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

February 21, 2014 **Refer to NMFS No:** SWR-2013-9770

Lieutenant Colonel John K. Baker
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 Prologis Hercules Pipeline Removal Project (Corps File No. 2013-00058S)

Dear Colonel Baker:

On August 21, 2013, NOAA's National Marine Fisheries Service (NMFS) received your request for a written concurrence that the U.S. Army Corps of Engineers' (Corps) proposed authorization of the pipeline removal project pursuant to Section 404 of the Clean Water Act of 1973 (33 U.SC. Section 1344) 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 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].[1] A complete record of this consultation is on file at NMFS' North Central Coast Office in Santa Rosa, California.

[1] Once on the PCTS homepage, use the following PCTS tracking number within the Quick Search column: SWR-2013-9770

Proposed Action and Action Area

The project site is located in the southeastern portion of San Pablo Bay near the City of Hercules in Contra Costa County, California. San Pablo Bay is approximately 90 square miles (60,000 acres) extending from Central San Francisco Bay to the western end of Carquinez Strait. The action area of this project consists of the shoreline area and sub-tidal area at and immediately adjacent to the Prologis 2,000-foot long pipeline. Water depths in the action area range from 0 to -8 feet, and the substrate is primarily silt and sand. Sub-tidal habitats with these characteristics in San Pablo Bay support benthic invertebrate communities such as bivalves, amphipods and polychaetes (Thompson *et al.* 2007). Prologis leases the land through the California State Lands Commission and the lease expires in August of 2017.

The project proposes to remove an 8-inch, 2000-foot long steel wastewater pipeline in San Pablo Bay that has not been in service since 2001. Removal of the structure includes both in-water work and work on the shoreline of San Pablo Bay. Work on the shore-side portion of the pipeline would be conducted first. The shore-side portion of the pipeline is approximately 160 feet long. A barge-mounted crane would be used to remove a small area of rip rap (10 feet length x 10 feet width x 5 feet deep) to fully expose the shore-side pipeline, and the pipe would then be grouted and left in place on the shore. The project proposes containment measures during shore-side construction activities to prevent the discharge of debris or contaminants into the waters of San Pablo Bay.

For the submerged portion of the project, the pipeline would be fully removed from the waters of San Pablo Bay. Divers would be used to attach straps to the pipeline and a barge-mounted winch would lift the pipeline off the bay floor. The pipeline would then be hoisted onto the barge for transport to the contractor's shore-based facility where it would be loaded onto a truck for transport to a recycling and/or disposal facility. It is anticipated that the pipeline is located under approximately one foot of unconsolidated sediment. Prologis proposes to lift the pipeline slowly to minimize suspension of the sediment overlying the pipe. No dredging or placement of fill would be associated with pipeline removal. All in-water work would be restricted to the period between June 1 and October 31, and work activities are expected to occur over a two to three week period.

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

Action Agency's Effects Determination

The Corps has determined that the proposed project is not likely to adversely affect ESA-listed fish and designated critical habitat, and has requested NMFS' concurrence with this determination. The Corps' finding of NLAA is based on the project's proposed avoidance and minimization measures. Available information indicates the following listed species (Distinct Population Segments [DPS] and Evolutionary Significant Units [ESU]) and critical habitat under the jurisdiction of NMFS may be affected by the proposed project:

Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*) **ESU**
endangered (70 FR 37160; June 28, 2005)
critical habitat (58 FR 33212; June 16, 1993);
Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*) **ESU**
threatened (70 FR 37160; June 28, 2005);

Central California Coast steelhead (*Oncorhynchus mykiss*) **DPS**
Threatened (71 FR 834; January 5, 2006)
Critical habitat (70 FR 52488; September 2, 2005);
Central Valley steelhead (*Oncorhynchus mykiss*) **DPS**
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 Corps has determined that the proposed project would not have a substantial adverse impact on EFH. The Corps finding is based on the project's avoidance and minimization measures. The project area is located within an area identified as EFH for various life stages of fish species managed with the Pacific Coast Salmon Fishery Management Plans (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. 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 FMP, San Francisco Bay, including the project area, is identified as estuary HAPC.

Consultation History

The Corps initiated informal consultation with NMFS by letter dated August 21, 2013, and provided the June 2013 Prologis Hercules Pipeline Removal Biological Assessment and Essential Fish Habitat Evaluation. Additional information regarding the project was provided to NMFS and the Corps by the project's consultant, Boudreau Associates LLC, on November 6, 2013, by electronic mail message.

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.

The effects of the proposed action are reasonably likely to include disturbance and degradation of water quality during pipeline removal activities. Post-construction, the project is expected to benefit habitat in San Pablo Bay by removing an abandoned steel pipeline which will restore the natural bay

bottom contour and substrate conditions. By restricting pipeline removal activities to the period between June 1 and October 31, the construction schedule avoids the migration seasons of adult and juvenile ESA-listed salmonids in San Pablo Bay. Thus, NMFS anticipates no ESA-listed anadromous salmonids will be present in the action area during construction. As presented below, impacts associated with construction will be temporary and fully dissipate when construction activities cease; therefore, any construction effects related to listed anadromous salmonids are anticipated to be discountable.

