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

April 10, 2020 **Refer to NMFS No:** WCRO-2019-03215

[redacted]
Environmental Branch Chief
Military Ocean Terminal Concord
U.S. Department of the Army
410 Norman Avenue
Concord, California 94520-1142

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for Maintenance Dredging at Military Ocean Terminal Concord in Suisun Bay, Contra Costa County, California

Dear [redacted].

Thank you for your letters of October 9, 2019, December 11, 2019, and January 23, 2020, requesting consultation for maintenance dredging at the Military Ocean Terminal, Concord (MOTCO) in Suisun Bay, Contra Costa County, California. On February 14, 2020, NOAA's National Marine Fisheries Service (NMFS) received your request for a written concurrence that the U.S. Army's (Army) proposed dredging at MOTCO 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.

Updates to the regulations governing interagency consultation (50 CFR part 402) were effective on October 28, 2019 [84 FR 44976]. This consultation was pending at that time, and we are applying the updated regulations to the consultation. As the preamble to the final rule adopting the regulations noted, "[t]his final rule does not lower or raise the bar on section 7 consultations, and it does not alter what is required or analyzed during a consultation. Instead, it improves clarity and consistency, streamlines consultations, and codifies existing practice." We have reviewed the information and analyses relied upon to complete this letter of concurrence in light of the updated regulations and conclude the letter is fully consistent with the updated regulations.

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 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.

vessels transiting the channel. Dredged material is released from the clamshell bucket into an open barge, or scow, and the process is repeated until dredging is complete or the scow is full.

Once dredging is complete, hydrographic surveys would be conducted to confirm that the proposed area is dredged to specification. Capacity of a clamshell dredge bucket ranges between 20-50 cy, and up to seven scows with 2,000 to 4,000 cy capacity and four 1,800 horsepower tugs would be used to transport dredged material to placement sites. The daily production rate would range between 3,100 and 6,600 cy, depending on the location. The Army proposes to conduct turbidity monitoring should overflow of decant dredge water occur. Once scows are loaded to capacity, they will be used to transport the dredged material to the disposal site.

Dredge Material Disposal. The Army proposes to place approximately 85,662 cy of sediments from this dredging project at the Montezuma Wetlands Restoration Project (MWRP) or at the Cullinan Ranch Restoration Project (Cullinan Ranch).

Future Dredging Episodes. Since these sites at MOTCO have not be dredged for 12 years, the San Francisco Bay Dredged Materials Management Office (DMMO) considers this dredging proposal as "new" dredging rather than "maintenance" dredging. Once the Army has completed this initial dredging event, future dredging, knockdown dredging events, and disposal activities will be conducted in coordination with the DMMO as maintenance dredging. To facilitate the DMMO review, the Army has developed a sediment sampling plan, sediment characterization plan, a sediment removal plan, and proposes to perform disposal in accordance with the Long Term Management Strategy (LTMS) for disposal of sediment in San Francisco Bay, and permits would be obtained from the Corps. NMFS, the Corps, and the Environmental Protection Agency (EPA) completed consultation on the LTMS Program in 1998 and re-initiation of consultation in 2015 resulted in the issuance of a new NMFS biological opinion on July 9, 2015. Similarly, NMFS, Corps, and EPA completed a programmatic EFH consultation for Operations and Maintenance Dredging in the San Francisco Bay Area and associated dredged material placement on July 13, 2010. Future dredging episodes at these MOTCO sites by the Army will be conducted to conform with the requirements established by the LTMS programmatic consultations for ESA (July 9, 2015) and EFH (July 13, 2010).

We considered whether or not the proposed action would cause any other activities and determined that it would not.

MOTCO is located in Concord, California on the southern shoreline of Suisun Bay. The facility is the primary U.S. West Coast ammunition terminal, home to the Army Surface Deployment and Distribution Command (SDDC) 834th Transportation Battalion, and supports critical Department of Defense wartime and contingency operations throughout the Pacific. Prior to Army operations, the installation was operated by the U.S. Navy, and between 1943 through 1981 more than 1.8 million cy of material was dredged, averaging 81,000 cy per dredging episode. The area has not been dredged since 2008.

The project's action area consists of MOTCO's Pier 2, Pier 3, Pier 4, and Barge Pier, and adjacent surrounding waters located along the southern Suisun Bay shoreline in the City of Concord, California. The action area also includes the dredged material disposal sites at MWRP and Cullinan Ranch. The dredge footprint at MOTCO is located in both Contra Costa and Solano Counties, and water depth ranges from approximately 18 to 45 feet MLLW. The MOTCO shoreline consists of

Central Valley steelhead DPS (*Oncorhynchus mykiss*)
threatened (71 FR 834; January 5, 2006); and
North American green sturgeon southern DPS (*Acipenser medirostris*)
threatened (71 FR 17757; April 7, 2006)
critical habitat (74 FR 52300; October 9, 2009).

The life history of steelhead is summarized in Busby *et al.* (1996) and Chinook salmon life history is summarized in Myers *et al.* (1998). CCC steelhead, Central Valley steelhead, Sacramento River winter-run Chinook salmon, and Central Valley spring-run Chinook salmon pass through Suisun Bay to rear as juveniles or to upstream areas to spawn as adults. Their migrations take place in the winter and spring months.

