FINAL COMMUNITY INVOLVEMENT PLAN NAS OCEANA VA
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Community Involvement Plan

Naval Air Station Oceana
Virginia Beach, Virginia

March 2020

Final

OMA01181101313OAVO

NAVFAC
Naval Facilities Engineering Command

Community Involvement Plan Organization

U.S. Navy photo by Mass Communication Specialist 2nd Class Alysia Hernandez

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1. Introduction

This Community Involvement Plan (**CIP**) presents the objectives and approach for implementing a community involvement program in support of work being performed under the Department of the Navy (Navy) Environmental Restoration Program (**ERP**) at Naval Air Station (**NAS**) Oceana, Virginia Beach, Virginia.

This CIP is designed to support effective two-way communication between NAS Oceana and local community members for the ERP. Effective communication and timely information exchange are essential for maintaining community understanding and support for NAS Oceana's mission and for implementing a successful ERP. The outreach methods described were developed based on the results of community questionnaires mailed in November 2018. An example of the community questionnaire is included in **Appendix A**.

1.1. Environmental Restoration Program

The Naval Energy and Environmental Support Activity initiated environmental investigations at NAS Oceana in 1984 during an Initial Assessment Study completed to identify and assess sites posing a potential threat to human health or the environment. Field Investigations were initiated at six sites in 1986 during the Round One Verification Step. In 1988, the United States Environmental Protection Agency (**USEPA**) initiated an environmental assessment of NAS Oceana under the Resource Conservation and Recovery Act (**RCRA**), by completing a RCRA Facility Assessment (**RFA**), which identified solid waste management units (**SWMUs**) that had the potential to pose risks to human health and/or the environment. In 1991, following finalization of the RFA, a RCRA Section 3008(h) Administrative Order (Order) on Consent was issued for NAS Oceana. SWMUs identified in the Order were investigated and remediated in accordance with the Order until 1998, when the NAS Oceana Partnering Team, consisting of representatives of the Navy, USEPA, and Virginia Department of Environmental Quality (**VDEQ**), agreed to conduct investigations in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (**CERCLA**), commonly referred to as "Superfund."

The Navy's ERP consists of two programs:

- The Installation Restoration Program (**IRP**) addresses releases of hazardous substances, pollutants, or contaminants that may pose risks to human health or the environment.
- The Munitions Response Program (**MRP**) addresses environmental health and safety hazards from unexploded ordnance, discarded military munitions, and munitions constituents.
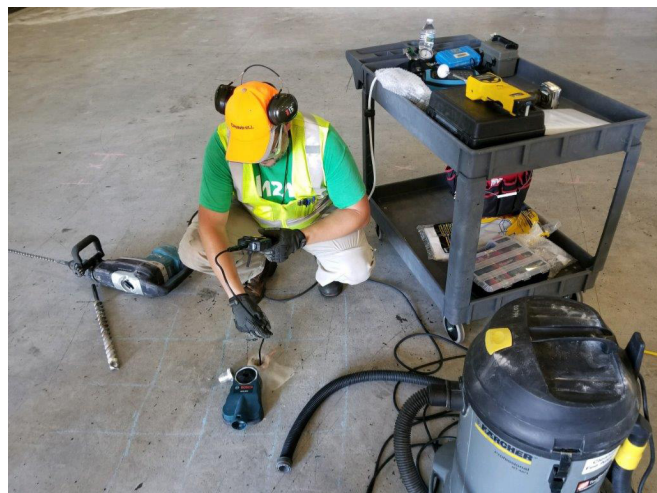
1.2. Community Involvement

The first CIP[1] prepared for NAS Oceana was finalized in December 1991 (NAVFAC, 1991). The CIP was updated in October 1995 (NAVFAC, 1995). This 2019 CIP supersedes the 1995 CIP Update. Federal and state laws provide opportunities for community involvement throughout the environmental restoration process. Naval Facilities Engineering Command (**NAVFAC**) Mid-Atlantic and the NAS Oceana Public Affairs Office will work in partnership with USEPA and VDEQ to meet these requirements and ensure implementation of the community involvement activities outlined in this CIP.

Acronym Use

To make this document more readable, acronym use has been limited. Acronyms that are used repeatedly appear in bold the first time they are used and are listed below:

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIP	Community Involvement Plan
CNIC	Commander, Navy Installation Command
CVW	carrier air wing
EE/CA	Engineering Evaluation and Cost Analysis
ERP	Environmental Restoration Program
IRP	Installation Restoration Program
MRP	Munitions Response Program
NAS	Naval Air Station
NAVFAC	Naval Facilities Engineering Command
POC	Point of Contact
PP	Proposed Plan
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
SWMU	Solid Waste Management Unit
USEPA	United States Environmental Protection Agency
VDEQ	Virginia Department of Environmental Quality

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1   The term "Community Relations Plan" was replaced with "Community Involvement Plan" after the publication of USEPA's 2002 *Superfund Community Involvement Handbook*.

2. The Community

This section describes NAS Oceana's setting within the local community.

2.1. Community Profile

2.1.1. Location

NAS Oceana is located approximately 4 miles from the Atlantic Ocean. The Base is approximately 6,000 acres and is located in the City of Virginia Beach. **Figure 1** illustrates the general location of NAS Oceana.

2.1.2. Surrounding Community

The City of Virginia Beach is located within the Hampton Roads area in the southeastern portion of Virginia and is surrounded by the Atlantic Ocean to the east, by the Chesapeake Bay to the north, by the City of Chesapeake to the west, and by North Carolina to the south. The northern area of Virginia Beach is densely populated with a lot of tourism at the Atlantic oceanfront. The southern portion of Virginia Beach is more rural and contains mostly active agricultural land and the protected Back Bay National Wildlife Refuge and False Cape State Park along the Atlantic Ocean shoreline. Another point of interest is the First Landing State Park, encompassing 2,900 acres. Located off Highway 60 and open year-round, the park has cabins, campsites, and picnic areas (NAS Oceana, 2018).

2.1.3. Base Land Use

NAS Oceana is a master jet base devoted to ensuring fighter and attack squadrons on aircraft carriers of the U.S. Atlantic Fleet are ready for deployment. There are five carrier air wings (**CVWs**) based at NAS Oceana: CVW-1, CVW-3, CVW-7, CVW-8, and CVW-17, along with 16 fleet F/A-18 strike fighter squadrons homeported at NAS Oceana. The aforementioned units make up the deployable units at NAS Oceana. The shore units at NAS Oceana are the Strike Fighter Wing Atlantic, Strike Fighter Weapons School – Atlantic, Navy Landing Signal Officer School, Fleet Readiness Center Mid-Atlantic, Strike Fighter Squadron 106 (Gladiators), Fighter Squadron Composite 12 (Fighting Omars), and the Fleet Logistics Support Squadron Five Six 56 (Globemasters) (NAS Oceana, 2018).

2.1.4. Parks and Recreation

The community surrounding NAS Oceana provides a variety of indoor and outdoor activities, shown on **Figure 2**. Indoor activities of particular interest include the Virginia Museum of Contemporary Art, Virginia Aquarium and Marine Science Center, American Indoor Karting,

FIGURE 1
NAS OCEANA SITE MAP

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Bow Creek Recreation Center, and Seatack Recreation Center. Outdoor activities include Ocean Breeze Waterpark, Motorworld, Hunt Club Farm, Bow Creek Golf Course, the Virginia Beach Farmers Market, the West Neck Creek Park, and First Landing State Park. Motorworld is an amusement center with go-kart tracks, paintball, mini-golf, and various other small attractions. Hunt Club Farm is a petting farm with seasonal events including the Farm Camp for children, Haunted Hunt Club Farm Halloween Festival, Hunt Club Farm Fall Festival Fair, Hunt Club Farm Winter Market, and various other events. There is also a Tourist Information Center located in Virginia Beach that provides additional information about points of interest in the area.

2.1.5. Medical Facilities

Nearby medical facilities include Sentara Virginia Beach General Hospital and Sentara Princess Anne Hospital, as well as local urgent care facilities and doctors' offices in Virginia Beach. The locations of the hospitals are shown on **Figure 2**.

2.1.6. Schools

In the 2018-2019 school year, the Virginia Beach Public School System, which includes 12 high schools in the city, served a population of approximately 68,624 students (VDE, 2019). The dropout rate in 2018 was 3.8 percent. The Virginia Beach campuses of East Coast Polytechnic Institute, Regent University, Stratford University, Tidewater Community College, and the Virginia Beach Center for Higher Education are located in the City of Virginia Beach and are shown on **Figure 2**. In Virginia Beach, an estimated 34.8 percent of residents aged 25 and over have a bachelor's degree or higher (U.S. Census Bureau, 2019).

