



**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

NATIONAL MARINE FISHERIES SERVICE

Southwest Region  
501 West Ocean Boulevard, Suite 4200  
Long Beach, California 90802- 4213

N00221\_001542  
MARE ISLAND  
SSIC NO. 5090.3.A

December 1, 2009

In response refer to:  
2009/06351

Michael S. Bloom  
BRAC Environmental Coordinator  
Department of the Navy  
1455 Frazee Road, Suite 900  
San Diego, California 92108-4310

Dear Mr. Bloom:

Thank you for your letter of November 18, 2009, requesting the initiation of consultation with NOAA's National Marine Fisheries Service (NMFS) pursuant to section 7 of the Endangered Species Act of 1973 (ESA), as amended, for the proposed removal of mercury-contaminated sediment from an area in San Pablo Bay. This letter also serves as consultation under the authority of and in accordance with the provisions of the Fish and Wildlife Coordination Act of 1934 (FWCA), as amended.

NMFS has reviewed the information provided in your November 18, 2009, letter and the project's Draft Sanitary Sewage Treatment Plant Outfall Sediment Removal Work Plan dated November 2009. The Department of Navy Base Realignment and Closure Program Management Office West (Navy) is planning to dredge approximately 300 cubic yards of mercury-contaminated sediment from an area surrounding an abandoned Navy outfall pipe in San Pablo Bay. Mercury is present at concentrations up to 19 mg/kg in an area of mudflats approximately 180 feet from the northwestern shoreline of Mare Island near Vallejo, California. The material identified for removal occupies the top 1.5 feet of sediment and the footprint of the proposed dredge site is approximately 3,500 square feet. Excavation will be performed with a shallow-draft barge-mounted crane with bucket. Excavation of sediments is expected to be completed within two days. Once removed, the material will be transported via truck to an authorized landfill facility.

Due to the site's location over shallow water mudflats, access to the site requires a high-tide window. However, the actual dredging operations will be performed during low tide when the project site is exposed mudflats. The proposed work dates for the project are December 1 through December 3, 2009. Alternative high tide periods are also available in late December 2009 and again in late January 2010.

By electronic mail message dated November 30, 2009, the Navy has requested NMFS'



concurrence with their finding that the proposed project is not likely to adversely affect ESA-listed fish species or designated critical habitat.

### **Endangered Species Act**

Available information indicates that the following listed species (Distinct Population Segments [DPS] or Evolutionarily Significant Units [ESU]) may occur at the project site:

- Central California Coast steelhead DPS** (*Oncorhynchus mykiss*)  
Threatened (January 5, 2006; 71 FR 834)  
Critical habitat (September 2, 2005; 70 FR 52488)
- Central Valley steelhead DPS** (*O. mykiss*)  
Threatened (January 5, 2006; 71 FR 834)
- Sacramento River Winter-run Chinook salmon ESU** (*O. tshawytscha*)  
Endangered (June 28, 2005; 70 FR 37160)  
Critical habitat (June 16, 1993; 58 FR 33212)
- Central Valley Spring-run Chinook salmon ESU** (*O. tshawytscha*)  
Threatened (June 28, 2005; 70 FR 37160)
- Southern DPS of North American green sturgeon** (*Acipenser medirostris*)  
Threatened (April 7, 2006; 71 FR 17757)  
Critical habitat, (October 9, 2009; 74 FR 52300)

The life history of steelhead is summarized in Busby *et al.* (1996) and Chinook salmon life history is summarized in Myers *et al.* (1998). Central California Coast steelhead, Central Valley steelhead, Sacramento River winter-run Chinook salmon, and Central Valley spring-run Chinook salmon use the project's action area primarily as a migration corridor. These anadromous salmonids pass through San Pablo and San Francisco bays to rear as juveniles or to upstream areas to spawn as adults. Their migrations generally take place in the winter and spring months. The proposed dredging period of two days in December avoids the migration period of listed juvenile salmonids.

The life history of green sturgeon in California is summarized in Adams *et al.* (2002) and NMFS (2005). The southern DPS of North American green sturgeon spawn in the deep turbulent sections of the upper reaches of the Sacramento River. As juvenile green sturgeon age, they migrate downstream and live in the lower delta and bays, spending from three to four years there before entering the ocean. Adult green sturgeon return from the ocean every few years to spawn, and generally show fidelity to their upper Sacramento River spawning sites. Adult and juvenile green sturgeon may be present in San Pablo Bay year-round.

NMFS has evaluated the proposed project for potential adverse effects to ESA-listed anadromous salmonids, threatened green sturgeon, and designated critical habitat. Dredging may affect listed fish through exposure to turbidity and suspended sediment during excavation activities. For this project, dredging will be performed during low tide on exposed mudflats. Thus, water quality will not be degraded and listed fish will not be in the action area during dredging. The work site is also relatively small (approximately 3,500 square feet) and the entire project is expected to be completed within two days. No impacts are anticipated with disposal of the dredged material,

because the mercury-contaminated sediments will be placed in leak-proof containers and transported to an approved upland disposal site. Therefore, this project's dredging and disposal activities are not expected to have any effect on listed fish species. Once the proposed work is completed, no on-going impacts to listed salmonids or green sturgeon are anticipated from this project.