The life history of threatened green sturgeon in California is summarized in Adams *et al.* (2002) and NMFS (2005). The southern DPS of North American green sturgeon are anadromous, making migrations through the San Francisco Bay estuary to the Sacramento River in the spring, with peaks in April-June (Moyle *et al.* 1995). Green sturgeon spawn in the deep turbulent sections of the upper reaches of the Sacramento River, and as juvenile green sturgeon age, they migrate downstream and live in the lower delta and bays. Green sturgeon juveniles spend three to four years in the estuary, before entering the ocean, and likely optimize their growth opportunities in summer by foraging in the relatively warm estuarine water (Moser and Lindley 2007). Green sturgeon forage on benthic prey items throughout the estuary, notably shallow tidal flats dominated by burrowing shrimp and other benthic prey items (Dumbauld *et al.* 2008). Green sturgeon juveniles, subadults, and adults (pre-and post-spawning) are present in Suisun Bay at various times throughout the entire year.

Regarding EFH, the Army has determined that the proposed project may adversely affect EFH, but that adverse effects would be localized and offset by the disposal of dredged sediments at a beneficial reuse site. Additionally, fish will be able to return to the area once dredging is completed. The project area is located within an area identified as EFH for various life stages of fish species managed within the Pacific Coast Salmon Fishery Management Plan (FMP), the Pacific Groundfish FMP, and the Coastal Pelagic FMP. The project area is also within an area designated as Habitat Areas of Particular Concern (HAPC) for various federally-managed fish species within the Pacific Groundfish FMP and Pacific Coast Salmon FMP. 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. As defined in the Pacific Groundfish and Salmon FMPs, San Francisco Bay, including the project area, is identified as estuary HAPC.

ENDANGERED SPECIES ACT

Effects of the Action

Under the ESA, "effects of the action" are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR 402.02). In our analysis, which describes the effects of the proposed action, we considered 50 CFR

As presented above, the project's disposal of dredged sediments at MWRP and Cullinan Ranch is expected to have no effects on listed fish. MWRP is an upland site and placement of material would be within the diked wetland area. The placement of dredged material at Cullinan Ranch is also within diked wetlands with no current tidal connection to San Francisco Bay.

The action area is located within designated critical habitat for Sacramento River winter-run Chinook salmon, CCC steelhead, and the southern DPS of green sturgeon. The designation of critical habitat for these species uses the term primary constituent element (PCE) or essential features. The new critical habitat regulations (81 FR 7414) replace this term with physical or biological features (PBFs). This shift in terminology does not change the approach used in conducting our analysis, whether the original designation identified primary constituent elements, physical or biological features, or essential features. In this letter of concurrence, we use the term PBF to mean PCE or essential feature, as appropriate for the specific critical habitat.

The PBFs essential for the conservation of Sacramento River winter-run Chinook salmon are: (1) access from the Pacific Ocean to appropriate areas in the upper Sacramento River; (2) availability of clean gravel for spawning substrate; (3) adequate river flows for spawning, incubation of eggs, fry development and emergence, and downstream transport of juveniles; (4) water temperatures between 42.5 and 57.5 °F (5.8 and 14.1 °C) for successful spawning, egg incubation, and fry development; (5) habitat areas and adequate prey that are not contaminated; (6) riparian habitat that provides for successful juvenile development and survival; and (7) access downstream so that juveniles can migrate from spawning grounds to San Francisco Bay and the Pacific Ocean. PBFs of designated critical habitat for CCC steelhead include estuarine areas free of obstruction with water quality, water quantity, and salinity conditions supporting juvenile and adult physiological transitions between fresh- and saltwater; natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, and side channels; and juvenile and adult forage, including aquatic invertebrates and fishes, supporting growth and maturation. PBFs of critical habitat for the southern DPS of green sturgeon in estuarine areas include food resources, water flow, water quality, migratory corridor, water depth, and sediment quality.

During dredging activities, critical habitat will be temporarily affected by potential increases in turbidity and disturbance of benthic invertebrates. As discussed above, water quality effects on listed fish, in the form of increased turbidity, are expected to be temporary and insignificant. Disturbance of the benthic community is expected from the removal of invertebrate prey items with the dredged materials. The removal of benthic invertebrates can reduce the foraging value of the dredged area for fish (Newell *et al.* 1998). Dredging at MOTCO will occur in water depths ranging from 18 to 45 feet. Foraging by green sturgeon typically occurs on tidal flats and shallow subtidal areas (Kelly *et al.* 2007, Dumbauld *et al.* 2008), and foraging by juvenile salmonids in deep estuarine areas typically occurs within the upper portion of the water column or within shallow wetland channels (Dunford 1975, Bottom *et al.* 2011). Therefore, benthic organisms impacted within the deeper water dredge footprint of this project should not affect prey availability for green sturgeon and listed anadromous salmonids. Following dredging, recolonization of disturbed areas by macroinvertebrates is expected to occur. For these reasons, NMFS expects that project activities will not significantly affect PBFs associated with foraging by listed fish in the action area. Based on the above, the potential effects of this project are considered insignificant and are not expected to result in adverse impacts to designated critical habitat.

the basis for NMFS' EFH conservation recommendations (50 CFR 600. 920(l)). This concludes the MSA portion of this consultation.

Please direct questions regarding this letter to [redacted] North Central Coast Office in Santa Rosa, California at (707) 575-6067 or sara.azat@noaa.gov.

Sincerely,

[redacted]

San Francisco Bay Branch Chief
North-Central Coast Office

cc: [redacted] USACE San Francisco
[redacted], USACE Environmental Resources Section, Albuquerque
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