

# **Appendix A**

**Bodega Bay Harbor Federal Navigation Channel**

**Fiscal Year 2017 Maintenance Dredging**

**USFWS and NMFS**

**ESA Informal Consultation Documentation**



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
West Coast Region  
777 Sonoma Avenue, Room 325  
Santa Rosa, California 95404-4731

**JUL 05 2017**

**Refer to NMFS No: WCR-2017-7090**

Richard M. Bottoms, Ph.D.  
Regulatory Branch Chief  
U.S. Department of the Army  
San Francisco District, Corps of Engineers  
1455 Market Street  
San Francisco, California 94103-1398

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Bodega Harbor Maintenance Dredging Project.

Dear Dr. Bottoms:

On April 17, 2017, NOAA's National Marine Fisheries Service (NMFS) received your request for a written concurrence that U.S. Army Corps of Engineers (Corps) proposed maintenance dredging of the Bodega Harbor under the statutory authority of Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 (§10) of the Rivers and Harbors Act is not likely to adversely affect (NLAA) species listed as threatened or endangered or critical habitats designated under the Endangered Species Act (ESA). This response to your request was prepared by NMFS pursuant to section 7(a)(2) of the ESA, implementing regulations at 50 CFR 402, and agency guidance for preparation of letters of concurrence.

NMFS also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including conservation measures and any determination you made regarding the potential effects of the action. This review was pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The concurrence letter will be available through NMFS' Public Consultation



Tracking System [<https://pcts.nmfs.noaa.gov/pcts-web/homepage.pcts>]. A complete record of this consultation is on file at NMFS North-Central Coast Office in Santa Rosa, California.

### **Proposed Action and Action Area**

The proposed action is to dredge the federal navigation channels in Bodega Bay Harbor, transport dredged material to dredged material placement sites, and dispose of the material. The maintenance dredging cycle of the federal channels in Bodega Harbor is approximately every 12 years. The last dredging episode was in 2004 when approximately 112,000 cubic yards of sediment was dredged from the federal channels. Approximately 110,000 cubic yards of sediment will be dredged from the federal navigation channels to the authorized depth of 12 feet MLLW, plus 2 feet of overdepth. The federal Bodega Harbor shallow-draft navigation channels are 20,220 feet long, 100 feet wide with the entrance channel extending approximately 1,600 feet into Bodega Bay. Dredging of the Bodega Harbor Federal Channels is scheduled to occur sometime between July and November 2017 and to last for up to 60 calendar days.

The action area also includes the transportation of dredged material from Bodega Harbor to the San Francisco Deep Ocean Disposal Site (SF-DODS) and SF-8 dredged material placement sites. Dredging will be conducted with the use of a clamshell environmental bucket. The clamshell will have a minimum capacity of 10 cubic yards. The environmental bucket is proposed to reduce turbidity that may affect water quality adjacent to the channel. The environmental bucket reduces turbidity because it is sealed at the top, thus preventing dredged material from spilling out and over the sides when the bucket is raised through the water column.

USACE proposes to conduct eelgrass surveys before and after dredging per the requirements of the California Eelgrass Mitigation Policy and Implementing Guidelines (NOAA Fisheries 2014). To the extent practicable, USACE will avoid areas of eelgrass. Areas where eelgrass cannot be avoided will be clearly identified in pre-dredge surveys. To the extent practicable, the USACE will remove and transplant eelgrass that would otherwise be removed during dredging. Post-dredge surveys will identify areas where eelgrass was directly removed.

The action area includes the Bodega Bay Harbor and areas approximately one-quarter mile outside of the bay. Bodega Bay Harbor is a migratory area for CCC steelhead, with the closest critical habitat streams are Estero Americano (5.0 kilometers (km) away) and Salmon Creek (8.6 km away). CCC steelhead and CCC coho salmon are not known to spawn in Bodega Harbor or Cheney Gulch, the main tributary to Bodega Harbor.

Historically, these species may have utilized Cheney Gulch, though due to the lack of suitable habitat within Bodega Harbor and Cheney Gulch, the potential for occurrence is expected to be low. However, juveniles and adults may stray into the harbor on occasion. Adult salmon can occasionally be found near the outlet to a small freshwater pond at the northwest end of the harbor but are not known to spawn there (NMFS 2015).

There are no interrelated or interdependent activities associated with the proposed action.

#### **Action Agency's Effects Determination**

The Corps has determined the potential impacts resulting from the Bodega Harbor dredging is not likely to adversely affect federally listed species, or designated critical habitat. This determination was made for Central California Coast (CCC) coho salmon (*O. kisutch*), Central California Coast steelhead (*Oncorhynchus mykiss*), and the Southern Distinct Population

Segment (DPS) of North American green sturgeon (*Acipenser medirostris*). The Corps NLAA determination is based on past section 7s for this action, minimization and avoidance measures that have been used in the recent past, and proposing a work window that is likely to avoid any contact with salmonids.

Available information indicates that ESA listed species of the following Evolutionarily Significant Unit (ESU) or Distinct Population Segment (DPS) and designated critical habitat may occur within the project site:

**Central California Coast (CCC) steelhead DPS (*Oncorhynchus mykiss*)**

Threatened (January 5, 2006; 71 FR 834)

Critical habitat (September 5, 2005; 70 FR 52488)

**Central California Coast (CCC) coho salmon ESU (*O. kisutch*)**

Endangered (70 FR 37160; June 28, 2005)

Critical habitat (May 5, 1999; 64 FR 24049)

**Southern DPS of North American green sturgeon (*Acipenser medirostris*)**

Threatened (April 7, 2006; 71 FR 17757)

Critical habitat, proposed (September 8, 2008; 73 FR 52084)

Regarding EFH, the Corps has determined that the proposed action would have minimal adverse impacts on EFH and Federally managed fisheries in California waters. The species management

plans that apply in California are the Coastal Pelagic Species Fisheries Management Plan (FMP), Pacific Coast Groundfish FMP and Pacific Salmon FMP. This determination is based on the fact that dredging activities will occur adjacent to eelgrass beds. Tidal mudflats and eelgrass beds occur in the Bodega Bay Harbor area. Under EFH, eelgrass is considered Habitat Areas of Particular Concern (HAPC). Eelgrass grows in large beds in soft-bottomed bays from about mean low tide to six feet below. Eelgrass is ecologically important, providing food for many species, structure for diverse habitat, and nursery sites for many commercially and recreationally important aquatic species. In the project area, eelgrass occurs along the edge of the proposed channel dredging and likely cannot be avoided entirely.