2.1.7. Drinking Water Sources

Drinking water at NAS Oceana and most of the surrounding properties is primarily supplied by the City of Virginia Beach. A handful of private groundwater drinking water wells are also located on private properties within the vicinity of NAS Oceana. Four public water supply wells are also located in the vicinity of NAS Oceana: two wells at restaurants located east and south of the Base and two wells at one campground located southeast of the Base.

The depth of private drinking water wells is unknown, but the wells are likely screened in the Yorktown aquifer. The Virginia Beach water supply source includes Lake Gaston in Brunswick County and surface water treated at the City of Norfolk Moores Bridges Water Treatment Plant. The Norfolk water supply source includes Lake Prince and Western Branch Reservoir in Suffolk and Lake Burnt Mills in Isle of Wight County. Additional sources may be used to supplement the drinking water supply, including four deep wells

FIGURE 2
NAS OCEANA LOCATION
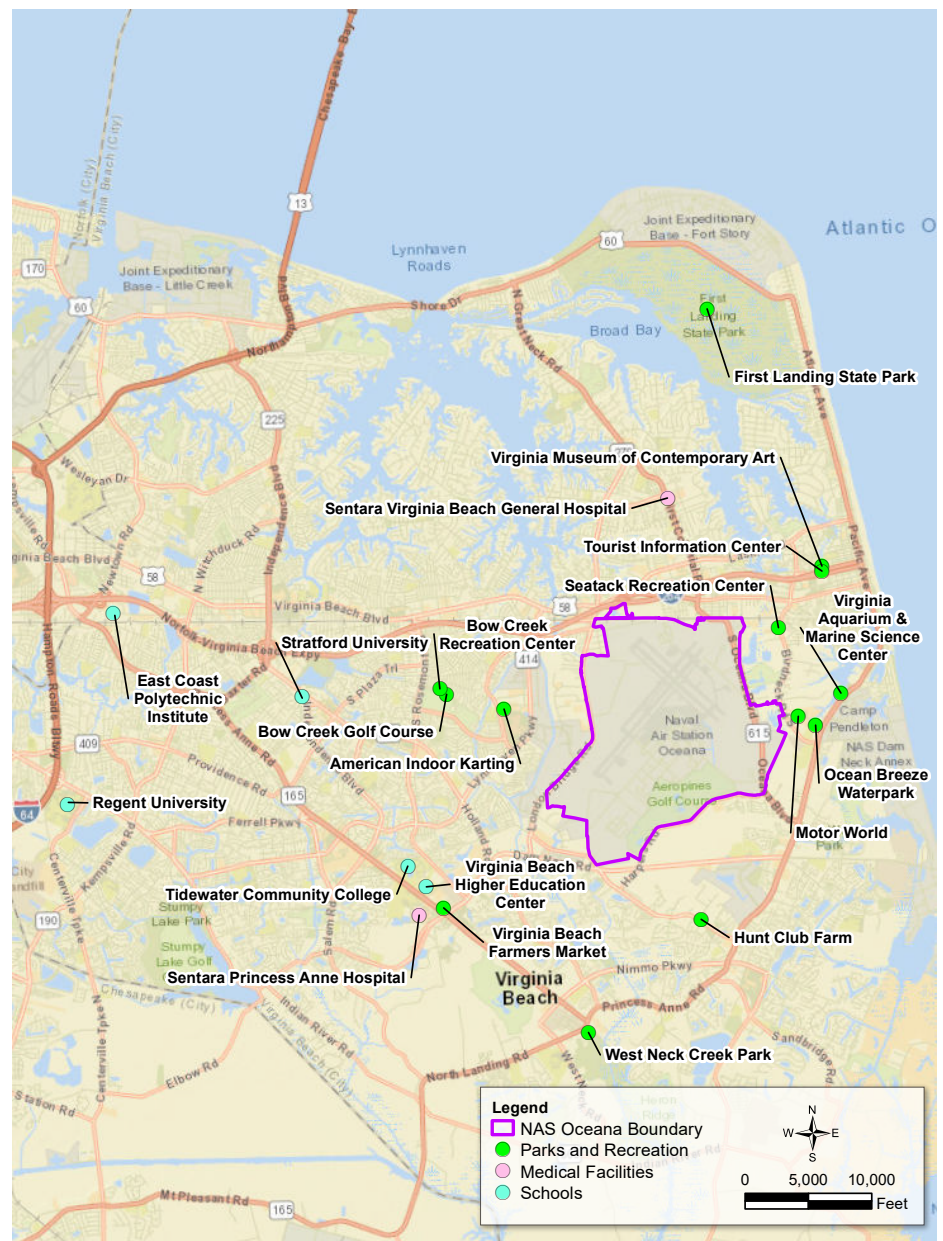
near the aforementioned lakes, the Blackwater River, the Nottoway River, and additional lakes located in Norfolk and Virginia Beach.

2.1.8. Population

The overall population of Virginia Beach was 437,994 during the 2010 U.S. Census and increased to an estimated 450,189 in 2018 (U.S. Census Bureau, 2019). This 2.8 percent growth in population from 2010 to 2018 is most likely due to the construction of new housing developments on former farmland in the southern parts of the city, in addition to condominiums near the oceanfront, and the creation of new jobs within the city of Virginia Beach and surrounding cities. **Table 1** presents the population data for Virginia Beach compared with the Commonwealth of Virginia.

2.1.9. Employment and Income

NAS Oceana is a major contributor to the City of Virginia Beach, as one of the largest employers. The Base provides a total economic impact of approximately $2 billion annually (NAS Oceana, 2018). The total direct payroll is nearly $1 billion annually.

The unemployment rate in the City of Virginia Beach is approximately the same as the unemployment rate for the Commonwealth of Virginia, as shown in **Table 2**.

TABLE 1
U.S. CENSUS POPULATION DATA

	Population 2010	Population 2018 (estimated)	Population Change 2010–2018
Virginia Beach	437,994	450,189	2.8%
Virginia	8,001,024	8,470,020	5.9%

Source: U.S. Census Bureau, 2019.

TABLE 2
UNEMPLOYMENT RATES

	Unemployment Rate January 2010	Unemployment Rate January 2019	Percent Change 2010–2019
Virginia Beach	7.1%	3.1%	-4.0%
Virginia	7.9%	3.2%	-4.7%

Note: Data is not seasonally adjusted.
Source: U.S. Bureau of Labor, 2019.

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3. Community Issues, Concerns, and Preferences

This section describes the history of community involvement activities at NAS Oceana and previous community issues, concerns, and preferences.

3.1. History of Community Involvement at NAS Oceana

One of the primary goals of the CIP is to provide opportunities for involvement to members of the local communities interested in or affected by environmental activities. A Technical Review Committee for the NAS Oceana ERP was established and then converted into a Restoration Advisory Board (**RAB**) in 1994 to increase the opportunity for the local community to participate in the ERP process. The first NAS Oceana RAB meeting took place on January 12, 1995. Meetings were held every quarter through 1995. Few members of the general public attended the meetings, leading to the eventual discontinuation of RAB meetings for NAS Oceana after the 2001 RAB meeting.

3.2. Previous Community Issues, Concerns, and Preferences

To support the 1991 CIP, Navy officials conducted interviews with a total of 20 people, including local residents, Virginia Beach city officials, representatives from local environmental groups, and enlisted and civilian personnel at NAS Oceana in June 1991. Primary concerns noted in the 1991 CIP included:

- Jet Noise – The community understands that jet noise is unavoidable, but thinks that it is excessive at certain times, such as at night.
- Jet Fuel – The community is worried that jet fuel is being released underneath flight patterns and fuel\exhaust residues are present on property outdoors.
- Contamination – The community was not overly concerned that this was occurring as long as contaminants did not reach the groundwater or surface streams that might transport contamination off-Base.
- Growth – While this concern is not directly related to NAS Oceana, the local community expressed concerns about open space being used at a rapid rate for housing. Although the Virginia Beach community understands that growth is necessary for economic growth, the community is concerned about the growth exceeding the existing water-supply capacity.

