orcas. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no documented proof of injuries to marine mammals.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at the Navy website (www.navymarinespeciesmonitoring.us/) and from the NMFS Office of Protected Resources website (www.nmfs.noaa.gov/pr/permits/incidental.htm#applications).</p> <p>Best management practices include measures that regulate operations to ensure compliance with pollution emission requirements and general resource conservation goals. Navy policies and procedures</p>

Table I.4-5: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<p>this as their number 1 reason for NOT renewing their testing permits. I want to see more whales not less. Granny the Orca is 100 years old and deserves to have the waters danger free from Navy testing. another resident orca is missing, Speaden. Presumed dead. Unknown reason. A fin whale washed up dead on Seahurst beach in Seattle Washington last year. why? How is the US Navy allowed to do testing in waters containing endangered species and so near international waters. I say NO. stop the testing now because the Orca and the environment are more important than testing. Even if the testing is for the benefit of all mankind it has to come second to the Habitat of the Orca and the pristine waters around San Juan Islands. There are additional animals besides Orca whom your tests could potentially harm. The photo of the space Needle with a Navy ship nearby made me feel sick. Yes I have visited the USS Constellation nuclear aircraft carrier while it was docked in Bremerton Washington. My brother was stationed on that ship. I am not against the navy. I am against underwater testing because too many pilot whales, dolphins and Orca whales have beached themselves, and died, when Navy testing has happened nearby. That is the truth and you know it. It is time for such barbaric consequences of your testing to stop because You are the one to stop it now. I hope that you hear the voices who are speaking up for the Orca and other marine mammals because they have no voice except for us. There may be few of us because many do not know what you are doing or that there is time now to protest and ask you to kindly stop. The starfish are dying near Seattle? almost melting away. Nothing like this has ever happened before. why? You do not realize how fragile the eco system is and it all works together. When you disrupt the area with Navy testing you do not know the environmental damage that you cause and that can continue for years or forever because of the changes you made to the habitat. The Navy has to be accountable for the threat to endangered species like the Resident Orca and also financially accountable and stopping testing will save the American people money. USA can not afford frivolous testing in this economy. Everyone needs to cut back and this is a perfect area to cut since it endangers marine mammals and the environment. It threatens tourism in the area. It endangers human fishermen in the area. It probably contributes to the pollution or chemical changes in the ocean that are contaminating the marine mammals. If the Orca in this area die, it would be a tragedy. You can save this endangered species. Ban testing now. Thanks</p>	<p>identified in Navy instructions such as the Environmental Readiness Program Manual include directives regarding waste management, pollution prevention, and recycling, all of which benefit sediments and water quality in the ocean. Any procedures or practices that benefit ocean sediments and water quality in turn benefit all marine life in the ocean, from plants and invertebrates, to fish and marine mammals.</p> <p>Wildlife-dependent recreational activities, such as wildlife viewing, or whale watching, are discussed in Section 3.12 (Socioeconomic Resources). The impacts of the training and testing activities in NWTT on tourism are discussed in Section 3.12.2.3 (Tourism). No negative effects to tourism activities in the Study Area are expected from proposed training and testing activities. Therefore, loss of revenue or employment associated with tourism is not expected to occur.</p> <p>The Navy has conducted training and testing in these operating areas regularly for decades. The Proposed Action does not include construction, as discussed in Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS. Though the intensity of live training may increase, the events are of relatively short duration and therefore we do not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant.</p> <p>Most commercially important fish species are not believed to hear mid- and high-frequency sound sources that make up the majority of sound producing activities.</p>
Zontek (Electronic)	Please adhere to the requests of the Center for Biological Diversity with respect to your sonar testing. Thanks.	Thank you for participating in the NEPA process.
Zuvich (Electronic)	Please Allow more private applicable studies! The proof of this testing etc. is on the Beaches, Dead or @ the bottom of the oceans! How about marine die off in many forms maybe even Microscopic. Please study further. Marine life in all forms are dying @ an alarming rate. Thank You for consideration of this urgent message. SMZ	The Navy only uses the best available and peer-reviewed published science to write their documents, as that is the standard accepted by the regulatory agencies with oversight of the resources in the Study Area.