### **Consultation History**

The Corps requested concurrence with their ESA and EFH determinations by letter dated June 17, 2017. During pre-consultation on June 17, 2016, the Corps provided a brief overview of the proposed action and requesting an official species list. On July 7, 2016, NMFS provided a species list through email. On July 19, 2016, the Corps provided NMFS with an analysis of the potential effects of the proposed action on threatened and endangered species, critical habitat, and EFH in the project area. The analysis concluded that the proposed action is not likely to adversely affect ESA-protected species or adversely modify critical habitat; but, additional EFH analysis should be conducted. On July 28, 2016, NMFS responded that informal consultation would be appropriate for ESA species, critical habitat and EFH.

## **ENDANGERED SPECIES ACT**

### **Effects of the Action**

Under the ESA, “effects of the action” means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is not likely to adversely affect listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur.

Potential impacts to listed species include direct effects of entrainment and indirect effects to benthic habitat and water quality from dredging. The Corps has worked with the NMFS to

propose the dredging during a work window that avoids all life stages of salmonids. The work window of July to November will ensure that in-water work will not occur during the upstream migration season of adult salmonids, and will avoid the outmigration of salmonid smolts. NMFS has determined there is a low probability that juvenile steelhead will be rearing in the action area during proposed dredging. NMFS makes this determination because there is limited presence of salmonids in the Bodega Bay Harbor during late summer and fall. We base this on past information showing that no salmonids are known to utilize this area during the summer and fall months. Due to their limited occurrence in the project's action area, and the low risk of entrainment associated with dredging equipment proposed to be used, it is also unlikely that salmonids will be entrained, or adversely affected by the dredging actions.

With respect to the southern DPS of North American green sturgeon, most spawn in the upper reaches of the Sacramento River, and exhibit an extensive marine existence, traveling as far north along the Pacific west coast as Alaska. These fish return from the ocean every few years in the late winter to spawn, and generally show fidelity to their upper Sacramento River spawning sites, but are known to inhabit bays and estuaries such as the Bodega Bay Harbor (Corps 2017). As with salmonids, it is unlikely that green sturgeon will encounter the dredging equipment due to the low likelihood of being in the action area. Based on limited information, the presence of green sturgeon in the action area is unlikely during the proposed dredging (Adams et al. 2002). Therefore, NMFS has determined that it is unlikely that green sturgeon will be entrained during the proposed action. Regarding potential impacts to water quality in the Bodega Bay, minimal effects are anticipated by this project. Increased turbidity generated while pulling the bucket through the water column will be minimized with an environmental bucket. Sediments suspended in the water column could be carried with the current away from the dredge site, thus generating a turbidity plume in the area of dredging. These turbidity plumes are generally short-term, localized and as

#### **MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT**

Under the MSA, this consultation is intended to promote the protection, conservation and enhancement of EFH as necessary to support sustainable fisheries and the managed species' contribution to a healthy ecosystem. For the purposes of the MSA, EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity", and includes the associated physical, chemical, and biological properties that are used by fish (50 CFR 600.10), and "adverse effect" means any impact which reduces either the quality or quantity of EFH (50 CFR 600.910(a)). Adverse effects may include direct, indirect, site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

NMFS has evaluated the proposed project for potential adverse effects to EFH pursuant to Section 305(b)(2) of the MSA and anticipates the proposed dredging of sediments from the Bodega Bay Harbor will result in temporary degradation and/or loss of EFH through removal/burial of benthic prey species, increased turbidity/suspended sediments within the action area, and potential disturbance to eelgrass Habitat Areas of Particular Concern (HAPC). HAPC are described in the regulations as subsets of EFH that are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Designated HAPC are not afforded any additional regulatory protection under MSA; however, federal projects with potential adverse impacts to HAPC are more carefully scrutinized during the consultation process.

Dredging is expected to remove prey items from the benthos, reducing the value of the dredged area as a foraging area for FMP species (Newell et al. 1998). Based on rates of community recovery listed in the scientific literature, NMFS expects the benthic community in the project area to recover within several months to a few years (Oliver et al. 1977; Watling et al. 2001). Water column turbidity associated with dredging reduces the amount of light available for photosynthesis and consequently affects the eelgrass growth and overall plant health (Zimmerman et al. 1991). Additionally, fish may suffer reduced feeding ability (Benfield and Minello 1996) and be prone to fish gill injury (Nightingale and Simenstad 2001) if exposed to excessive high levels of turbidity.

The Corps proposes to use an environmental dredge clamshell bucket, for this project. As such, the increases in turbidity are expected to be minor and to dissipate relatively quickly with tidal exchange. Thus adverse effects to eelgrass growth or fish feeding should be minimal. Any eelgrass detected in pre-project surveys within the dredge footprint of the proposed action will be avoided. The Corps proposes to avoid eelgrass to extent possible and to provide a 5 meter buffer to avoid eelgrass shoots associated with vegetated areas. Providing a buffer for existing eelgrass is expected to reduce the potential for adverse effects to this species. Pre and post eelgrass survey information collected for the proposed project will determine if mitigation will be necessary. In the event that post project mitigation is needed, the Corps has proposed to work with resource agencies and follow mitigation guidance in the NOAA Fisheries 2014 *California Eelgrass Mitigation Policy and Implementing Guidelines*.

Based on this analysis, NMFS has determined the proposed action would adversely affect EFH for various life stages of fish species managed under the Pacific Groundfish FMP, Coastal Pelagics FMP, or Pacific Coast Salmon FMP; however, the proposed action includes adequate measures to avoid, minimize, mitigate, or otherwise offset the adverse effects to EFH.

Therefore, NMFS has no practical EFH conservation recommendations to provide to avoid or reduce the magnitude of these effects. The Corps must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH. This concludes the MSA portion of this consultation.

Please direct questions regarding this letter to Thomas Daugherty, North-Central Coast Office, North Coast Branch, at (707) 468-4057 or tom.daugherty@noaa.gov.

Sincerely,



Barry A. Thom  
Regional Administrator

cc: Dr. Mark Wiechmann, Corps  
bcc: CHRON File (pdf)  
Division- File copy

#### Literature Cited

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Zimmerman, RC, J.L. Reguzzoni, S. Wyllie-Echeverria, M. Josselyn and R.S. Alberte. 1991. Assessment of Environmental Suitability for Growth of *Zostera-Marina L* (Eelgrass) in San-Francisco Bay. *Aquatic Botany* 39 (3-4): 353-366.