FIGURE 3
NAS OCEANA 0.5-MILE RADIUS

Interviewees indicated that they were confident in the credibility and ability of the Navy to meet its ERP objectives, and several interviewees expressed compliments regarding the Base personnel's professionalism. The interviewees were generally supportive of the activities being conducted under the ERP. Additional interviews were not conducted for the 1995 CIP revision (NAVFAC, 1995).
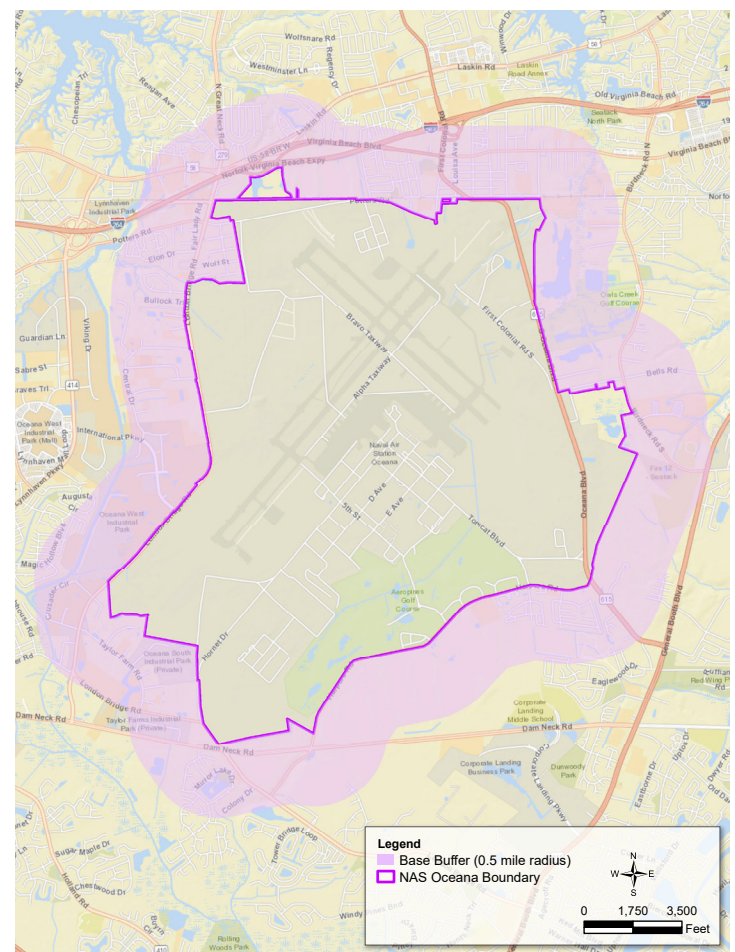
3.3. Process for Gathering Updated Community Input

To support this CIP, the Navy focused the information-gathering process on NAS Oceana's neighboring communities (using a 0.5-mile radius from the Base). The questionnaires (and fact sheets) were sent to 350 randomly selected addresses within the 0.5-mile radius (**Figure 3**), as well as the key community members included in **Appendix B**. The questionnaires reached residents, local business owners, retired military, etc. The results of the questionnaire provided valuable data and recommendations, discussed in the following sections.

3.4. Results of Current Community Questionnaires

Although the questionnaire was not designed to provide statistical analysis of the information received, the responses provided valuable data to construct final CIP recommendations specifically related to the community's general awareness, level of concern, and information needs.
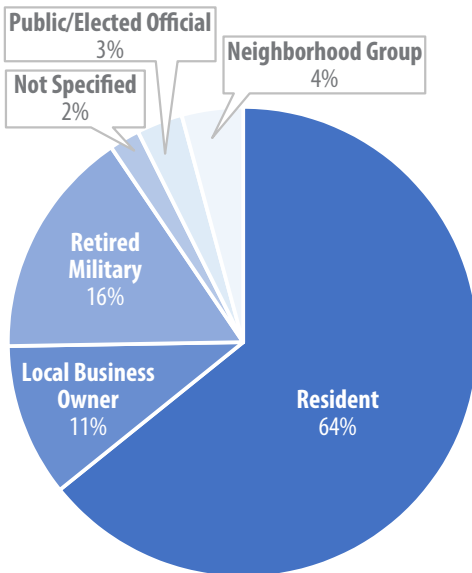
Seventeen completed questionnaires were received for this CIP, providing the following information:

- Most of the respondents were local residents who lived within a mile of NAS Oceana. Respondents to the questionnaire identified themselves as local business owners, retired military, public/elected officials, and members of neighborhood groups. Affiliations with the Base are summarized on **Figures 4a–c**.

- Most of the respondents were not aware of the ongoing efforts to investigate and remediate past contamination at Navy facilities and were not aware of the IRP or the MRP.

- Most of the respondents did not know the location of the information repository for NAS Oceana (which is located at Meyera Oberndorf Library in Virginia Beach); however, the respondents did believe it was a convenient location. The majority also did not know the Administrative Record could be accessed from the NAS Oceana public website.
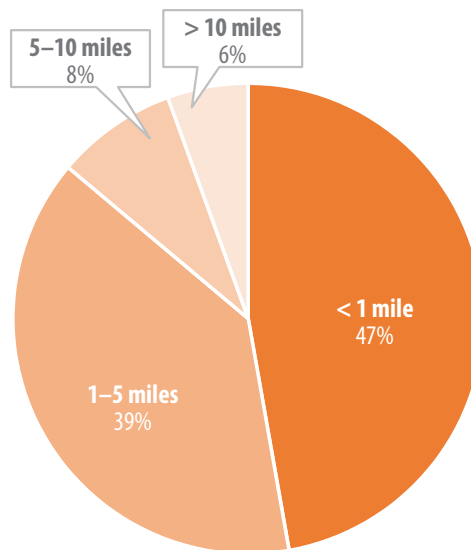
Respondents to the questionnaire identified the following issues and concerns:

- Approximately half of the respondents are concerned about environmental issues related to activities at NAS Oceana (**Figure 5**). Those who are concerned cited concern about fuel spills and jet noise/path overhead.

- Most of the respondents believe the environmental releases at NAS Oceana do affect the surrounding community, with the environment and quality of life being the most affected (**Figure 6**).

- A little more than half of the respondents believe that NAS Oceana is fulfilling its responsibility to protect and restore the environment and that when the ERP is completed, it will protect human health and the environment.
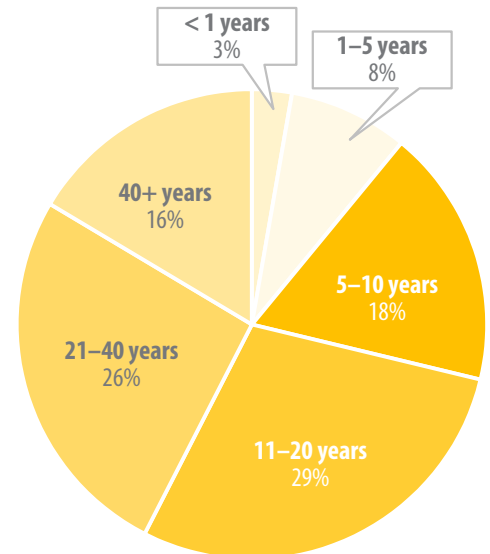
FIGURE 4A
AFFILIATION WITH BASE

Public/Elected Official 3%
Not Specified 2%
Neighborhood Group 4%
Retired Military 16%
Local Business Owner 11%
Resident 64%

FIGURE 4B
DISTANCE FROM BASE

5–10 miles 8%
> 10 miles 6%
< 1 mile 47%
1–5 miles 39%

FIGURE 4C
TIME SPENT IN COMMUNITY

< 1 years 3%
1–5 years 8%
40+ years 16%
5–10 years 18%
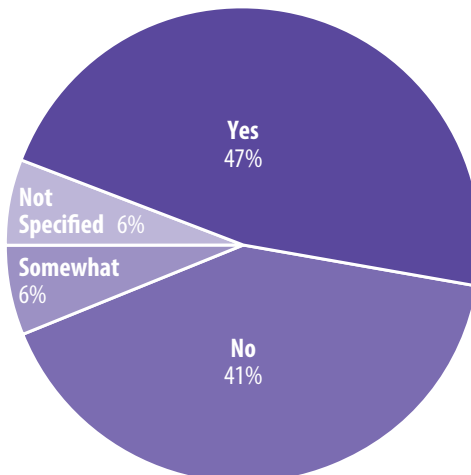21–40 years 26%
11–20 years 29%

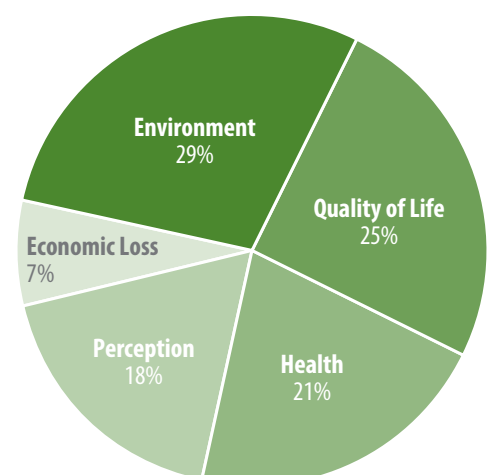## 3.5. Recommendations and Communication Preferences

Respondents indicated that there should be more regular distribution of information and the date added to the fact sheets. It was also recommended that the fact sheet contain less technical information and be more directed to the general public.

Most of the respondents indicated that they prefer to receive updates regarding environmental restoration activities at NAS Oceana either on a quarterly or annual basis.