For threatened southern DPS green sturgeon, in-water construction activities may affect water quality. As the pipeline is removed from the bay floor, disturbance of the bottom substrate would likely result in temporary increases in turbidity in the adjacent water column. Increased levels of turbidity and suspended sediment can affect listed fish species by disrupting normal feeding behavior, reducing growth rates, increasing stress levels, and reducing respiratory functions. However, increased turbidity levels created by this project are expected to be minor, localized and considerably less than the thresholds commonly cited as the cause of the above-referenced possible behavioral and physical impacts. The minor and localized elevated levels of turbidity associated with pipeline removal by this project are expected to quickly disperse from the project area with tidal circulation. As a benthic dwelling species, green sturgeon are adapted to living in estuaries with fine sediment bottoms and they occupy high turbidity river systems (Allen and Cech 2007); specifically, they are tolerant of levels of turbidity that exceed levels expected to result during this project's construction activities.

If green sturgeon are present in the project area during construction activities, individuals could be startled and fish are likely to temporarily vacate the area. San Pablo Bay offers adequate areas with sufficient water depths and the open water habitat adjacent to the project site which would provide green sturgeon areas to disperse. Thus, startled fish would have sufficient area to escape disturbance during construction, and pipeline removal activities should not result in more than an insignificant effect. Construction activities on the shoreline of San Pablo Bay are limited to removal of rip rap and grouting the onshore portion of the pipeline in place. These activities are fully out of the water and measures are proposed to prevent the discharge of debris and contaminants into the waters of San Pablo Bay. Thus, shore-side construction activities are not expected to result in degradation of water quality or other impacts that affect listed fish or their habitat.

The action area is located within designated critical habitat for winter-run Chinook salmon, Central California Coast steelhead, and the southern DPS of green sturgeon. The physical and biological features 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. Primary constituent elements (PCEs) 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. The PCEs of designated 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. PCEs include sites essential to support one or more life stages of the species. These sites in turn contain physical and biological features that are essential to the conservation of the species.

Project activities would temporarily disrupt a total of 148 cubic yards (cy) of sediment during construction that will result in minor and temporary increases of turbidity. As discussed above, these increases in turbidity are expected to be temporary and minor given the small area affected and construction methods. Increased turbidity may lead to a loss of prey resources. However, for the reasons discussed above, the small increase in turbidity for a short time is expected to be insignificant. Similarly, based on the expected magnitude and duration of the turbidity, the number of prey resources affected will be small and recolonization will occur quickly; listed species are expected to utilize other food resources during this brief interim period without any reduction in fitness. The project's sediment analysis report provided verification that contaminants in sediments at the site are at insignificant levels and are not deleterious to aquatic life (Pacific EcoRisk 2013). Benthic invertebrates in the action area may be disturbed by pipeline removal, but the quantity of sediment (*i.e.,* 148 cy) disrupted is small considering the size of San Pablo Bay. Following removal of the pipeline, invertebrate communities are expected to recolonize the substrate currently occupied by the pipeline and the bottom contour of San Pablo Bay in the action area will be restored to a natural condition. Furthermore, there is ample area for foraging outside of the action area. For these reasons, project implementation is expected to ultimately benefit designated critical habitat through the removal of the abandoned steel pipeline.

Conclusion

Based on this analysis, NMFS concurs with the Corps that the proposed action is not likely to adversely affect the subject listed species and designated critical habitat.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by the Corps or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or if (3) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA portion of this consultation.

MAGNUSON-STEVENS 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 determined the proposed action would adversely affect EFH and HAPC due to localized degradation of water quality and loss/burial of benthic organisms. As discussed above, temporary increases in turbidity would be expected to occur during the removal of the pipeline from the substrate. Increased turbidity can reduce light in the water column. Limited light can cause detrimental impacts to native aquatic biota and phytoplankton (Dennison and Alberte 1986, Zimmerman *et al.* 1991). The contents of the suspended material may react with the dissolved oxygen in the water and result in short-term oxygen depletion to aquatic resources (Nightingale and Simenstad 2001). However, due to the small scale of this project, adverse effects to EFH are expected to be temporary, localized, and not rise to the level of impact to water quality and aquatic biota referenced above.

Project activities would result in temporary degradation of EFH through disturbance of benthic organisms within the action area during removal of the pipeline. In response to these impacts, foraging by fish may be temporarily affected until the benthic community and habitat functions recover. However, there is ample area for foraging adjacent to the action area. Post-construction, the project is expected to benefit EFH and HAPC by removing an existing anthropogenic structure (*i.e.,* steel pipeline) from the floor of San Pablo Bay and increasing the amount of benthic habitat available to native invertebrates and fish. 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).

As described in the above effects analysis, NMFS has determined the proposed action would adversely affect EFH for various life stages of fish species managed under the three FMPs identified above; however, the anticipated adverse effects are so minimal in nature that no EFH Conservation Recommendations are necessary 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 (50 CFR 600. 920(l)). This concludes the MSA portion of this consultation.

Please direct questions regarding this letter to Autumn Cleave, North-Central Coast Office, San Francisco Bay Branch, 707-575-6056.

Sincerely,

for William W. Stelle, Jr.
Regional Administrator

cc: Nina Cavett-Cox, US Army Corps of Engineers, San Francisco, California
Christine Boudreau, Boudreau Associates LLC, San Francisco, California
Copy to ARN File # 151422SWR2013SR00242

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