DEPARTMENT OF THE ARMY  
SAN FRANCISCO DISTRICT, US ARMY CORPS OF ENGINEERS  
1455 MARKET STREET  
SAN FRANCISCO CALIFORNIA 94103-1398

April 17, 2017

Mr. Gary Stern  
ATTN: Ms. Sara Azat  
National Oceanic and Atmospheric Administration - Fisheries  
West Coast Region  
U.S. Department of Commerce  
777 Sonoma Ave. Room 325  
Santa Rosa, CA 95404

Dear Mr. Stern:

We are writing you to inform you that the U.S. Army Corps of Engineers, San Francisco District, proposes to maintenance dredge the federal navigation channels at Bodega Harbor. In addition, we would like to initiate informal consultation under the federal Endangered Species Act, pursuant to 50 CFR § 402.13, and request essential fish habitat (EFH) abbreviated consultation under the Magnuson-Stevens Fishery Conservation and Management Act, pursuant to 50 CFR § 600.920(h). With this letter, we are submitting for your review the enclosed draft Environmental Assessment (EA), *Bodega Harbor Federal Channels – Maintenance Dredging for Fiscal Year 2017* and the associated draft *Finding of No Significant Impact (FONSI)*, both of which are dated April 2017 (provided electronically) and the draft *Essential Fish Habitat Assessment for Maintenance Dredging of the Federal Bodega Harbor Federal Navigation Channels* (EFH Assessment), dated April 2017 (Enclosure 1). The EA will be available for a 30-day comment period, from April 19 through May 18, 2017.

The EA provides a detailed description of the proposed federal action, which is summarized herein. This letter, along with the draft EA, provides the basis of our assessment that the proposed action is not likely to adversely affect, nor jeopardize the continued existence of threatened or endangered species managed by your agency. The EFH Assessment provides an analysis of the proposed project's potential impacts to EFH, including eelgrass, and our plans to monitor eelgrass in accordance with the California Eelgrass Mitigation Policy and Implementing Guidelines, dated October 2014.

*Consultation history:* On June 17, 2016, our staff emailed your agency providing a brief overview of the proposed action and requesting an official species list. On July 7, 2016, Ms. Sara Azat provided a species list through email. On July 19, 2016, we provided your staff with an analysis of the potential effects of the proposed action on threatened and endangered species, critical habitat, and EFH in the project area. The analysis concluded that the proposed action is not likely to adversely affect ESA-protected species or

adversely modify critical habitat; but, additional EFH analysis should be conducted. On July 28, 2016, your agency responded that informal consultation would be appropriate for ESA species and critical habitat; however, that the proposed project may result in adverse effects to EFH, particularly eelgrass. This email exchange is provided as Enclosure 2.

*Action area:* The action area includes the federal Bodega Harbor navigation channels located predominately within Bodega Harbor, with the entrance channel extending approximately 1,600 feet into Bodega Bay. The federal Bodega Harbor shallow-draft navigation channels are 20,220 feet long, 100 feet wide, maintained to a depth of 12 feet mean lower low water (MLLW), with up to 2 feet of overdepth. The channel includes a 300-footwide turning basin north of Campbell Cove at the end of the entrance channel, and two 400-foot wide turning basins, the first at the most northern part of the channel near the town of Bodega Bay, and a second basin at the innermost end of the federal channel. The action area also includes the transportation corridor from Bodega Harbor to the San Francisco Deep Ocean Disposal Site (SF-DODS) and SF-8 dredged material placement sites. Enclosure 3 provides figures of the Bodega Harbor federal channels, dredged material placement sites, transportation corridor, as well as the associated action area.

*Proposed action:* The proposed action is to maintenance dredging the Bodega Harbor federal channels and place the dredged material in approved aquatic placement sites. Bodega Harbor maintenance dredging occurs approximately every 12 to 13 years. Since its construction in 1943, the channels have only been dredged five times, with the last dredging episode occurring in 2004. The upcoming dredging cycle is scheduled to occur over 60 days between July and November 2017. The channel's authorized depth is 12 feet MLLW, with a 2-feet of allowable overdepth. It is estimated that up to 110,000 cubic yards of sediment could be dredged from the channels, with placement occurring at SF-DODS and SF-8. While dredging is expected to take approximately 60 days, it might be temporarily halted if inclement weather or rough seas prevent safe transport of dredged material.

Dredging will occur with an environmental (closed) clamshell bucket to minimize the potential for turbidity to affect nearby eelgrass beds. Dredged material will be placed into shallow barges (scows) for transport to the proposed dredged material disposal sites. Scows will be loaded to no more than 80 percent capacity, as this is a requirement for transporting dredged material through the Gulf of the Farallones National Marine Sanctuary. A detailed project description is provided in the enclosed environmental assessment.

*Threatened and endangered species:* Your agency provided an official species list on July 7, 2016, via email (Enclosure 4). According to the species list, three NMFS-managed

threatened and endangered species have the potential to be present in the action area, designated critical habitat for one species, green sturgeon is also within the action area. Designated critical habitat for Central California Coast coho salmon was also included in the list. However, this critical habitat is only present in tributaries to Bodega Bay proper, which is outside of the action area. In addition, the list included three EFH Fishery Management Plans: Pacific Coast Groundfish, Pacific Coast Salmonid, and Coastal Pelagic. The threatened and endangered species and critical habitat provided in the species list are listed below, along with our determination of potential effects of the proposed action. Potential impacts to EFH are discussed in detail in the enclosed EFH Analysis.

- Central California Coast steelhead (*Oncorhynchus mykiss*) – threatened (71 FR 834; January 5, 2006). Central California Coastal steelhead may be present in the coastal waters within the transportation corridor, particularly in April and May. However, the barges and tugs transporting dredged material are extremely shallow, drafting less than 10 feet MLLW. As such, it is anticipated that transporting dredged material to SF-DODS or SF-8 is not likely to adversely affect this species.
- Central California Coast coho salmon (*Onchorynchus kisutch*) – endangered (77 FR 19552, April 2, 2012). Central California Coast coho salmon may be present in the coastal waters within the transportation corridor; however, they are typically present outside of the proposed dredging timeframe. As such, it is anticipated that transporting dredged material to SF-DODS or SF-8 is not likely to adversely affect this species.
- North American green sturgeon (*Acipenser medirostris*) southern DPS – threatened (71 FR 17757; April 7, 2006). Green sturgeon southern distinct population segment (DPS) utilize coastal estuaries and nearshore waters along the West Coast of North America, ranging from Mexico to the Bering Sea. Although they inhabit waters along the coast of North America, they have a general tendency to head north after their out-migration from freshwater (Lindley *et al.* 2011). In ocean waters, green sturgeon inhabit waters between 0 and 200 meters depth, but are typically found in depths from 20-80 meters (Huff *et al.* 2011). Multiple rivers and estuaries are visited by aggregations of adult and subadult green sturgeon in summer months, and larger estuaries appear to be particularly important habitat (Lindley *et al.* 2011). During the winter months, green sturgeon generally reside in the coastal ocean, particularly off the coasts of western Canada and Washington.

Dredging the entrance channel and transporting dredged material to the placement sites has the potential to affect green sturgeon. However, dredging the entrance channel would be conducted only over a few days, thus resulting in very temporary impacts to sturgeon that may be present in the vicinity of dredging.