I.4.1 FORM LETTER

The Navy received a CD-ROM from the Center for Biological Diversity containing approximately 9,700 versions of a letter from their supporters. Table I.4-6 provides the Navy’s response to the letter itself. The response to the letter was prepared and reviewed for scientific and technical accuracy and completeness.

Table I.4-6: Response to the Form Letter from Center for Biological Diversity

Comment	Navy Response
<p>I am writing with serious concern about the Navy's proposed use of sonar in the Northwest Training Range. Marine mammals are extremely sensitive to noise, and sonar destroys important habitat and disrupts the essential behavior of killer whales, blue whales, harbor porpoises and other marine wildlife.</p> <p>In 2004 the Navy's sonar was implicated in a mass stranding of as many as 200 melonheaded whales in Hanalei Bay, near Hawaii. And in 2003 the USS Shoup exposed a group of endangered orcas to sonar in Washington's Haro Strait, causing the animals to stop feeding and attempt to flee the painful sound.</p> <p>The Navy must first consider an alternative that puts key biological areas off limits to testing and training activities, and that mitigates and reduces the impacts of training and testing on the region's valuable wildlife.</p> <p>Please -- as you continue to provide for our country's defense, find a way to train that respects and protects our natural resources and our ocean's sensitive wildlife.</p>	<p>The Navy shares your concern for the environment and specifically marine life. The analysis and the science show that there is not a significant impact on the environment, including marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks. The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively impacted marine mammal populations in the Study Area or at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities.</p> <p>Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations.</p> <p>Some of the information presented in this comment regarding the Hanalei Bay and Haro Strait strandings is incorrect. See the discussion of the events in Section 3.4.3.1.8 (Stranding) and in the cited U.S. Department of the Navy (2013c), "Marine Mammal Strandings Associated with U.S. Navy Sonar Activities" technical report available at the website www.NWTTEIS.com.</p>

Table I.4-6: Response to the Form Letter from Center for Biological Diversity (continued)

Comment	Navy Response
	<p>As part of the Navy’s effects analysis, the Navy considers all the science that identifies locations where certain cetacean populations or individuals are known to engage in feeding, breeding, or other biologically important activities at certain times of year. Recently, NMFS has taken steps to begin formally identifying some of these areas and naming them Biologically Important Areas (BIAs). The Navy has considered these areas as part of its analysis in this Final EIS/OEIS when discussing particular species in Chapter 3 (Affected Environment and Environmental Consequences) as well as in considering whether limitations on Navy activities in these areas are warranted as mitigation in discussion in Chapter 5 (see Section 5.3.4.1.11, Avoiding Marine Species Habitats and Biologically Important Areas). The Navy thoroughly considered biologically important areas identified recently in its analysis and whether avoidance as mitigation was appropriate. Given the impact avoidance would have on military readiness activities and lack of biological benefit, avoidance is not warranted. Please see Section 5.3.4.1.11 (Avoiding Marine Species Habitats and Biologically Important Areas). However, Navy is proposing to provide reporting of generally low use of sonar in some of these areas to NMFS as part of classified annual reports to help inform future adaptive management related to impacts in these areas. At time of release of this Final EIS/OEIS, NMFS and Navy are in ongoing discussion regarding mitigation for MMPA purposes. Should additional mitigation to that which Navy has proposed be identified in the MMPA rule making and authorization, it will be indicated in the ROD. It is important to note that the BIAs were not meant to define exclusionary zones, nor critical habitat with regulatory management, nor were they meant to be locations that serve as sanctuaries from human activity, or areas analogous to marine protected areas. The NMFS-identified BIAs do not have direct or immediate regulatory consequences and the BIAs located within the NWTT Study Area are not the only areas used for feeding, migrating, or reproductive activity for these cetaceans in a species’ entire range and habitat. The stated intention is for the BIAs to serve as a resource management tool and their currently identified boundaries be considered dynamic and subject to change based on any new information as well as, “existing density estimates, range-wide distribution data, information on population trends and life history parameters, known threats to the population, and other relevant information.”</p> <p>There is a lack of science supporting identification of any additional BIAs at this time for the Pacific. The Navy and NMFS have supported and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap), which informed NMFS’ identification of BIAs. The same marine mammal density data present in the Navy’s Density Database Technical Report, and used in the analysis for this EIS/OEIS, was used in the development of BIAs. The final products, including U.S. West Coast BIAs from this mapping effort, were completed and published in March 2015.</p>

