UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

Finding of No Significant Impact on Issuance of an Incidental Harassment Authorization to the NOAA Restoration Center, Southwest Region, for the Take of Marine Mammals Incidental to Parsons Slough Sill Project in the Elkhorn Slough National Estuarine Research Reserve, Monterey County, California

National Marine Fisheries Service

The National Marine Fisheries Service (NMFS) received an application from the NOAA Restoration Center, Southwest Region (NOAA RC), for an incidental harassment authorization (IHA) pursuant to its responsibility to authorize the taking of marine mammals incidental to an otherwise lawful activity (other than commercial fishing), provided that NMFS determines that the action: will have a negligible impact on the affected species or stocks of marine mammals, will not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals intended for subsistence uses, and that the permissible methods of taking and requirements pertaining to the mitigation, monitoring, and reporting of such takings are set forth. NMFS has satisfied those requirements for this authorization for the take of one species of marine mammal, by Level B Harassment only, incidental to the installation of a partially submerged tidal barrier (sill) across the mouth of the Parsons Slough Channel located on the southeast side of the Elkhorn Slough Estuary in Monterey County, California during the fall of 2010.

As background, in August, 2010, NOAA's NMFS Office of Habitat Conservation prepared a Targeted Supplemental Environmental Assessment (TSEA) for a restoration activity funded by the American Recovery and Reinvestment Act of 2009. The purpose of the project is to increase Coastal Pelagic and Pacific Groundfish species survival by reducing tidal scour of essential fish habitat in Parsons Slough. The TSEA assesses the potential adverse environmental impacts of this project specific to the Southern sea otter (*Enhydra lutris nereis*) and Pacific harbor seal (*Phoca vitulina richardsi*). Additional potential impacts to other elements of the human environment from this type of project are analyzed in the February 6, 2002 Programmatic Environmental Assessment (PEA) for the Community-based Restoration Program's (CRP's) Implementation Plan and the June 23, 2006 Supplement (SPEA); the PEA and SPEA are incorporated by reference into the TSEA. The TSEA is expressly incorporated by reference in this FONSI. The IHA application submitted by the NOAA RC, Southwest Region, and the *Federal Register* notice announcing the proposed IHA (75 FR 61432, October 5, 2010), including its references and analyses, are also expressly incorporated by reference.

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NMFS made the NOAA RC 2010 TSEA available to the public and requested comments concurrently with the *Federal Register* notice of proposed issuance of an IHA to the NOAA RC, Southwest Region (75 FR 61432, October 5, 2010). NOAA has considered and evaluated public comment on the proposed IHA and supporting documentation, including the NOAA RC IHA in the course of determining whether or not to supplement the TSEA and issue a FONSI. As explained below, NOAA has determined the TSEA to be adequate without further supplementation to meet its NEPA responsibilities for the IHA. With respect to public comments, in addition to fully evaluating and considering such comments, NOAA will provide responses in the Federal Register notice announcing issuance of the final IHA. This FONSI has been prepared to evaluate the significance of the impacts of NMFS' proposed action of issuing an IHA to NOAA RC, Southwest Region. The IHA will allow takes of marine mammals incidental to the Parsons Slough Project, an action evaluated in the NOAA RC 2010 TSEA.

NAO 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans?

Response: NMFS action of authorizing harassment to marine mammals incidental to the Parsons Slough Project is not expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat. The purpose of the project is to increase Coastal Pelagic and Pacific Groundfish species survival by reducing tidal scour of essential fish habitat in Parsons Slough. As described in the NOAA RC EA, potential impacts to marine mammals from the sill installation are limited to noise associated with construction (e.g., pile driving), vessel presence and operation, and exposure to operational discharges or accidental fuel releases from construction sites and construction vessels and to accidentally released solid debris. Noise and discharge may impact marine mammal habitat; however, NOAA RC determined, and NMFS agrees, that impacts from noise, vessel presence and operation, and the discharge of waste materials or the accidental release of fuels on habitat are expected to be negligible.

2) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: NMFS does not expect the proposed action (authorizing the incidental take of

marine mammals) to have a substantial impact on biodiversity or ecosystem function within the affected area. The impacts of the proposed action on marine mammals are specifically related to the sounds produced by pile driving. Any impacts are expected to be limited to behavioral reactions (e.g., avoidance), auditory and communication disruption (e.g., temporary threshold shift [TTS], masking) and only during times pile driving is occurring (20 days during an 11-15 week work window). Although some marine mammals may haul-out to rest within the action area, and this behavior may be affected, there are alternative sites suitable for hauling-out throughout the estuary. Any impacts would be temporary in nature and not result in substantial impacts to marine mammals or to their role in the ecosystem. The IHA would authorize the Level B harassment of Pacific harbor seals. Neither serious injury nor mortality is anticipated or would be authorized.

3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: The harassment of marine mammals does not affect public health and safety; therefore, NMFS' proposed action of issuing an IHA to the NOAA RC is not expected to have a substantial adverse impact on public health and safety.

4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: The proposed action involves authorization to harass marine mammals incidental to the installation of sill across the mouth of the Parsons Slough Channel located on the southeast side of the Elkhorn Slough Estuary in Monterey County, California. No critical habitat exists within the proposed action area. The applicant would carry out a comprehensive monitoring and mitigation plan, as described in NOAA RC's application and the IHA, to prevent ESA-listed marine mammals from being exposed to noise levels at or above NMFS' harassment thresholds. As such, adverse effects, including the potential for incidental take of ESA-listed marine mammals, are not anticipated nor would incidental take be authorized in the IHA.