However, it is expected that sturgeon would avoid the dredge. Transportation of dredged material could also affect green sturgeon migrating in coastal waters along the dredged material transportation corridor. However, it is unlikely that sturgeon would be present in the top 10 feet of the water column, as sturgeon typically inhabit waters 65 feet (20 meters) or deeper. As such, the proposed action may affect, but are not likely to adversely affect green sturgeon.

- North American green sturgeon critical habitat (74 FR 52300; October 9, 2009). Critical habitat was designated for the southern DPS green sturgeon on October 9, 2009 (74 FR 52300). Critical habitat includes coastal marine waters within 60 fathoms (360-foot) depth from Monterey Bay, California to Cape Flattery, Washington, including the Strait of Juan de Fuca to its United States boundary, and includes Bodega Bay proper, but not the harbor. Project areas located in green sturgeon critical habitat include approximately 1,600 linear feet (3.7 acres) of the Bodega Bay harbor entrance channel, as well as the dredged material transportation corridor to SF-DODS and SF-8.

Primary constituent elements (PCE) of designated critical habitat in estuarine areas are food resources, water flow, water quality, mitigation corridor, depth, and sediment quality. In freshwater riverine systems, PCEs include food resources, substrate type or size, water flow, water quality, migratory corridor, depth, and sediment quality. PCEs in the nearshore coastal marine areas include migratory corridor, water quality, and food resources. The proposed maintenance dredging project is not located within the estuarine or freshwater riverine PCEs; however, the entrance channel and transportation corridor are within the nearshore coastal marine PCEs. The dredged material disposal sites (SF-DODS and SF-8) are also within green sturgeon critical habitat; however, dredged material disposal of suitable material is already permitted for these sites.

Current hydrosurvey data indicate that small portions of the entrance channel may require dredging. Hydrosurveys conducted prior to dredging will confirm the locations where dredging will occur and the associated volume of dredged material. It is expected that dredging the entrance channel would be minimal, lasting only a few days during the dredging period. Dredging could temporarily affect PCEs in the entrance channel; however, these impacts would be temporary, minimal, and would not adversely modify green sturgeon critical habitat. Transporting dredged material from the federal channel to the disposal sites would not affect green sturgeon critical habitat.

- Central California Coast coho salmon critical habitat (64 FR 24049; May 5, 1999). Accessible reaches are those within the historical range of the ESU that can still be occupied by any life stage of coho salmon. The final critical habitat determination

(64 FR 24049) does not specifically identify critical habitat in the project area, beyond indicating that accessible reaches of rivers in the Bodega Bay Hydrological Unit are included in the critical habitat. However, NOAA Fisheries has GIS data indicating that Estero Americano, a tributary to Bodega Bay proper, is critical habitat for this species. No other waterways in vicinity of the project area are accessible to salmonids. Because dredging and dredged material transportation would not occur within CCC coho salmonid critical habitat, the proposed maintenance dredging would not affect this species' critical habitat.

Based on the analysis regarding the proposed project's potential to affect ESA species and critical habitat provided herein, it is unlikely that threatened or endangered species or critical habitat managed by your agency would be adversely affected by the proposed action. Should impacts occur, they would be insignificant and/or discountable and, therefore, would not jeopardize the continued existence of any such species. We request your review and concurrence with our analysis pursuant to 50 C.F.R § 402.13(a). We also request your comments on the enclosed EFH Assessment within 30 days of receipt of the document, pursuant to 50 CFR § 600.920(h)(3).

We have provided copies of this letter and the environmental assessment to Mr. Brian Ross of the United States Environmental Protection Agency, Ms. Elizabeth Christian of the San Francisco Regional Water Quality Control Board, Mr. Stephen Bargsten of the North Coast Regional Water Quality Control Board, Mr. Mark Delaplaine of the California Coastal Commission, Mr. Ryan Olah of the United States Fish and Wildlife Service, and Mr. Arn Aarreberg of the California Division of Fish and Wildlife.

Please submit comments within 30 days of receipt of this letter and associated documents. Direct your comments to Dr. Mark Wiechmann, of my staff, at [Mark.J.Wiechmann@usace.army.mil](mailto:Mark.J.Wiechmann@usace.army.mil), or at (415)-503-6846.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jessica Burton Evans', with a stylized, flowing script.

Jessica Burton Evans  
Chief, Environmental Sections A & B

Enclosures

**From:** Fowler, Cynthia J SPN  
**To:** [Wiechmann, Mark J SPN](#); [BurtonEvans, Jessica L SPN](#); [Palmer, Michele L SPN](#)  
**Cc:** [Mull, Peter A SPN](#)  
**Subject:** FW: [EXTERNAL] Bodega Bay Maintenance Dredging (UNCLASSIFIED)  
**Date:** Friday, July 29, 2016 6:04:00 AM

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Below is NMFS' concurrence with our assessment for Bodega Harbor.

Thanks,

Cynthia

Cynthia Jo Fowler  
US Army Corps of Engineers  
1455 Market Street  
San Francisco, CA  
94103-1398

Phone: 415.503.6870

-----Original Message-----

From: Sara Azat - NOAA Federal [<mailto:sara.azat@noaa.gov>]  
Sent: Thursday, July 28, 2016 2:53 PM  
To: Fowler, Cynthia J SPN <[Cynthia.J.Fowler@usace.army.mil](mailto:Cynthia.J.Fowler@usace.army.mil)>  
Cc: Gary Stern - NOAA Federal <[gary.stern@noaa.gov](mailto:gary.stern@noaa.gov)>  
Subject: Re: [EXTERNAL] Bodega Bay Maintenance Dredging (UNCLASSIFIED)

Hi Cynthia,

Thank you for providing the draft preliminary assessment for ESA species and critical habitat for the Bodega Bay Maintenance Dredging Project. NMFS agrees with this preliminary assessment that informal consultation is appropriate for ESA-listed species and their critical habitat.

As I mentioned on the phone, we look forward to working closely with you to provide assistance in developing avoidance and minimization measures for EFH in the project area. This project may result in substantial effects to EFH, and specifically to eelgrass, but I am confident that early coordination on this project will facilitate timely completion of consultation.

Let me know if you have any questions.

-Sara

On Tue, Jul 19, 2016 at 8:04 AM, Fowler, Cynthia J SPN <[Cynthia.J.Fowler@usace.army.mil](mailto:Cynthia.J.Fowler@usace.army.mil)> wrote:

CLASSIFICATION: UNCLASSIFIED

I forgot to mention - my computer is down and I'm on a loaner. I do plan to put keys on those figures for ease of reading - but, don't have the software on the loaner. Therefore, I've include a description of the figure key in the text. Sorry!