FIGURE 5
CONCERNS FOR ENVIRONMENTAL ISSUES AT NAS OCEANA

Yes 47%
Not Specified 6%
Somewhat 6%
No 41%

FIGURE 6
HOW ENVIRONMENTAL RELEASES HAVE AFFECTED SURROUNDING COMMUNITY

Environment 29%
Quality of Life 25%
Economic Loss 7%
Perception 18%
Health 21%

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4. Community Involvement Action Plan

Based on the community's issues, concerns, and preferences described in Section 3, this section describes the specific techniques and activities the Base will use to refine its ongoing ERP.

4.1. Goals and Objectives

The Community Involvement Action Plan for NAS Oceana is designed to encourage public involvement in the ERP by providing information to the public and media regularly. The action plan is also designed to be flexible so that it can be revised as community information needs evolve and change.

Community outreach activities are based on community suggestions and community relations requirements outlined in the *Superfund Community Involvement Handbook* (USEPA, 2002). The activities outlined here will be conducted, and other activities may be included, at the discretion of NAS Oceana.

The goals and objectives for this CIP are as follows:

- To utilize the established robust communication channels between NAS Oceana, the community, and municipal and Commonwealth leadership; and to provide information concerning environmental restoration actions, major findings, and decisions in a timely manner.

- To provide a means by which public concerns and information needs can be monitored and addressed throughout the environmental restoration process.

- To provide a mechanism for incorporating public comments into the process in a timely and meaningful way.

- To identify additional individuals and groups that may become interested in one or more sites as environmental work on the Base progresses.

U.S. Navy photo by Mass Communication Specialist Seaman Mark Thomas Mahmod

4.2.   Community Involvement Activities

Following is a description of how community involvement activities will be implemented at various steps in the ERP process at NAS Oceana.

4.2.1.   Publish Public Notices

Newspapers are an important medium for providing information to communities. Public notices will be issued to provide notice of meetings, the availability of a technical document, or other pertinent information. Public notices are required by law to announce the availability of some specific technical documents, for example, Proposed Plans (**PPs**). Public notices are published in *The Virginian-Pilot,* and an example is provided in **Appendix C**.

4.2.2.   Hold Public Meetings

Public meetings are intended to inform the community about ongoing site activities and to discuss and receive feedback from the public on proposed courses of action. Public meetings will be held as required for certain site activities. In addition, informal meetings may be used to keep community groups and citizens informed of site activities. Additional public meetings will be held as needed or requested.

4.2.3.   Provide Comment Periods

Public comment periods are held at various points in the environmental cleanup process and are often accompanied by a public meeting. These points include the completion of a Feasibility Study, PP, or an Engineering Evaluation and Cost Analysis (**EE/CA**) and Action Memorandum.

4.2.4.   Prepare Responsiveness Summaries

A Responsiveness Summary is prepared following a public comment period to provide decision makers with documentation of the comments received and the Navy's responses to major comments. Responsiveness Summaries are included in the Record of Decision (or Action Memorandum) and placed in the information repository and Administrative Record file.

NAS Oceana will continue to prepare a responsiveness summary or minutes that summarize the comments received during a public comment period, as well as responses to those comments.

4.2.5.   Prepare and Distribute Fact Sheets

Fact sheets are produced to inform the public of the status and significant findings of specific cleanup activities. Fact sheets provide detailed information about site history and planned technical activities and provide updates on schedules and next steps. Fact sheets are available in the Administrative Record and are located in the designated Information Repository. An example of a fact sheet, which was included with the community questionnaires sent out in 2018, is provided in **Appendix D**.

4.2.6.   Maintain the Information Repository and Administrative Record File

Documents in the Information Repository may include:

- CIP
- Site Management Plan
- Remedial Investigation Reports
- EE/CAs
- Feasibility Study Reports
- Proposed Plans
- Records of Decision
- News releases, community notices, public meeting minutes, and fact sheets

The Navy will continue to maintain an information repository file at:

Meyera E. Oberndorf Central Library
4100 Virginia Beach Boulevard
Virginia Beach, Virginia 23452
757-385-0150

Documents in the repository are available for public inspection during normal library hours. The repository is accessible to individuals with mobility constraints, has copier facilities, and Internet access. Hours of operation are as follows:

Monday–Thursday	**10:00 a.m. to 9:00 p.m.**
Friday–Saturday	**10:00 a.m. to 5:00 p.m.**
Sunday	**1:00 p.m. to 5:00 p.m. (1st Sunday after Labor Day – Sunday before Memorial Day Weekend)**

NAS Oceana will announce additions to the Administrative Record when public notices or press releases are issued. The notification will include the title of the item and the date it was placed in the Administrative Record. The Administrative Record is available in the Information Repository and online at:

https://www.navfac.navy.mil/products_and_services/ev/products_and_services/env_restoration/administrative_records.html?p_instln_id=OCEANA_NAS

4.2.7. Publicize Points of Contact

The point of contact (**POC**) for the ERP is responsible for distributing information about the environmental restoration work at NAS Oceana. The POC for information about the ERP is the NAS Oceana Remedial Project Manager. Key points of contact and their roles are included in **Table 3**.

4.2.8. Update the Community Involvement Plan

USEPA community involvement guidance states that CIPs are required to be updated every 5 years (USEPA, 2019). This CIP will be updated again in 2024.

4.2.9. Provide Up-to-Date Information on the Internet

The objective of providing up-to-date information on the internet is to enable community members to access accurate, timely, and comprehensive information on ERP activities at NAS Oceana on their own time and at minimal expense.

The Navy will continue to maintain a public website for the ERP at NAS Oceana. The website is currently maintained at the following location:

https://www.navfac.navy.mil/products_and_services/ev/products_and_services/env_restoration/installation_map/navfac_atlantic/midlant/oceana.html

All public notices and fact sheets will include the address of the ERP website. The website will include a link to the Administrative Record and provide web links to additional environmental resources. Documents that are available for public comment, such as EE/CAs and PPs, will be made available as .pdf files for download through the website and will clearly identify information about the public comment period. The website also includes a description of each active environmental restoration site.

The website will be updated semi-annually at a minimum. However, interim updates will occur when there is a significant action (e.g., PPs and EE/CAs are available for public review, and POCs change).

4.2.10. Maintain a Contact List of Interested Parties

The objective is to facilitate the distribution of information about the ERP at NAS Oceana to stakeholders.

The Navy will continue to maintain a contact list to inform stakeholders of ERP activities at NAS Oceana. Contacts included on the list will receive notification of public meetings and changes in the designated Navy POCs by regular mail and email.

The Navy will update the contact list as requests for inclusion on the list are received. Community members can request to be added to the contact list by contacting the Public Affairs Officer or Navy Remedial Project Manager identified in **Table 3**.

TABLE 3
KEY NAVY POINTS OF CONTACT

Primary Contact for:	Current Contact Information
• Questions about NAS Oceana in general	NAS Oceana Public Affairs Officer Jennifer Hayes (757) 433-3131 jennifer.hayes@navy.mil
• Questions and concerns about NAS Oceana's ERP • Requests for a public document or comments on a document during a public comment period • Questions about accessing the Administrative Record File	NAS Oceana Remedial Project Manager Angela Jones (757) 341-0485 angela.jones1@navy.mil

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5. The Base

This section describes NAS Oceana's history and mission, its environmental history, the regulatory framework and steps for environmental restoration, and summarizes the current site status.

5.1. History and Mission

5.1.1. Base History

The U.S. Government purchased approximately 330 acres in an almost inaccessible area of Virginia Beach, in 1940, to construct a small airfield that would later grow into what is now NAS Oceana (CNIC, 2019). On August 17, 1943, the airfield was commissioned as Naval Auxiliary Air Station Oceana for Naval Air Station Norfolk. Between 1943 and 1952, there was an increase in runways and training, making Oceana too large to function as a subordinate to other air stations. Naval Auxiliary Air Station Oceana was redesignated as Naval Air Station Oceana by the Secretary of the Navy on April 1, 1952, following Captain Whitmore Butts' assignment as Commanding Officer in March 1952 (NAS Oceana, 2018).

The list of aircraft flown by squadrons stationed at NAS Oceana represents a near-complete history of naval aviation since the 1940s. Aircraft flown include the PB4Y Privateer, SB2C Helldiver, F6F Hellcat, TBF Avenger, and F4U Corsair. F-14 Tomcats were assigned to NAS Oceana in 1974, and Fighter Squadron One-Hundred-One was established in 1976 to train aviators transitioning into the Tomcat. Between 1998 and 1999, F/A-18 Hornets arrived at NAS Oceana from NAS Cecil Field, Florida (CNIC, 2019). Today, NAS Oceana is a 6,000-acre master jet base with 250 aircraft, supporting a community of more than 9,100 Navy personnel and 11,000 dependents.

5.1.2. Mission

The primary mission of NAS Oceana is to provide the personnel, operations, maintenance, and training facilities to ensure that fighter and attack squadrons on aircraft carriers of the U.S. Atlantic Fleet are ready for deployment.