Primary constituent elements (PCEs) of designated critical habitat for listed salmonids in the action area include water quality and quantity, foraging habitat, natural cover including large substrate and aquatic vegetation, and migratory corridors free of obstructions. PCEs for green sturgeon critical habitat in estuarine areas include: food resources, water flow, water quality, migratory corridor, water depth, and sediment quality. Potential effects to designated critical habitat are limited to excavation of 1-2 feet of surface sediments from 3,500 square feet of mudflat area in San Pablo Bay. Green sturgeon are a benthic species, foraging on bottom-dwelling prey items, such as clams and shrimp along the mudflats of San Pablo Bay. Juvenile listed salmonids forage primarily on planktonic organisms, but may also feed on benthic organisms in San Pablo Bay. The benthic faunal community in the project's 3,500 square foot action area will be temporarily disturbed by the excavation of sediments, but benthic organisms are expected to rapidly re-colonize the site as it returns to its former bottom contour. Excavated areas are expected to quickly fill in due to the high level of fine sediment transport and deposition with tidal circulation in San Pablo Bay. This temporary effect on the foraging habitat and prey-organisms of green sturgeon and listed anadromous salmonids is considered minimal and insignificant. The overall project is expected to benefit designated critical habitat for anadromous salmonids and green sturgeon by reducing a significant surficial sediment concentration of mercury in the mudflats of San Pablo Bay.

Based upon our review of the best available information, NMFS concurs with the Navy's determination that the proposed project is not likely to adversely affect Sacramento River Winter-run Chinook salmon, Central Valley Spring-run Chinook salmon, Central California Coast steelhead, Central Valley steelhead, or southern DPS green sturgeon. Regarding critical habitat, NMFS has determined the proposed project will not adversely affect essential physical or biological features associated with designated critical habitat for salmon, steelhead, or green sturgeon. This concludes informal consultation for the proposed removal of mercury-contaminated sediments from an area on the San Pablo Bay mudflats near Mare Island, Vallejo, California in accordance with 50 CFR §402.13(a). However, further consultation may be required if: (1) new information becomes available indicating that listed species or critical habitat may be affected by the project in a manner or to an extent not previously considered; (2) current project plans change in a manner that causes an effect to listed species or critical habitat in a manner not previously considered; or (3) a new species is listed or critical habitat designated that may be affected by the action.

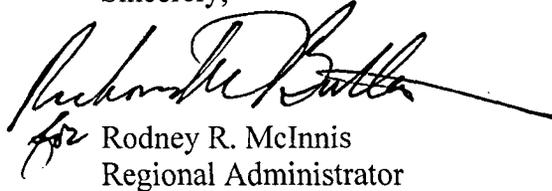
### **Fish and Wildlife Coordination Act (FWCA)**

The purpose of the Fish and Wildlife Coordination Act (FWCA) is to ensure that wildlife conservation receives equal consideration, and is coordinated with other aspects of water resources development [16 U.S.C. 661]. The FWCA establishes a consultation requirement for federal departments and agencies that undertake any action that proposes to modify any stream

or other body of water for any purpose, including navigation and drainage [16 U.S.C 662(a)]. Consistent with this consultation requirement, NMFS provides recommendations and comments to federal action agencies for the purpose of conserving fish and wildlife resources. NMFS has no FWCA recommendations to provide for this project, because the impacts are expected to be minor, temporary, and beneficial.

If you have questions concerning these comments, please contact Gary Stern at (707) 575-6060.

Sincerely,



for Rodney R. McInnis  
Regional Administrator

cc: Dwight Gemar, Weston Solutions – Walnut Creek, CA  
Copy to File ARN #151422SWR2009SR00560

#### Literature Cited

- Adams, P.B., C.B. Grimes, J.E. Hightower, S.T. Lindley, and M.L. Moser. 2002. Status Review for North American Green Sturgeon, *Acipenser medirostris*. National Marine Fisheries Service, Southwest Fisheries Science Center. 49 pages. [<http://www.nwr.noaa.gov/Other-Marine-Species/upload/grn-sturgeon-status.pdf>]
- Busby, P.J., T.C. Wainwright, G.J. Bryant, L. Lierheimer, R.S. Waples, F.W. Waknitz, and I.V. Lagomarsino. 1996. Status review of West Coast steelhead from Washington, Idaho, Oregon and California. United States Department of Commerce, National Oceanic and Atmospheric Administration Technical Memorandum NMFS-NWFSC-27. 261 pages. [[http://www.nwfsc.noaa.gov/assets/25/4245\\_06172004\\_122523\\_steelhead.pdf](http://www.nwfsc.noaa.gov/assets/25/4245_06172004_122523_steelhead.pdf)]
- NMFS (National Marine Fisheries Service). 2005. Green Sturgeon (*Acipenser medirostris*) Status Review Update. National Marine Fisheries Service, Southwest Fisheries Science Center. 31 pages. [<http://swr.nmfs.noaa.gov/psd/Final%20Green%20Sturgeon%20Status%20Review%20Update.pdf>]
- Myers, J.M., R.G. Kope, G.J. Bryant, D. Teel, L.J. Lierheimer, T.C. Wainwright, W.S. Grant, F.W. Waknitz, K. Neely, S.T. Lindley, and R.S. Waples. 1998. Status review of Chinook salmon from Washington, Idaho, Oregon, and California. United States Department of Commerce, National Oceanic and Atmospheric Administration Technical Memorandum NMFS-NWFSC-35. 443 pages. [<http://www.nwr.noaa.gov/Publications/Biological-Status-Reviews/loader.cfm?csModule=security/getfile&pageid=21664>]