Thanks,

Cynthia

-----Original Message-----

From: Fowler, Cynthia J SPN  
Sent: Tuesday, July 19, 2016 10:02 AM

To: 'Sara Azat - NOAA Federal' <sara.azat@noaa.gov <<mailto:sara.azat@noaa.gov>> >  
Cc: 'Gary Stern - NOAA Federal' <gary.stern@noaa.gov <<mailto:gary.stern@noaa.gov>> >  
Subject: RE: [EXTERNAL] Bodega Bay Maintenance Dredging (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

Hi Sara. Thanks for your email indicted the ESA species, critical habitat and EFH that may be present in the Bodega Harbor maintenance dredging project area. I've done a review of the ESA species, critical habitat, and ESA in the project area, as well as an impacts assessment. I think the biggest concern is the impacts on eelgrass HPAC/EFH; however, we do plan to minimize turbidity impacts using an environmental dredge and do pre- and post- surveys, according to the California eelgrass policy.

If you could, please take a look at the draft (and short) preliminary assessment for the species, critical habitat, and EFH that you provided in your 7 July 2016 email (below). With this analysis, I am hoping that we can move forward with informal ESA consultation and work together to look more closely at the impacts of the project on adjacent eelgrass in an abbreviated EFH.

I'd like to send an official letter to your agency requesting informal ESA consultation in the near future; however, I don't want to do this until you are comfortable with the analysis and agree that informal consultation is the path forward. I will work on an EFH assessment as well, but would like to focus that assessment on the specific concerns of your agency, rather than doing a large analysis on impacts that are likely to not be substantial.

Please let me know what your thoughts are on the attachment and my proposed path forward.

Thanks!

Cynthia  
415.238.6906 <tel:415.238.6906>

-----Original Message-----

From: Fowler, Cynthia J SPN  
Sent: Thursday, July 07, 2016 4:27 PM  
To: Sara Azat - NOAA Federal <sara.azat@noaa.gov <<mailto:sara.azat@noaa.gov>> >  
Cc: Gary Stern - NOAA Federal <gary.stern@noaa.gov <<mailto:gary.stern@noaa.gov>> >  
Subject: RE: [EXTERNAL] Bodega Bay Maintenance Dredging

Thanks, Sara! Regarding ESA - the salmonids typically aren't present Bodega Harbor, as there isn't upstream spawning grounds. Bodega Bay does not include the enclosed lagoon harbor where the eelgrass is - it's a separate embayment. However, they could be present in Bodega Bay proper (outside the harbor). There is a small portion of the channel (1600 feet) that extends into Bodega Bay proper - the entrance channel. We may need to dredge an approximately 200 by 200 foot area; but, since dredging will not occur until approximately April - October, 2017, it may be larger or may not be required at all. The 1,600 foot entrance channel also extends into green sturgeon critical habitat.

I've also read through the 2014 eelgrass mitigation policy document you sent me and am basing our survey and impacts analysis off of that. We will also need to discuss any mitigation, if required.

I'm preparing a short write up to send you to facilitate your analysis. Do you think formal consultation will be required?

Thanks,

Cynthia

Cynthia Jo Fowler  
US Army Corps of Engineers  
1455 Market Street  
San Francisco, CA  
94103-1398

Phone: 415.503.6870

-----Original Message-----

From: Sara Azat - NOAA Federal [<mailto:sara.azat@noaa.gov> <<mailto:sara.azat@noaa.gov>> ]  
Sent: Thursday, July 07, 2016 12:13 PM  
To: Fowler, Cynthia J SPN <[Cynthia.J.Fowler@usace.army.mil](mailto:Cynthia.J.Fowler@usace.army.mil) <<mailto:Cynthia.J.Fowler@usace.army.mil>> >  
Cc: Gary Stern - NOAA Federal <[gary.stern@noaa.gov](mailto:gary.stern@noaa.gov) <<mailto:gary.stern@noaa.gov>> >  
Subject: [EXTERNAL] Bodega Bay Maintenance Dredging

Hello Cynthia,

This is a follow-up to our phone conversation last week regarding the 2017 maintenance dredging for Bodega Bay Channel.

The following ESA-listed species and critical habitat are found in the project area:

Central California Coast steelhead

Central California Coast coho salmon and their critical habitat

North American green sturgeon and their critical habitat

Essential Fish Habitat for the Coastal Pelagic Species, Pacific Coast Groundfish Species, and Pacific Salmon Management Plans is located within the project area.

With regard to your question concerning the affects of transporting dredged material to SF-DODS on marine mammals, please contact Jolie Harrison at the Office of Protected Resources in Silver Spring - 301-427-8401 <<tel:301-427-8401>> .

Please contact me if you have any other questions regarding moving forward with the consultation process.

Thank you,

Sara

--

Sara Azat  
Fish Biologist

NOAA Fisheries - West Coast Region  
U.S. Department of Commerce  
777 Sonoma Ave. Room 325  
Santa Rosa, CA 95404  
tel: 707-575-6067 <<tel:707-575-6067>>  
fax: 707-578-3435 <<tel:707-578-3435>>  
web: Blocked<http://Blockedwww.westcoast.fisheries.noaa.gov>  
<Blocked<http://www.westcoast.fisheries.noaa.gov>>

<Blocked[https://lh6.googleusercontent.com/3mb4dQ0Bvm5Magqi0SAO6U7iCXaM\\_cWzOW-LvmbyahVuTxompKstvNmP2PhQt0aejnOoVKAIL\\_8S3mm5GSET2rh7H7vgBkjaqpu\\_Pc52os\\_ivGGVIRQ](https://lh6.googleusercontent.com/3mb4dQ0Bvm5Magqi0SAO6U7iCXaM_cWzOW-LvmbyahVuTxompKstvNmP2PhQt0aejnOoVKAIL_8S3mm5GSET2rh7H7vgBkjaqpu_Pc52os_ivGGVIRQ)>  
<Blocked[http://lh6.googleusercontent.com/3mb4dQ0Bvm5Magqi0SAO6U7iCXaM\\_cWzOW-LvmbyahVuTxompKstvNmP2PhQt0aejnOoVKAIL\\_8S3mm5GSET2rh7H7vgBkjaqpu\\_Pc52os\\_ivGGVIRQ](http://lh6.googleusercontent.com/3mb4dQ0Bvm5Magqi0SAO6U7iCXaM_cWzOW-LvmbyahVuTxompKstvNmP2PhQt0aejnOoVKAIL_8S3mm5GSET2rh7H7vgBkjaqpu_Pc52os_ivGGVIRQ)> >

CLASSIFICATION: UNCLASSIFIED  
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Sara Azat  
Fish Biologist

NOAA Fisheries - West Coast Region  
U.S. Department of Commerce  
777 Sonoma Ave. Room 325  
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tel: 707-575-6067  
fax: 707-578-3435  
web: Blocked<http://www.westcoast.fisheries.noaa.gov>

<Blocked[https://lh6.googleusercontent.com/3mb4dQ0Bvm5Magqi0SAO6U7iCXaM\\_cWzOW-LvmbyahVuTxompKstvNmP2PhQt0aejnOoVKAll\\_8S3mm5GSET2rh7H7vgBkjaqpu\\_Pc52os\\_ivGGVIRQ](https://lh6.googleusercontent.com/3mb4dQ0Bvm5Magqi0SAO6U7iCXaM_cWzOW-LvmbyahVuTxompKstvNmP2PhQt0aejnOoVKAll_8S3mm5GSET2rh7H7vgBkjaqpu_Pc52os_ivGGVIRQ)>

**From:** [Sara Azat - NOAA Federal](#)  
**To:** [Fowler, Cynthia J SPN](#)  
**Cc:** [Gary Stern - NOAA Federal](#)  
**Subject:** [EXTERNAL] Bodega Bay Maintenance Dredging  
**Date:** Thursday, July 07, 2016 12:15:00 PM

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Hello Cynthia,

This is a follow-up to our phone conversation last week regarding the 2017 maintenance dredging for Bodega Bay Channel.