Individuals who submitted the form letter made their own amendments, additions, changes, and editorial remarks. Most repeated the concerns spelled out in the Center for Biological Diversity letter, or expressed general opposition to the Proposed Action; others were related to the topics described below. The Navy has responded to these additional comments in Table I.4-7.

Table I.4-7: Responses to the Additions and Changes to the Form Letter as Submitted by the Center for Biological Diversity

Comment Topic	Response
Request for the Navy to use either passive sonar or active sonar on a frequency that doesn't affect marine life.	<p>Currently, sonar is the best technology available that can help keep Sailors safe from mines and hostile submarines. The Navy's sonar systems are designed to operate in a number of different frequency ranges, depending on the requirement for each system. For example, mid-frequency active sonar is ideal for detecting large objects like submarines at the greatest possible distance; while locating an underwater mine typically requires a higher frequency sonar. Marine life is also very diverse, with different species using—and potentially being affected by—sounds across a wide range of frequencies.</p> <p>As discussed in various locations in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring; for an example, see specifically Section 5.3.2.1.2.1) of the EIS/OEIS, the Navy already makes use of passive acoustic detection when available and appropriate. Passive acoustic monitoring would be conducted with Navy assets, such as passive ship sonar systems or sonobuoys, already participating in the activity.</p>
The Navy must follow our nation's environmental laws.	<p>The Navy is completing this EIS/OEIS in compliance with current law, primarily the National Environmental Policy Act (NEPA). In addition to NEPA, the Navy continues to comply with other applicable environmental laws and with a number of regulatory requirements, such as the Marine Mammal Protection Act, the Endangered Species Act, the Coastal Zone Management Act, and the Magnuson-Stevens Fishery Conservation and Management Act.</p>
Use of simulators or computer software to replace training and testing.	<p>The Navy currently uses computer simulation for training and testing whenever possible (e.g., command and control exercises are conducted without operational forces); however, there are significant limitations and its use cannot completely substitute live training or testing.</p> <p>As described in Section 2.5.1.4.1 (Simulated Training) of the EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."</p> <p>The EIS/OEIS also describes the limitations of simulated or software testing as a replacement to testing in the actual environment. From Section 2.5.1.4.2 (Simulated Testing): "Although simulation is a key component in platform and systems development, it does not adequately provide information on how a system will perform or whether or not it will be able to meet performance and other specification requirements because of the complexity of the technologies in development and the marine environments in which they will operate. For this reason, at some point in the development process, platforms and systems must undergo at-sea or in-flight testing. Furthermore, the Navy is required by law to operationally test major platforms, systems, and components of these platforms and systems in realistic combat conditions before full-scale production can occur."</p>

Table I.4-7: Responses to the Additions and Changes to the Form Letter as Submitted by the Center for Biological Diversity (continued)

Comment Topic	Response
The Navy should not test chemicals close to shore.	The Navy is not proposing to test chemicals as part of this Proposed Action. The Navy does conduct training and testing with systems that can influence the chemical composition of the air and water in which they are used. The potential impacts from those activities are discussed in Section 3.1 (Sediments and Water Quality) and Section 3.2 (Air Quality).

I.4.2 PETITION

The Navy received a petition circulated by the Environmental Protection Information Center (EPIC) containing approximately 6,000 signatures. Table I.4-8 provides the Navy’s response to the petition itself. The response to the petition was prepared and reviewed for scientific and technical accuracy and completeness. Individuals who signed the petition added their own remarks. Most repeated the concerns spelled out in the petition itself, or expressed general opposition to the Proposed Action; other additions were similar to the topics described above for the Center for Biological Diversity form letter (see Table I.4-7).