5.2. Environmental History

NAS Oceana's history and mission have required the use, handling, storage, and disposal of hazardous materials and petroleum products, including paints, solvents, degreasers, waste oil, fuels, pesticides/herbicides, and household products. Typical activities at NAS Oceana include maintenance of aircraft, vehicles, and engines; fuel and oil storage and distribution; weapons cleaning and repair; facilities maintenance; photograph processing; medical and dental clinics; munitions operations; and, historically, sewage treatment and landfilling. In the past, few (if any) regulations guided these activities, and little was known about the long-term effects of hazardous materials on human health and the environment. Prior to the 1980s, hazardous materials came into contact with the environment through accidental spills, leaks, and conventional waste disposal practices. These occurrences may have resulted in conditions that do not meet today's stricter and more comprehensive environmental standards.
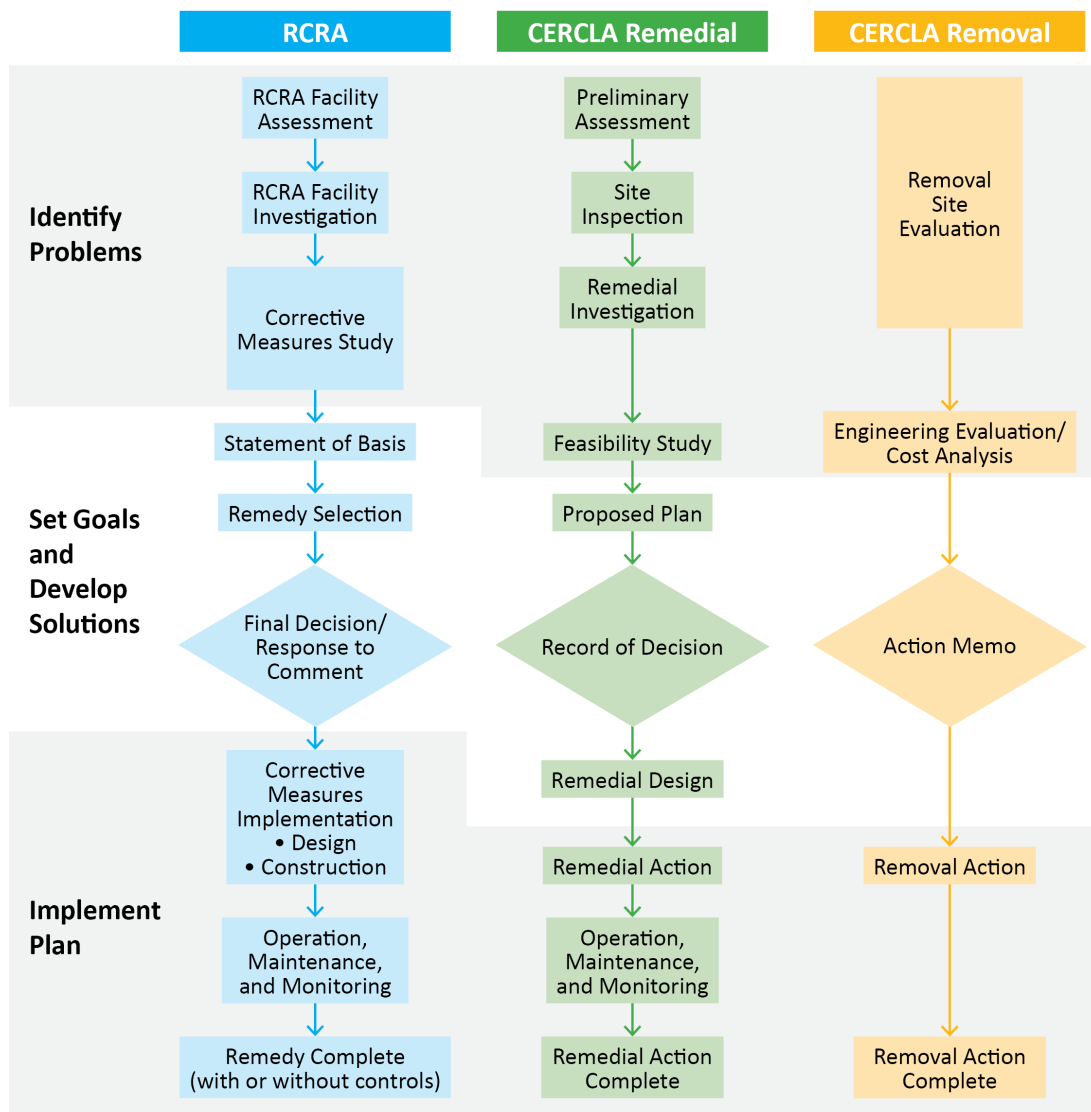
Currently, all hazardous materials and wastes generated at NAS Oceana are managed in accordance with state and federal regulations and are disposed of or recycled offsite at licensed waste disposal facilities. Past releases to the environment are being addressed by the Navy's ERP. This focus on the effects caused by cleaning up past waste disposal practices and controlling current practices enables the Navy to reduce any adverse effects or potential threat to the public health, public welfare, or the environment.

U.S. Navy photo by Mass Communication Specialist Seaman Mark Thomas Mahmod

5.3. Regulatory Framework

Application of RCRA corrective action began in June 1988, when USEPA contractors conducted an RFA of NAS Oceana (USEPA, 1988). In 1991, following finalization of the RFA, the Order was issued for NAS Oceana. Then, in 1998, it was determined that management of NAS Oceana SWMUs would be conducted following the CERCLA process (USEPA, 1998). There is no Federal Facilities Agreement for NAS Oceana; however, following the arrangement with USEPA, all investigations and documents in the NAS Oceana IRP have been completed in accordance with CERCLA with USEPA as the lead regulatory agency (**Figure 7**).

FIGURE 7
REGULATORY FRAMEWORK

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5.4. Site Status

Currently, there are 11 active IRP sites/SWMUs and 1 active MRP site. As a result of the lack of formal closeout documentation for some sites, the NAS Oceana Partnering Team is reviewing formerly closed sites on a case-by-case basis and sites may be reopened as needed.

Additional active site information for NAS Oceana can be seen on **Figure 8** and in **Table 4.** It is also included on the public website (**Section 4.2.9**).
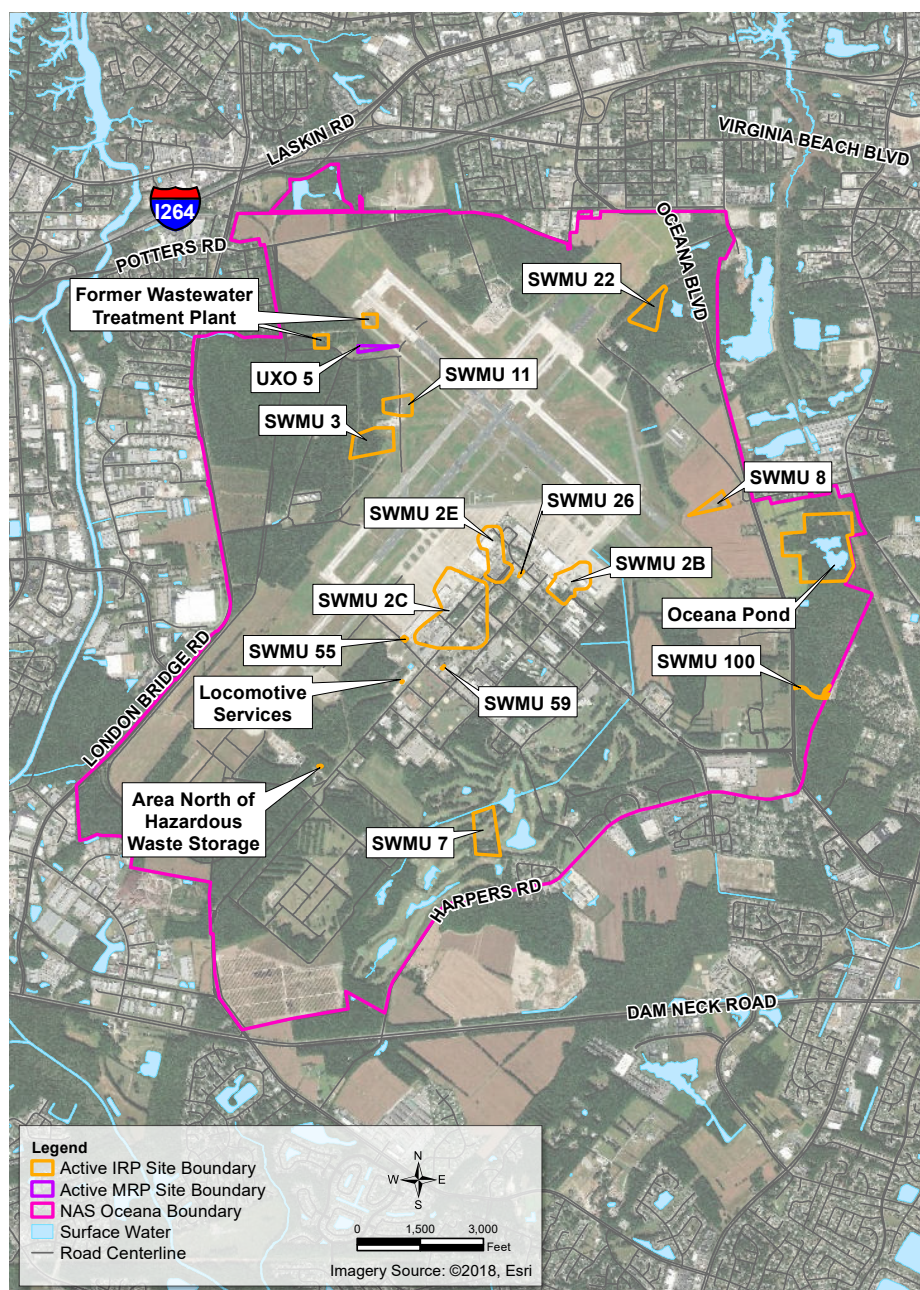