The following ESA-listed species and critical habitat are found in the project area:

Central California Coast steelhead

Central California Coast coho salmon and their critical habitat

North American green sturgeon and their critical habitat

Essential Fish Habitat for the Coastal Pelagic Species, Pacific Coast Groundfish Species, and Pacific Salmon Management Plans is located within the project area.

With regard to your question concerning the affects of transporting dredged material to SF-DODS on marine mammals, please contact Jolie Harrison at the Office of Protected Resources in Silver Spring - 301-427-8401.

Please contact me if you have any other questions regarding moving forward with the consultation process.

Thank you,

Sara

--

Sara Azat  
Fish Biologist

NOAA Fisheries - West Coast Region  
U.S. Department of Commerce  
777 Sonoma Ave. Room 325  
Santa Rosa, CA 95404  
tel: 707-575-6067  
fax: 707-578-3435  
web: Blocked<http://www.westcoast.fisheries.noaa.gov>

<Blocked[https://lh6.googleusercontent.com/3mb4dQ0Bvm5Magqi0SAO6U7iCXaM\\_cWzOW-LvmbyahVuTxompKstvNmP2PhQt0aejnOoVKAll\\_8S3mm5GSET2rh7H7vgBkjaqpu\\_Pc52os\\_ivGGVIRQ](https://lh6.googleusercontent.com/3mb4dQ0Bvm5Magqi0SAO6U7iCXaM_cWzOW-LvmbyahVuTxompKstvNmP2PhQt0aejnOoVKAll_8S3mm5GSET2rh7H7vgBkjaqpu_Pc52os_ivGGVIRQ)>



DEPARTMENT OF THE ARMY  
SAN FRANCISCO DISTRICT, US ARMY CORPS OF ENGINEERS  
1455 MARKET STREET  
SAN FRANCISCO CALIFORNIA 94103-1398

April 17, 2017

Mr. Ryan Olah  
Sacramento Fish and Wildlife Office  
U.S. Fish and Wildlife Service  
2800 Cottage Way  
Sacramento, CA 95825

Dear Mr. Olah:

We are writing you to inform you of the U.S. Army Corps of Engineers, San Francisco District proposes to maintenance dredge the federal navigation channels at Bodega Harbor and to initiate informal consultation under the federal Endangered Species Act, pursuant to 50 CFR § 402.13. With this letter, we are submitting for your review the enclosed draft Environmental Assessment (EA), *Bodega Harbor Federal Channels – Maintenance Dredging for Fiscal Year 2017* and the associated draft *Finding of No Significant Impact (FONSI)*, both of which are dated April 2016 (provided electronically). The EA will be available for a 30-day comment period, from April 19 through May 18, 2017.

The EA provides a detailed description of the proposed federal action, which is summarized herein. This letter, along with the draft EA, provides the basis of our assessment that the proposed action is not likely to adversely affect, nor jeopardize the continued existence of threatened or endangered species managed by your agency. Further, USFWS-managed critical habitat is not present in the action area and would not be affected by project activities.

*Consultation history:* On June 17, 2016, our staff emailed your agency (Mr. Ryan Olah) providing a brief discussion of the proposed project, the species provided in the official species list, and our conclusion that the proposed action would not likely affect the threatened or endangered species discussed in the species list and requested informal consultation. On July 21, 2016, your agency responded that informal consultation would be appropriate for this project as it is unlikely that listed species would not be affected by this project. This email exchange is provided as Enclosure 1.

*Action area:* The action area includes the federal Bodega Harbor navigation channels located predominately within Bodega Harbor, with the entrance channel extending approximately 1,600 feet into Bodega Bay. The federal Bodega Harbor shallow-draft navigation channels are 20,220 feet long, 100 feet wide, maintained to a depth of 12 feet mean lower low water (MLLW), with up to 2 feet of overdepth. The channel includes a 300-footwide turning basin north of Campbell Cove at the end of the entrance channel, and

two 400-foot wide turning basins, the first at the most northern part of the channel near the town of Bodega Bay, and a second basin at the innermost end of the federal channel. The action area also includes the transportation corridor from Bodega Harbor to the San Francisco Deep Ocean Disposal Site (SF-DODS) and SF-8 dredged material placement sites. Enclosure 2 provides figures of the Bodega Harbor federal channels, dredged material placement sites, transportation corridor, as well as the associated action area.

*Proposed action:* The proposed action is to maintenance dredging the Bodega Harbor federal channels and place the dredged material in approved aquatic placement sites. Bodega Harbor maintenance dredging occurs approximately every 12 to 13 years. Since its construction in 1943, the channels have only been dredged five times, with the last dredging episode occurring in 2004. The upcoming dredging cycle is scheduled to occur over 60 days between July and November 2017. The channel's authorized depth is 12 feet MLLW, with a 2-feet of allowable overdepth. It is estimated that up to 110,000 cubic yards of sediment could be dredged from the channels, with placement occurring at SF-DODS and SF-8. While dredging is expected to take approximately 60 days, it might be temporarily halted if inclement weather or rough seas prevent safe transport of dredged material.

Dredging will occur with an "environmental" (closed) clamshell bucket to minimize the potential for turbidity to affect nearby eelgrass beds. Dredged material will be placed into shallow barges (scows) for transport to the proposed dredged material disposal sites. Scows will be loaded to no more than 80 percent capacity, as this is a requirement for transporting dredged material through the Gulf of the Farallones National Marine Sanctuary. A detailed project description is provided in the enclosed environmental assessment.

*Threatened and endangered species:* An official species list was generated on June 16, 2016, and updated on March 7, 2017. According to the species list, twelve USFWS-managed threatened or endangered species have the potential to be present in the action area. These species are listed below, along with our determination of potential effects of the proposed action.

- California red-legged frog (*Rana draytonii*) – threatened. California red-legged frog inhabits fresh water ecosystems that are not present in the action area. Therefore, the proposed action would not affect this species.
- Northern spotted owl (*Strix occidentalis caurina*) – threatened. Northern spotted owl inhabits old growth forest habitat, which is not present in the action area; therefore, the proposed action would not affect this species.