Table I.4-8: Response to the Petition from the Environmental Protection Information Center

Comment	Navy Response
<p>On behalf of the Environmental Protection Information Center (EPIC) and our 19,333 members and online supporters, we request that the Navy rescind the proposed training and testing activities and explore other alternatives to train military personnel that do not put hundreds of thousands of species at risk in the global commons.</p> <p>During the Navy's open public comment period for this project, we were able to gather 6,203 people's names who oppose the proposed training and testing activities. Their names and the petition are attached. Many of the people who signed our online petition also developed their own comments, which are also attached. Mark Matsunaga told us that all of these statements would be accepted as official public comment.</p>	<p>The petition and all signatories to it are available for review at NWTTEIS.com and is included as part of the official public comments.</p>

Table I.4-8: Response to the Petition from the Environmental Protection Information Center (continued)

Comment	Navy Response
<p>On behalf of the Environmental Protection Information Center (EPIC) and our 19,333 members and online supporters, we request that the Navy rescind the proposed training and testing activities and explore other alternatives to train military personnel that do not put hundreds of thousands of species at risk in the global commons.</p> <p>During the Navy's open public comment period for this project, we were able to gather 6,203 people's names who oppose the proposed training and testing activities. Their names and the petition are attached. Many of the people who signed our online petition also developed their own comments, which are also attached. Mark Matsunaga told us that all of these statements would be accepted as official public comment.</p>	<p>The petition and all signatories to it are available for review at NWTTEIS.com and is included as part of the official public comments.</p>
<p>The proposed activities would result in significant harm to whales, dolphins, fish and countless other marine animal species including many species, such as Humpback and Sperm Whales, that are listed as threatened or endangered under the Endangered Species Act. Testing and training activities including the use of explosives, weapons firing, sonar and other acoustic devices would result in risks that would disrupt basic behaviors of marine mammals, including activities necessary for survival such as migration, surfacing, navigating, hearing, nursing, breeding and feeding. For these reasons, the proposed activities would result in violations of the Endangered Species Act by placing threatened and endangered species in jeopardy.</p>	<p>The Navy has consulted with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service pursuant to the Endangered Species Act (ESA). The regulatory agencies responsible for administering the ESA determined that the Navy's proposed activities would not place any threatened or endangered species in jeopardy.</p>
<p>The analysis of effects to marine mammals, especially endangered species is severely inadequate, as the Navy does not disclose anywhere in the EIS the total number of species that will be adversely affected. Upon contacting the Navy's Public Affairs Officer, Mr. Mark Matsunaga asking where we can find total numbers of individual marine mammal species that the Navy would "take" during the proposed activities, he did not know the total number of individual species that would be affected by the proposed training and testing operations, he said that you would have to add up the tables, but he could not specify which tables would need to be added. Knowing this, how can cooperating agencies, concerned public citizens and</p>	<p>The Navy shares your concern for marine life. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Effects to marine mammals can be found in the EIS/OEIS, specifically in Section 3.4, Marine Mammals.</p> <p>Regarding the number of species that may be affected, the Navy has calculated estimates of each species of marine mammal that may receive acoustic energy resulting in a Level A or Level B take, as defined by the MMPA. Those estimates, by species, were provided in the EIS/OEIS in Section 3.4 (see Tables 3.4-17, 3.4-18, and 3.4-24 through 3.4-28). These tables present the estimates broken down by impacts from sonar and impacts from explosives. Those are further broken down by testing and by training, to provide the</p>

Table I.4-8: Response to the Petition from the Environmental Protection Information Center (continued)