FIGURE 8
NAS OCEANA SITES

TABLE 4
SITE STATUS

SWMU ID	Site Name	Redesignation
1	Hazardous Waste Storage Area, Building 23	Redesignated as part of SWMU 2E
22	Construction Debris Landfill	Redesignated as SWMU 22
24	Fifth Green Landfill	Redesignated as SWMU 7
26	North Station Landfill	Redesignated as SWMU 8
29	West Side Landfill	Designated as SWMU 3
51	Line Shack Disposal Areas, Building 23	Redesignated as SWMU 2E
53	Line Shack Disposal Areas, Building 131	Redesignated as SWMU 2B
54	Line Shack Disposal Areas, Building 400	Redesignated as SWMU 2C
55	Line Shack Disposal Areas, Building 500	Redesignated as Site 2A
59	Navy Exchange Maintenance Building Waste Oil Disposal Area, Building 518	Designated as Site 6 in the Initial Assessment Study
62	Old Burn Pit	Redesignated as SWMU 11 (62 & 63)
63	New Burn Pit	
65	Fire Station Burn Pit	Redesignated as SWMU 26
66	Old Tank	Tank removed and within boundaries of SWMU 11
IRP Sites not identified in the RFA		
–	Oceana Pond	No redesignation
–	Former Wastewater Treatment Plant	No redesignation
–	Area North of the Hazardous Waste Storage	No redesignation
–	Locomotive Service Building, Former Building 606	No redesignation
100	Access Road, Burial Unit, and Surrounding Area	No redesignation

6. References

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Appendix A
Example Community Questionnaire

2018 Community Questionnaire for the Environmental Restoration Program

Naval Air Station Oceana, Virginia Beach, Virginia

Community Involvement Plan

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE!

To gauge community awareness of the Environmental Restoration Program (ERP) at Naval Air Station (NAS) Oceana, Virginia Beach, Virginia, we ask you to complete this questionnaire. Your responses help us understand the community's concerns and information needs related to environmental investigation and restoration at the base.

Your responses to this questionnaire will be kept anonymous and will help us develop a Community Involvement Plan This plan describes how NAS Oceana will communicate on-base environmental investigation and restoration activities with the community, and provides an opportunity for the public to be involved in the decision-making process.

WEBSITE https://go.usa.gov/DyRj (case sensitive)

If you would like additional information about the Environmental Restoration Program (ERP) at NAS Oceana, including specific information about each active site, please visit the website listed above. If you have questions about the ERP at NAS Oceana or this fact sheet, please contact Angela Jones, Remedial Project Manager at 757-341-0485 or e-mail angela.jones1@navy.mil. For other questions regarding NAS Oceana, contact Jennifer Hayes, NAS Oceana Public Affairs Officer, at 757-433-3131 or e-mail jennifer.hayes@navy.mil. Thank you for your participation!

The personal information below is OPTIONAL, but is requested so we can understand the demographics in the local community (for example: 10 local residents, 5 business owners, etc.) and we can add your name to a mailing list, if requested. At a minimum, please provide your zip code.	
Name:	
Address:	Zip Code:
Organization:	
Phone (W):	Phone (H):
E-mail:	
How would you describe your "affiliation" with NAS Oceana? (check all that apply)	
☐ Employee Working Within NAS Oceana	☐ Former Employee Working Within NAS Oceana
☐ Retired Military	☐ Local Business Owner
☐ Homeowners Association Representative	☐ Local Resident
☐ Civic or Public Interest Organization Representative	☐ Public or Elected Official
☐ Other (please describe):	

Please return this survey by December 10, 2018. Scan/email, or mail to:

Ms. Angela Jones, P.E.
NAVFAC Mid-Atlantic
9742 Maryland Ave., Bldg N-26
Room 3208
Norfolk, VA 23511

Telephone: 757-341-0485 ▪ Email: angela.jones1@navy.mil

THANK YOU for taking the time to share your thoughts with us! Your participation is greatly appreciated.

Community Involvement Plan Questionnaire – NAS Oceana

| 1. | a. How long have you lived or worked in this community? | ☐ < 1 Year _____ Years | | |
| | b. How far do you live or work from NAS Oceana? | ☐ < 1 Mile | ☐ 1–5 Miles | ☐ 5–10 Miles | ☐ > 10 Miles |

2.	On a scale of 1 to 5, with 1 being Poor and 5 being Excellent, how would you rank NAS Oceana's relationship with the surrounding community?			
	a. Trusting Relationship		c. Involved in the Community	
	b. Open Communication		d. Concerned for the Environment	

| 3. | a. How would you rate <u>the public's</u> attitude toward NAS Oceana? | ☐Excellent ☐Satisfactory ☐Poor |
| | b. How would you rate <u>your</u> attitude toward NAS Oceana? | ☐Excellent ☐Satisfactory ☐Poor |

| 4. | a. Are you concerned about any environmental issues at NAS Oceana? ☐Yes ☐Somewhat ☐No |
| | b. *If yes,* what issues? _____ |

5.	a. Based on facts, figures and data, do you think environmental releases (e.g. spills, disposal, and leaks) NAS Oceana have affected the surrounding community? ☐Yes ☐No
	b. *If yes,* in what ways? (check all that apply) ☐Health ☐Economic Loss ☐Perception of the Community ☐Environment ☐Quality of Life ☐Other (please explain): _____
	c. *If yes, please explain what information led you to answer in this way?* _____ _____ _____

| 6. | a. Do you feel NAS Oceana is fulfilling its responsibility to protect and restore the environment? | ☐Yes ☐No ☐Don't Know |
| | b. Do you think the environmental restoration program (as presented in the attached fact sheet) when completed, will protect human health and the environment? | ☐Yes ☐No ☐Don't Know |

7.	Before you received the fact sheet included with this questionnaire, were you aware of:
	a. Ongoing efforts to investigate and remediate past contamination at U.S. Navy facilities? ☐Yes ☐No
	b. The NAS Oceana Installation Restoration Program (IRP) ☐Yes ☐No

	c. The NAS Oceana Munitions Response Program (MRP)	☐Yes ☐No
	If yes, what is your understanding of the program(s)? (please explain) _____ _____	

8.	Do you think the U.S. Navy, United States Environmental Protection Agency (USEPA), and Virginia Department of Environmental Quality (VDEQ) are viewed as trustworthy sources of information about the environmental restoration at NAS Oceana?	U.S. Navy: ☐Yes ☐No ☐Not Sure USEPA: ☐Yes ☐No ☐Not Sure VDEQ: ☐Yes ☐No ☐Not Sure

9.	a. Have you talked with any U.S. Navy, USEPA, or VDEQ officials about the environmental restoration at NAS Oceana? ☐Yes ☐No
	If yes, which officials? _____
	If yes, were they responsive to your concerns or questions? ☐Yes ☐No
	b. If you had a question or comment about the environmental restoration program at NAS Oceana, who would you contact? _____

10.	How do you typically receive information about local news and events? (select all that apply) ☐The *Virginian-Pilot* ☐Television ☐Radio ☐Website ☐Other: _____ If TV or radio, which stations? _____ If a website, which site? _____

11.	a. Are you aware of the NAS Oceana information repository at the Virginia Beach Meyera E. Oberndorf Central Library which includes a reference collection of general and NAS Oceana IRP site information?		☐Yes ☐No
	b. *If yes,* have you made use of this resource? ☐Yes ☐No	c. Do you feel this is a convenient location? ☐Yes ☐No	
	d. *If no,* where would you prefer it to be? _____		

12.	a. Are you aware that you can utilize the NAS Oceana public website to access the Administrative Record? The Administrative Record is a comprehensive record of all documents and resources used to make decisions about the IRP cleanup.	☐Yes ☐No
	b. *If yes,* have you made use of this resource? ☐Yes ☐No	

13.	How often would you like to receive updates regarding environmental restoration activities at NAS Oceana? ☐ Monthly ☐ Quarterly ☐ Biannually ☐ Annually *The collective responses received will be used to develop a schedule for updating the public.*

14.	Do you have any other comments or suggestions for the NAS Oceana environmental restoration team? Please note if you would like to remain informed of ongoing ERP (Environmental Remediation Program) activities at NAS Oceana.