- Yellow-billed cuckoo (*Coccyzus americanus*) – threatened. Yellow-billed cuckoos inhabit wooded habitat with dense cover with freshwater nearby. Suitable yellow-billed cuckoo habitat is not present in the action area. Therefore, the proposed action will not affect this species.
- Marbled murrelet (*Brachyramphus marmoratus*) – threatened. Marbled murrelet is a seabird that spends its time in the nearshore environment foraging or in nesting areas in large, old growth trees with platforms present in coastal forests. In Bodega Bay, this species may be present in waters off the shore; but, is considered an uncommon winter resident. Because this species is uncommon in the action area and dredging would occur outside of the winter period, it is expected that the proposed action would not likely affect marbled murrelet.
- Short-tailed albatross (*Phoebastria albatrus*) – endangered. Short-tailed albatross is a seabird that inhabits coastal marine habitats. It is rare in California and not known to nest in the United States. It is unlikely that this species would be present in the action area. Therefore, the proposed action would not affect this species.
- Western snowy plover (*Charadrius nivosus* spp. *nivosus*) – threatened. Western snowy plover nests on coastal beaches and dunes along the West Coast of the United States, predominately in Washington and central California, with peak nesting in mid-April through June. Snowy plovers have been observed wintering in Bodega Bay, but are not known to nest in the region. Dredging would occur outside of the wintering period when plovers could be present. Therefore, the project is not likely to adversely affect western snowy plovers.
- California freshwater shrimp (*Syncaris pacifica*) – endangered. This species does not inhabit marine waters and would not be in the action area. Therefore, the proposed action would not affect this species.
- Tidewater goby (*Eucyclogobius newberryi*) – endangered. Tidewater goby may be present in the shallow nearshore waters and estuarine tributaries outside of the action area. Therefore, the proposed action would not affect this species.
- Clover lupine (*Lupinus tidestromii*) – endangered, yellow larkspur (*Delphinium luteum*) – endangered, Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*) – endangered and San Bruno elfin butterfly (*Callophrys mossii bayensis*) – endangered. These species inhabit upland areas and would not be in the project area. Therefore, the proposed action would not affect these species.

Based on the unlikelihood that threatened or endangered species managed by your agency are not likely to be present in the action area, and impacts resulting from the proposed action would be insignificant and/or discountable and, therefore, would not jeopardize the continued existence of any such species. Further, because USFWS-managed critical habitat is not present in the action area, adverse modification of such habitat would not occur. We request your review and concurrence with our analysis pursuant to 50 C.F.R § 402.13(a).

We have provided copies of this letter and the environmental assessment to Mr. Brian Ross of the United States Environmental Protection Agency, Ms. Elizabeth Christian of the San Francisco Regional Water Quality Control Board, Mr. Stephen Bargsten of the North Coast Regional Water Quality Control Board, Mr. Mark Delaplaine of the California Coastal Commission, Ms. Sara Azat of the National Marine Fisheries Service, and Mr. Arn Arrenberg of the California Division of Fish and Wildlife.

Please submit comments within 30 days of receipt of this letter and associated documents. Direct your comments to Dr. Mark Wiechmann, of my staff, at [Mark.J.Wiechmann@usace.army.mil](mailto:Mark.J.Wiechmann@usace.army.mil), or at (415)-503-6846.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jessica Burton Evans', with a stylized flourish at the end.

Jessica Burton Evans  
Chief, Environmental Sections A & B

Enclosures

**From:** [Olah, Ryan](#)  
**To:** [Fowler, Cynthia J SPN](#)  
**Subject:** Re: [EXTERNAL] Re: Bodega Bay maintenance dredging  
**Date:** Thursday, July 21, 2016 10:19:21 AM

---

Cynthia,

Sorry it took me a bit to get back to you on this-I agree that informal consultation would be appropriate for this project. I don't think that listed species would be adversely affected by the dredging work. Will you be submitting an informal consultation request to our office for this?

Ryan

Ryan Olah  
Coast Bay Division Chief  
U.S. Fish and Wildlife Service  
Sacramento Fish and Wildlife Office  
2800 Cottage Way  
Sacramento, CA 95825  
(916) 414-6623

On Fri, Jun 17, 2016 at 2:35 PM, Fowler, Cynthia J SPN <[Cynthia.J.Fowler@usace.army.mil](mailto:Cynthia.J.Fowler@usace.army.mil)> wrote:

Thank you! Hi Ryan! Could you take a look at them email below.

I am working on ESA compliance for the upcoming operations and maintenance dredging for the federal navigation channel in Bodega Bay, California. I'd like to talk with you or your staff about this project and ESA compliance.

We are proposing to dredge approximately 70,000 cubic yards of material from the approximate 11-mile long, 100-foot wide, 12-foot deep federal channel sometime between May and October, 2017. We propose to use a 'environmental' closed mechanical clamshell dredge. The environmental dredge is proposed to reduce turbidity that could affect eelgrass in shallow areas adjacent to the channel. The proposed placement sites include the SF-8 and SF-DODS ocean disposal sites. Approximately 25,000 cubic yards of sandy sediment dredged from the entrance of the channel is proposed to be placed at the SF-8 placement site outside 3 nautical miles from shore. Material that doesn't meet the sand content requirements of SF-8 (i.e., less than 80% sand) would be placed at SF-DODS. The last dredging event occurred in 2004. The project also includes transporting dredged material in shallow 3,000 cubic yard scows at 80% full to the placement sites using tugs. ESA, NEPA, and other environmental compliance is already complete for SF-DODS and SF-8; therefore, placement of dredged material is not included in the current analysis. Tier III sediment sampling and analysis was conducted in November 2015; the analysis also included bioassays. The analysis shows that the sediment is clean; however the final suitability determination from the USEPA will be provided in July, 2016.

Attached to this email are hydrosurveys showing the areas proposed for dredging. The areas proposed for dredging are shaded. Dredging will return the channel to 12 feet MLLW, with up to 2 feet of overdepth, leaving the channel between 12- and 14- feet mean lower low water.