Comment	Navy Response
<p>international governments provide accurate assessment of the project and meaningful comments if the documentation fails to disclose the total number of species that will be disturbed or killed? The cumulative effects of this project, combined with the impacts of the Navy's historic and ongoing operations, will significantly harm the environment and endangered species and is not in the best interest of the global commons.</p> <p>We believe that the Navy's analysis of environmental impacts is inadequate and is in violation of several environmental laws for the following reasons:</p> <ol style="list-style-type: none"> 1. Navy does not disclose anywhere in the EIS the total number of species that will be adversely affected, and therefore the EIS does not address total cumulative impacts; 2. The cumulative effects of this project, combined with the impacts of the Navy's other testing ranges and their historic and ongoing operations is not analyzed; 	<p>greatest possible level of detail and allow for meaningful assessment of the Navy's analysis.</p> <p>The Navy used the best available science and a comprehensive review of past, present, and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 (Cumulative Impacts) of the EIS/OEIS.</p>
<p>3. These operations will inflict significant harm the environment and sensitive species and is not in the best interest of the global commons, which is in direct violation of Executive Order 12114;</p>	<p>The Navy is in full compliance with Executive Order 12114, which directs federal agencies to provide for informed environmental decision-making for major federal actions outside the United States and its territories. This EIS is also an Overseas EIS under EO 12114, which covers analysis of impacts to the area beyond 12 nm (including U.S. EEZ and any high seas area) within the study area.</p>
<p>4. The Navy has not followed the proper procedure for consulting with NMFS for the take permits, since the application was submitted to NMFS prior to publishing the FEIS; and</p>	<p>The Navy has followed all procedures associated with obtaining take permits from NMFS. The Navy has been updating NMFS with pertinent information necessary for the regulatory process during the course of EIS/OEIS development, from Draft, to Supplement, to the Final. The timing of the application is not dependent on the Final EIS/OEIS.</p>
<p>5. The Navy has failed to consult with Native American tribes about the impacts of the Navy's activities on traditional tribal use of marine resources as required by the Navy's 2005 Policy for Consultation with Federally Recognized Indian Tribes and the President's Executive Order 13175 on Consultation and Coordination with Tribal Governments (65 Fed. Reg. 67249, November 6, 2000);</p>	<p>The Navy has offered to conduct government-to-government consultation with all American Indian tribes potentially affected by the proposed activities. Consultations are ongoing. The Navy is fully compliant with all applicable regulations.</p>
<p>Activities like dumping debris on the seafloor, spreading toxic chemicals, detonating explosives, and blasting high intensity mid-frequency sonar will significantly degrade habitat areas, including many sensitive habitat areas that serve for countless species, and</p>	<p>The Navy does not propose any activities such as "dumping debris on the seafloor, or spreading toxic chemicals." In the course of the Navy proposed activities (listed in Chapter 2, Description of Proposed Action and Alternatives, of the EIS/OEIS), which do include the use of sonar and similar sound sources as well as underwater detonations,</p>

Table I.4-8: Response to the Petition from the Environmental Protection Information Center (continued)

Comment	Navy Response
that are critical to the health and survival of dozens of marine mammal populations.	<p>some expended materials are left behind in the ocean. The potential impacts of these actions was thoroughly analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS.</p> <p>Based on the analysis, and decades of experience conducting similar activities in the same area, there is no evidence of any habitat areas being degraded. The analysis is contained throughout Chapter 3 (Affected Environment and Environmental Consequences) of the Draft and Final EIS/OEIS (e.g., Section 3.3.3.2.1, Impacts from Military Expended Materials discusses marine habitats). For example, military expended materials related to training exercises under Alternatives 1 and 2 would not impact more than 0.00009 percent of the available soft bottom habitat annually within any of the range complexes.</p>
<p>The proposed mitigation measures will not prevent significant negative impacts to marine species. Human lookouts on the ships and fish finders are inadequate for reducing impacts to marine mammals, as the sonar, expended materials and toxic chemicals would travel beyond the distances that people and fish finders can detect animals. Any approval of Navy training exercises must rely on the best available science and consider the impacts of such activities over the long-term. However, the Navy fails to account for the decades of operations that have negatively affected our oceans, marine mammals, and other species that depend on clean safe waters to survive.</p>	<p>As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of this Final EIS/OEIS.</p> <p>Section 5.3.1.2.5 (Effectiveness Assessment for Lookouts) acknowledges that, due to the various detection probabilities, levels of Lookout experience, and variability of sighting conditions, Lookouts will not always be effective at avoiding impacts on all species. However, Lookouts are expected to increase the overall likelihood that certain marine mammal species and some sea turtles will be detected at the surface of the water, when compared to the likelihood that these same species would be detected if Lookouts are not used. The continued use of Lookouts contributes to helping reduce potential impacts on these species from training and testing activities.</p> <p>While the range of the sonar's detection would travel beyond the distance that Lookouts can detect animals, the range at which sonar is predicted to be able to cause injury to a marine mammal is very short, within 10 meters of the sonar. At such short distances, it is likely any marine mammal would have been detected.</p>
<p>Some questions we would like to have answered are:</p> <p>1. How many total individuals will be harassed, harmed or killed by the proposed project?</p>	<p>First, and most importantly, the Navy does not expect any marine mammal mortalities as a result of its proposed activities. Harassment and exposures as predicted by the Navy's acoustic model are presented as Level A and Level B takes; see Tables 3.4-17, 3.4-18, and 3.4-24 through 3.4-28 in the EIS/OEIS.</p>
<p>2. Where is the Navy prohibited from conducting harmful testing and training operations?</p>	<p>The Navy has conducted active sonar training and testing activities in the Study Area for decades, and there is no evidence that routine Navy training and testing has negatively (harmfully) impacted marine mammal or other resource populations in the Study Area or</p>