Key Community Contacts

Key Community Contacts

Virginia Beach Department of Economic
Development
4525 Main St Ste 700
Virginia Beach VA 23462
Attn OLUCC MEMBERSHIP

Congresswoman Elaine Luria
283 Constitution Drive
One Columbus Center, Suite 900
Virginia Beach VA 23462

Senator William Desteph
588 Central Dr
Virginia Beach VA 23454

Delegate Barry Knight
1852 Mill Landing Rd
Virginia Beach VA 23457

Virginia Aquarium & Marine Science Center
717 General Booth Blvd
Virginia Beach VA 23451
Attn Cynthia Whitbref-Spanoulis

Camp Pendleton State Military Reservation
203 Red Horse Dr
Virginia Beach VA 23451
Attn LTC Timothy Pillion, Post Commander

Hampton Roads Sanitation District
1434 Air Rail Ave
Virginia Beach VA 23455
Attn John J Dano, PE

Seatack Community Civic League
PO Box 4252
Virginia Beach VA 23454
Attn George Minns

Scarborough Square Civic League
3328 Scarborough Way
Virginia Beach VA 23453
Attn M. Lyn Henry

Lamplight Manor Civic League
2929 Augusta Circle
Virginia Beach VA 23453
Attn Joe Conner

Appendix C
Example Public Notice

NAVFAC
Naval Facilities Engineering Command

Naval Air Station (NAS) Oceana and Naval Auxiliary Landing Field (NALF) Fentress Machine Gun Boresight Ranges Public Notice

The Department of the Navy (Navy) recently completed a study to evaluate alternatives for a response action at the NAS Oceana and NALF Fentress Machine Gun Boresight Ranges (MGBRs). The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requires an Engineering Evaluation/Cost Analysis (EE/CA) to evaluate removal alternatives prior to conducting a response action. The Navy, as lead agency, has prepared two EE/CAs (one for each site) in accordance with CERCLA and the National Contingency Plan (NCP).

NAS Oceana is located within the southeastern portion of Virginia Beach, Virginia, approximately 2 miles west of the Atlantic Ocean. The installation encompasses just over 5,300 acres and includes the former MGBR within the northwestern portion of the site. The former MGBR consists of a soil berm and concrete backstop, which was used as a testing range for aircraft-mounted machine guns and eventually converted into a small arms firing range. Ammunition used at the former range reportedly consisted of .50- and .30-caliber rounds for aircraft guns, as well as 9-millimeter (mm) small arms rounds.

NALF Fentress is located in Chesapeake, Virginia, approximately 7 miles southwest of NAS Oceana. The installation encompasses just over 2,500 acres and includes the former MGBR within the central portion of the site. The former MGBR consists of a soil berm and concrete backstop, which was initially used as maintenance and testing range for aircraft-mounted machine guns, but was later converted to a pistol range. Ammunition used at this former range reportedly consisted of .50- and .30-caliber rounds for aircraft guns, as well as 7mm, 9mm, and .38-caliber small arms rounds, and shotgun rounds.

The EE/CAs address the evaluation of alternatives for the treatment of surface and subsurface soils containing elevated metals concentrations at the NAS Oceana and NALF Fentress MGBRs. As a result of the EE/CAs, the Navy is proposing to conduct a Non-Time-Critical Removal Action (NTCRA) at NAS Oceana and NALF Fentress. The recommended alternative is removal of the contaminated soil. The NTCRAs are scheduled for performance beginning in September 2017 and will require 2 months to complete.

The Navy will make the EE/CA reports available for public review for 30 days at the Virginia Beach Central Library from June 8 until July 8, 2017. The Virginia Beach Public Library is located at 4100 Virginia Beach Boulevard, Virginia Beach, VA 23452. Public comments on the EE/CA reports, including the commenter's name and address, will become part of the Site Administrative Record and the Navy will provide a response to significant comments.

For additional information, please contact:
Angela Jones
Naval Facilities Engineering Command Mid-Atlantic
9742 Maryland Avenue
Norfolk, VA 23511
757-341-0485

OVAD1018110160XY

MACHINE GUN BORESIGHT RANGE (UXO 5)

The former Machine Gun Boresight Range (UXO 5) covers 1.7 acres and is north of Dorr Place road and west of Runway 14. The site initially was used as a maintenance and testing range for aircraft-mounted machine guns and was later converted to a small-arms firing range. Ammunition likely was limited to .50- and .30-caliber rounds for aircraft guns and small-arms ammunition.

STATUS: Metals including antimony, copper, lead, and zinc were found in surface and subsurface soil at levels requiring cleanup action. Remedial Action was performed in early 2018. A total of 2,103 tons of soil, 150 yd^3 of stumps and debris, and 150 tons of concrete were removed from the site and disposed off site at approved facilities. Additionally, 7,300 pounds of scrap metal and rebar were recycled at approved facilities. Following the remedial action removal, the site was restored, which included backfilling the excavation areas and seeding disturbed areas. Remaining clean soil was used as clean fill following analytical results; lime, compost, and fertilizer were added to promote growth.

Legend

— Extent of excavation
■ Excavation area
▭ Backstop
▭ Site boundary

N

0   50   100 feet
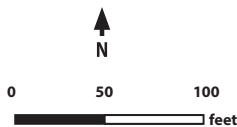
Environmental Restoration
CLEAN. PROTECT. RESTORE.

This brochure has been created as part of the Navy's Environmental Restoration community outreach program. The Navy provides the public with information on the ERP at NAS Oceana and other Navy facilities. To facilitate community outreach, the Navy ERP focuses on communicating how the Navy, USEPA, and states work together to restore areas where former Navy operations have caused environmental contamination.

NAS OCEANA ENVIRONMENTAL INVESTIGATION PROCESS

Under both the Resource Conservation and Recovery Act (RCRA) and CERCLA processes, investigations and restoration of contaminated sites are conducted through the following steps:
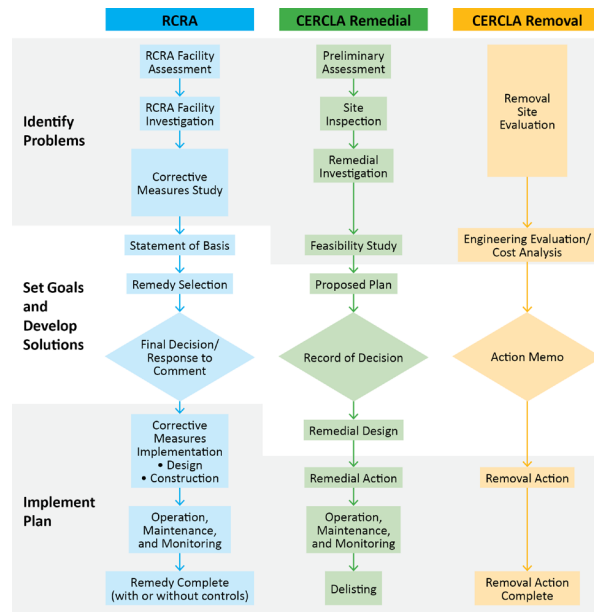
NAS Oceana

0   1   2 miles

N
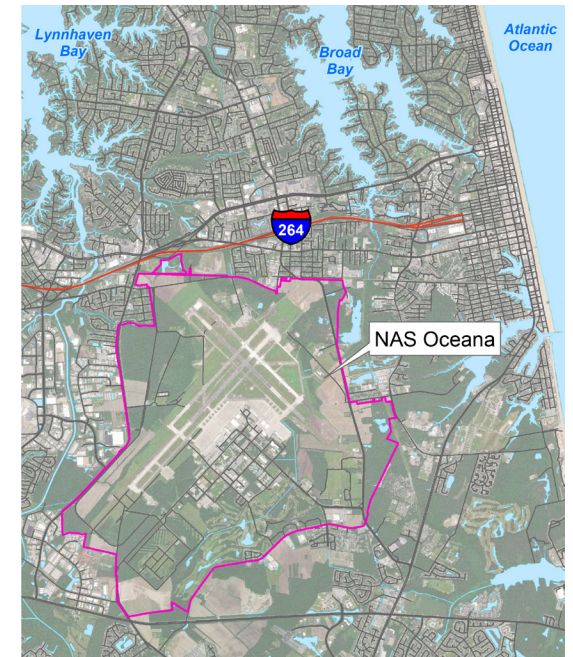
This fact sheet provides information on environmental investigation and restoration activities at Naval Air Station (NAS) Oceana.