According to the IPaC Trust Resources Report (link: [Blockedhttps://ecos.fws.gov/ipac/project/VPGLK-PDWUF-BQBNZ-47WY5-TTZYNU](https://ecos.fws.gov/ipac/project/VPGLK-PDWUF-BQBNZ-47WY5-TTZYNU) <[Blockedhttp://ecos.fws.gov/ipac/project/VPGLK-PDWUF-BQBNZ-47WY5-TTZYNU](http://ecos.fws.gov/ipac/project/VPGLK-PDWUF-BQBNZ-47WY5-TTZYNU)> ) generated today, the following threatened or endangered species may be present in the Bodega Bay region:

- Northern spotted owl (*Strix occidentalis caurina*) - threatened

- Yellow-billed cuckoo (*Coccyzus americanus*) - threatened
- Marbled murrelet (*Brachyramphus marmoratus*) - threatened
- Short-tailed albatross (*Phoebastria albatrus*) - endangered
- Western snowy plover (*Charadrius nivosus* spp. *nivosus*) - threatened
  
- California freshwater shrimp (*Syncaris pacifica*) - endangered
  
- Tidewater goby (*Eucyclogobius newberryi*) - endangered
  
- Clover lupine (*Lupinus tidestromii*) - endangered
- Yellow larkspur (*Delphinium luteum*) - endangered
- Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*) - endangered
- San Bruno elfin butterfly (*Callophrys mossii bayensis*) - endangered

Additionally, the IPaC site indicates that no critical habitat is present in the action area.

In the past, we've informally consulted on the Bodega Bay project because we determined that dredging the federal channel in Bodega Bay is not likely to adversely affect USFWS-managed threatened or endangered species because these species are not likely to be present near the areas where dredging occurs and use of an environmental bucket will limit turbid plumes flowing into adjacent shallow areas.

I would like to discuss this project further with you or your staff to determine if any other protected species or critical habitat managed by your agency should be included in our analysis and if you agree that informal consultation is appropriate for this project. Please call me at your earliest convenience.

Thank you,

Cynthia

Cynthia Jo Fowler  
US Army Corps of Engineers  
1455 Market Street  
San Francisco, CA  
94103-1398

Phone: 415.503.6870



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office

FEDERAL BUILDING, 2800 COTTAGE WAY, ROOM W-2605

SACRAMENTO, CA 95825

PHONE: (916)414-6600 FAX: (916)414-6713

Consultation Code: 08ESMF00-2017-SLI-1373

March 07, 2017

Event Code: 08ESMF00-2017-E-03345

Project Name: Bodega Harbor FY2017 Maintenance Dredging

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2)

of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior  
Fish and Wildlife Service

Project name: Bodega Harbor FY2017 Maintenance Dredging

## Official Species List

### Provided by:

Sacramento Fish and Wildlife Office  
FEDERAL BUILDING  
2800 COTTAGE WAY, ROOM W-2605  
SACRAMENTO, CA 95825  
(916) 414-6600

**Consultation Code:** 08ESMF00-2017-SLI-1373

**Event Code:** 08ESMF00-2017-E-03345

**Project Type:** DREDGE / EXCAVATION

**Project Name:** Bodega Harbor FY2017 Maintenance Dredging

**Project Description:** Maintaining the 12' MLLW depth of the federal navigation channels in Bodega Harbor; transporting the dredged material to ocean disposal sites.

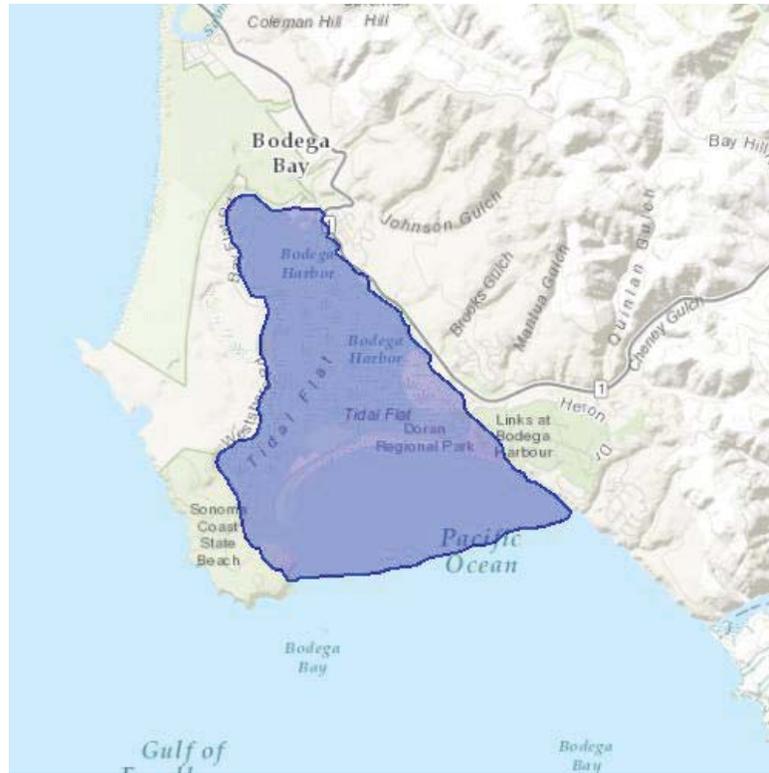
**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior  
Fish and Wildlife Service

Project name: Bodega Harbor FY2017 Maintenance Dredging

### Project Location Map:



**Project Coordinates:** The coordinates are too numerous to display here.

**Project Counties:** Sonoma, CA



## Endangered Species Act Species List

There are a total of 13 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
California red-legged frog ( <i>Rana draytonii</i> ) Population: Wherever found	Threatened	Final designated	
<b>Birds</b>			
Marbled murrelet ( <i>Brachyramphus marmoratus</i> ) Population: U.S.A. (CA, OR, WA)	Threatened	Final designated	
Northern Spotted owl ( <i>Strix occidentalis caurina</i> ) Population: Wherever found	Threatened	Final designated	
Short-Tailed albatross ( <i>Phoebastria (=diomedea) albatrus</i> ) Population: Wherever found	Endangered		
western snowy plover ( <i>Charadrius nivosus ssp. nivosus</i> ) Population: Pacific Coast population DPS- U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast)	Threatened	Final designated	
Yellow-Billed Cuckoo ( <i>Coccyzus</i> )	Threatened	Proposed	



United States Department of Interior  
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<i>americanus</i> Population: Western U.S. DPS			
<b>Crustaceans</b>			
California Freshwater shrimp ( <i>Syncaris pacifica</i> ) Population: Wherever found	Endangered		
<b>Fishes</b>			
steelhead ( <i>Oncorhynchus (=salmo) mykiss</i> ) Population: Northern California DPS	Threatened	Final designated	
Tidewater goby ( <i>Eucyclogobius newberryi</i> ) Population: Wherever found	Endangered	Final designated	
<b>Flowering Plants</b>			
Clover lupine ( <i>Lupinus tidestromii</i> ) Population: Wherever found	Endangered		
Yellow larkspur ( <i>Delphinium luteum</i> ) Population: Wherever found	Endangered	Final designated	
<b>Insects</b>			
Myrtle's Silverspot butterfly ( <i>Speyeria zerene myrtleae</i> ) Population: Wherever found	Endangered		
San Bruno Elfin butterfly ( <i>Callophrys mossii bayensis</i> ) Population: Wherever found	Endangered		



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## **Critical habitats that lie within your project area**

There are no critical habitats within your project area.