Table I.4-8: Response to the Petition from the Environmental Protection Information Center (continued)

Comment	Navy Response
	<p>at any Navy Range Complex. Based on the best available science summarized in the EIS/OEIS Section 3.4.4.1 (Summary of Monitoring and Observations During Navy Activities), long-term consequences for marine mammal and other species populations are unlikely to result from Navy training and testing activities in the Study Area. Please also refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, detailing the procedures and mitigation measures during its training and testing activities designed to reduce impacts to marine mammals from Navy activities. The types and levels of activities proposed, as well as the locations for these activities is described in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS.</p>
<p>3. Why are these operations necessary if these types of operations are already being carried out in other training range complexes?</p>	<p>Other training range complexes are primarily used by forces located near them. For a number of reasons, the Navy requires training and testing locations near where Fleet assets or testing facilities are located. Because of the ships, submarines, and aircraft located in the Puget Sound area, training and testing areas are necessary in and near the Puget Sound. Similarly, other training range complexes generally support the Navy assets based nearby. Section 2.5.1.1 (Alternative Locations) provides additional information regarding the importance of the location.</p>
<p>4. How can cooperating agencies make educated decisions without the complete and final analysis (prior to release of the FEIR)?</p>	<p>It is neither necessary nor required for cooperating agencies (or regulatory agencies) to wait for the Final EIS/OEIS to begin their permitting process on an agency's proposed action. Cooperating agencies, such as NMFS, have been working with the Navy throughout the development of the Draft and Final versions of the EIS/OEIS given separate regulator process schedules. The Draft EIS/OEIS was a complete document, with full analysis of all potential impacts. Each regulator was updated throughout the development of the Supplement and the Final EIS/OEIS, and the Navy provided additional information that was pertinent to each of those regulatory processes.</p>
<p>5. What alternatives have been explored i.e. virtual simulator trainings?</p>	<p>The Navy currently uses computer simulation for training and testing whenever possible (e.g., command and control exercises are conducted without operational forces); however, there are significant limitations and its use cannot completely substitute live training or testing.</p> <p>As described in Section 2.5.1.4.1 (Simulated Training) of the EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."</p> <p>The EIS/OEIS also describes the limitations of simulated or software testing as a replacement to testing in the actual environment. From Section 2.5.1.4.2 (Simulated</p>

Table I.4-8: Response to the Petition from the Environmental Protection Information Center (continued)