If you would like additional information about the Environmental Restoration Program (ERP) at NAS Oceana, contact Angela Jones, Remedial Project Manager, at 757-341-0485 or e-mail angela.jones1@navy.mil.

For other questions regarding NAS Oceana, contact Jennifer Hayes, NAS Oceana Public Affairs Officer, at 757-433-3131 or e-mail jennifer.hayes@navy.mil.

FOR MORE INFORMATION
https://go.usa.gov/DyRj
NAS Oceana Information Repository –
Meyera E. Oberndorf Central Libary | Virginia Beach

NAVAL AIR STATION OCEANA
Environmental Restoration Program (ERP)

NAS Oceana, located in Virginia Beach, was established in 1943 as a small auxiliary airfield. Since 1943, NAS Oceana has grown to more than 16 times its original size and is now a 6,000-acre master jet base supporting a community of more than 9,10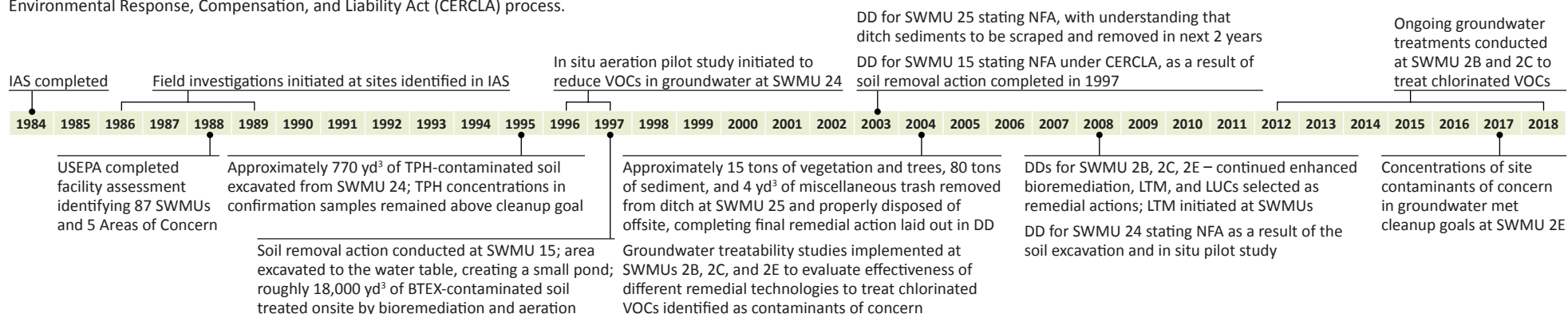0 Navy personnel and 11,000 dependents. The primary mission of NAS Oceana is to provide the personnel, operations, maintenance, and training facilities to ensure fighter and attack squadrons on aircraft carriers of the U.S. Atlantic Fleet are ready for deployment.

ENVIRONMENTAL RESTORATION HISTORY AND HIGHLIGHTS – The ERP was established to address releases of hazardous substances, pollutants, contaminants, and military munitions at military installations. To manage the ERP process, NAS Oceana works in partnership with the Virginia Department of Environmental Quality and the United States Environmental Protection Agency (USEPA) using the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process.

Timeline (above the axis):

- IAS completed
- Field investigations initiated at sites identified in IAS
- In situ aeration pilot study initiated to reduce VOCs in groundwater at SWMU 24
- DD for SWMU 25 stating NFA, with understanding that ditch sediments to be scraped and removed in next 2 years
- DD for SWMU 15 stating NFA under CERCLA, as a result of soil removal action completed in 1997
- Ongoing groundwater treatments conducted at SWMU 2B and 2C to treat chlorinated VOCs

Timeline years: 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Timeline (below the axis):

- USEPA completed facility assessment identifying 87 SWMUs and 5 Areas of Concern
- Approximately 770 yd³ of TPH-contaminated soil excavated from SWMU 24; TPH concentrations in confirmation samples remained above cleanup goal
- Soil removal action conducted at SWMU 15; area excavated to the water table, creating a small pond; roughly 18,000 yd³ of BTEX-contaminated soil treated onsite by bioremediation and aeration
- Approximately 15 tons of vegetation and trees, 80 tons of sediment, and 4 yd³ of miscellaneous trash removed from ditch at SWMU 25 and properly disposed of offsite, completing final remedial action laid out in DD
- Groundwater treatability studies implemented at SWMUs 2B, 2C, and 2E to evaluate effectiveness of different remedial technologies to treat chlorinated VOCs identified as contaminants of concern
- DDs for SWMU 2B, 2C, 2E – continued enhanced bioremediation, LTM, and LUCs selected as remedial actions; LTM initiated at SWMUs
- DD for SWMU 24 stating NFA as a result of the soil excavation and in situ pilot study
- Concentrations of site contaminants of concern in groundwater met cleanup goals at SWMU 2E

ENVIRONMENTAL RESTORATION PROGRAM SITES

Active ERP sites at NAS Oceana (see figure) include the following:

Active Installation Restoration Program Sites

- SWMU 2B – Line Shack Disposal Area
- SWMU 2C – Line Shack Disposal Area
- SWMU 2E – Line Shack Disposal Area
- SWMU 3 – West Side Landfill
- SWMU 7 – Fifth Green Landfill
- SWMU 8 – North Station Landfill
- SWMU 11 – Former Firefighting Training Area
- SWMU 22 – Construction Debris Landfill
- SWMU 26 – Former Firefighting Training Area
- Salvage Yard Burial Unit – Oceana Salvage Yard Burial Unit*
- Salvage Yard Access Road – Oceana Salvage Yard Access Road*
- Other areas that are part of the installation-wide PFAS investigation†

Munitions Response Program Site

- UXO 5 – NAS Oceana Machine Gun Boresight Range

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* PRP sites where non-Navy waste was deposited on Navy property – refer to the website for more details.

† PFAS are compounds with heat-resistant properties that were used in some formulations of AFFF (fire fighting foam). Two of these compounds, PFOS and PFOA, were present in AFFF used by the Navy. See the following website for more detail: http://www.secnav.navy.mil/eie/Pages/PFC-PFAS.aspx.
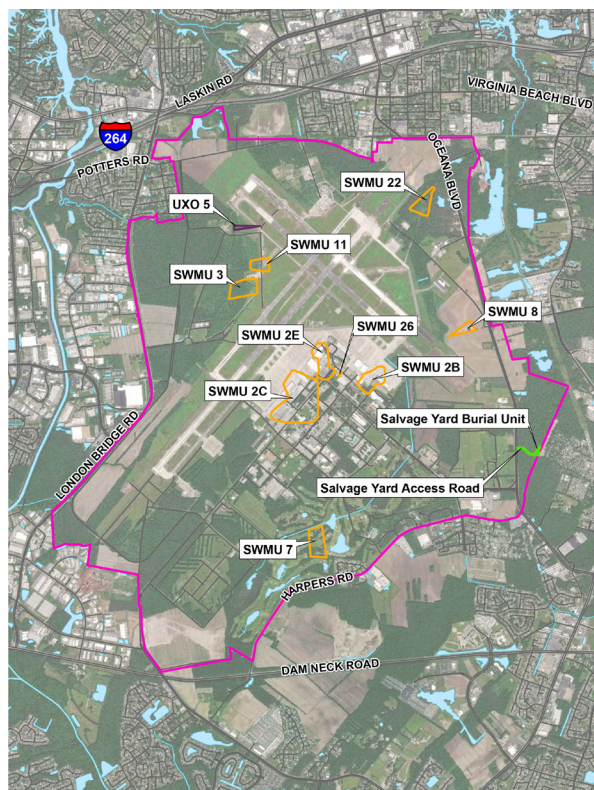
Legend

- NAS Oceana boundary
- Active IRP site boundary
- Active MRP site boundary
- PRP site boundary

0 0.5 1 mile · N

Abbreviation	Definition
AFFF	aqueous film forming foam
BTEX	benzene, toluene, ethylbenzene, and xylene
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DD	Decision Document
ERP	Environmental Restoration Program
IAS	Initial Assessment Study
IRP	Installation Restoration Program
LTM	long-term monitoring
LUCs	land use controls
NAS	Naval Air Station
NFA	No Further Action
MRP	Munitions Response Program
PFAS	per- and polyfluoroalkyl substance(s)
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
PRP	Potentially Responsible Party
RCRA	Resource Conservation and Recovery Act
SWMU	solid waste management unit
TPH	total petroleum hydrocarbon
USEPA	United States Environmental Protection Agency
UXO	unexploded ordnance
VOC	volatile organic compound
yd³	cubic yard(s)