Comment	Navy Response
	<p>Testing): “Although simulation is a key component in platform and systems development, it does not adequately provide information on how a system will perform or whether or not it will be able to meet performance and other specification requirements because of the complexity of the technologies in development and the marine environments in which they will operate. For this reason, at some point in the development process, platforms and systems must undergo at-sea or in-flight testing. Furthermore, the Navy is required by law to operationally test major platforms, systems, and components of these platforms and systems in realistic combat conditions before full-scale production can occur.”</p>
<p>If the Navy insists on using live sonar, explosives and other toxic chemicals and dangerous weapons, at the very least, the operations should be concentrated in one small area where the least amount of sea life exists, in a dead zone, and clear boundaries should be set up to protect the rest of our waters from being destroyed.</p> <p>In conclusion, the EIS is severely inadequate, the mitigation measures are pitiful, and the proposed actions would result in violations of several regulations that are in place to protect the environment and species from these types of harmful activities. All of the actions in the NWTR duplicate operations in other ranges and are therefore unnecessary for “training” purposes. The risk is too large; please rescind the proposed training and testing activities and explore other alternatives to train military personnel that do not put hundreds of thousands of species at risk in the global commons.</p>	<p>The Navy is unaware of any such areas, where minimal sea life exists. Importantly, safe and realistic training requires large areas of the littorals, open ocean, and certain nearshore areas. Limiting training and testing (including the use of sonar and other active acoustic sources or explosives) to specific locations (e.g., abyssal waters and surveyed offshore waters) and avoiding areas (e.g., embayments or large areas of the littorals and open ocean) would be impractical to implement with regard to the need to conduct activities in proximity to certain facilities and range complexes. These restrictions would also adversely impact the safety of the training and testing activities by requiring activities to take place in more remote areas where safety support may be limited.</p>

Table I.4-8: Response to the Petition from the Environmental Protection Information Center (continued)

Comment	Navy Response
<p>We the undersigned request that the Navy rescind the proposed training and testing activities and explore other alternatives to train military personnel that do not put hundreds of thousands of marine mammals at risk in the global commons. Please incorporate the comments below into the administrative record for the Northwest Training and Testing EIS/OEIS.</p> <p>The proposed activities would result in significant harm to whales, dolphins, fish and countless other marine animal species including many species, such as Humpback and Sperm Whales, that are listed as threatened or endangered under the Endangered Species Act. Testing and training activities including the use of explosives, weapons firing, sonar and other acoustic devices would result in risks that would disrupt basic behaviors of marine mammals, including activities necessary for survival such as migration, surfacing, navigating, hearing, nursing, breeding and feeding. For these reasons, the proposed activities would result in violations of the Endangered Species Act by placing threatened and endangered species in jeopardy.</p> <p>The analysis of effects to marine mammals, especially endangered species is severely inadequate, as the Navy does not disclose anywhere in the EIS the total number of species that will be adversely affected. Furthermore, upon contacting the Navy's public affairs officer for the project, even this official did not know the total number of individual species that would be affected by the proposed training and testing operations. How can cooperating agencies, concerned public citizens and international governments provide accurate assessment of the project and meaningful comments if the documentation fails to disclose the total number of species that will be disturbed or killed? The cumulative effects of this project, combined with the impacts of the Navy's other testing ranges and their historic and ongoing operations, will significantly harm the environment and is not in the best interest of the global commons, which is in direct violation of Executive Order 12114.</p> <p>Activities like dumping debris on the seafloor, spreading toxic chemicals, detonating explosives, and blasting high intensity mid-frequency sonar will significantly degrade habitat areas, including many sensitive habitat areas that serve for countless species, and that are critical to the health and survival of dozens of marine</p>	<p>See responses to previous comments.</p>

Table I.4-8: Response to the Petition from the Environmental Protection Information Center (continued)

Comment	Navy Response
<p>mammal populations.</p> <p>The proposed mitigation measures are derisory and would result in significant impacts to marine species. Human lookouts on the ships and fish finders are inadequate for reducing impacts to marine mammals, as the sonar, expended materials and toxic chemicals would travel beyond the distances that people and fish finders can detect animals.</p> <p>In conclusion, the EIS is severely inadequate, the mitigation measures are piteous, and the proposed actions would result in violations of several regulations that are in place to protect the environment and species from these types of harmful activities. The risk is too large; please rescind the proposed training and testing activities and explore other alternatives to train military personnel that do not put hundreds of thousands of species at risk in the global commons.</p>	

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