NMFS has determined that the proposed action may result in some Level B harassment of one non ESA-listed marine mammal species. Thus, adverse effects are likely; however, no serious injury or mortality is anticipated or authorized. Taking into account the mitigation measures that are planned (e.g., shut down should any marine mammal enter certain zones, pile driving soft starts, etc.), effects on non ESA-listed marine mammals from in-water construction are expected to be limited to short-term behavioral changes, temporary displacement from the action area, TTS and masking, falling within the MMPA definition of "Level B harassment." These impacts are described in NOAA RC's TSEA. While the underlying project is likely to result in incidental take of the ESA-listed Southern sea otter and be implemented in accordance with terms and conditions set forth in an accompanying Biological Opinion and separate IHA, no take of ESA-listed species under NMFS' jurisdiction is anticipated or authorized under the NMFS IHA for Pacific harbor seals given the implementation of the planned mitigation and monitoring

measures. Given the short duration of pile driving and planned mitigation and monitoring measures, any adverse effect from the specified activity on marine mammals is anticipated to have a negligible impact on small numbers of the affected species or stock.

5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: The primary impacts to the human environment from issuance of an IHA to NOAA RC would be limited to marine mammal harassment. These impacts are acoustic and temporary in nature (and not significant), and not interrelated with significant social or economic impacts. However, allowing NOAA RC to continue pile driving should a non ESA-listed marine mammal enter into the designated Level B harassment isopleths will reduce construction costs to a company attempting to provide alternative renewable energy to the national energy grid; hence some indirect beneficial economic impacts do exist.

6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: The effects on the quality of the human environment are not likely to be highly controversial. NMFS has issued numerous incidental take authorizations authorizing harassment to marine mammals from pile driving, which has allowed NMFS to develop relatively standard mitigation and monitoring requirements for these activities and to assess the effects with data from comprehensive monitoring reports. Although pile driving in the Parsons Slough Complex does not occur regularly, NMFS and NOAA RC evaluated reported noise levels associated with impact and vibratory pile driving of similar type piles from related projects at other sites to develop conservative noise level models on which to base harassment isopleths for marine mammals. However, in general, impacts from pile driving are generally similar and known.

For all previously evaluated pile driving projects, NMFS has found that pile driving does not result in significant impacts to the human environment and generally receives little public comment related to such actions. Specific to the proposed action, NMFS published a Notice of Proposed IHA in the *Federal Register* on October 5, 2010 (75 FR 61432), which allowed the public to submit comments for up to 30 days from the date of publication of the notice. NMFS only received comments from the Marine Mammal Commission.

NOAA has not identified on its own or through review of public comments any potential dispute concerning the size, nature or effect of the IHA. Nor is there any credible evidence that issuance of the IHA is likely to cause substantial degradation of any element of the human environment.

7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands,

wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: NMFS' issuance of an IHA to NOAA RC for the specified activity is not expected to impact any unique areas as described here. NMFS may only issue an incidental take authorization for those activities that are otherwise lawful. NOAA RC has received all required leases and permits that address mitigating impacts to unique areas such as EFH.

8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: As described in response to question 6 above, NMFS has issued numerous IHAs authorizing harassment to marine mammals from impact and vibratory pile driving (the same type of pile driving that would be conducted by NOAA RC) and conducted analysis of the impacts of pile driving under the MMPA and NEPA. The risks are not highly uncertain or involve unique or unknown risks.

9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: The proposed action is not related to other actions with individually insignificant, but cumulatively significant impacts. The NOAA RC's SPEA adequately considered this criterion when analyzing a broad range of restoration activities. The response included in the SPEA's associated FONSI states: "The proposed action, when combined with related past, present, or reasonably foreseeable future actions will not cause cumulative significant impacts to the human environment. Any impacts caused by the proposed action would generally be temporary, minor to moderate impacts due to ground disturbance or other construction-related activities from implementing specific projects, which then result in net long-term or permanent, moderate to substantial beneficial impacts on the affected communities, resources, and ecosystems of the United States. Due to the CRP's national scope and infrequency of projects occurring within the same geographic areas, the temporary negative impacts related to implementation would only be moderate, and isolated to project locations. Also, these negative impacts can be avoided, minimized, or mitigated by best management practices and other measures, as described in the SPEA.

Many other federal, state, and local government agencies and private organizations implement similar beneficial projects across the United States to help restore and maintain natural ecosystems. Consequently, if and when other unrelated projects are planned or identified in a project area with spatially or temporally cumulative adverse impacts, the CRP staff can work with grantees to implement best management practices, and/or require project timing that will avoid cumulative adverse impacts by using special award conditions as described in the SPEA. The net beneficial impacts resulting from past projects, the proposed actions, and foreseeable future projects would be long-term and beneficial impacts. Overall, the sustainability of resources, especially living coastal and marine resources, would be enhanced."

10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: The proposed action (i.e., authorizing harassment to marine mammals) would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or cause loss or destruction of significant scientific, cultural or historical resources.

11) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: The proposed action is not reasonably expected to result in the introduction or spread of non-indigenous species. NMFS issuance of an IHA solely authorizes harassment to marine mammals. Organisms are known to travel in ballast water and attach to hulls, which may lead to the introduction of non-ingenious species. However, all equipment used by NOAA RC would not be trans-ocean vessels and therefore the risk of spreading non-indigenous species is negated.

12) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: This action will not set a precedent for future actions with significant effects or represent a decision in principle. NMFS' actions under sections 101(a)(5)(D) of the MMPA must be based on the best available information, which continuously evolves. Moreover, each action for which an incidental take authorization is sought must be considered individually and independently in light of the specific circumstances surrounding the proposed action.

13) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: The issuance of an IHA would allow NOAA RC to be in compliance with the MMPA and is designed to minimize impacts to marine mammals and their habitat. The proposed action would not threaten a violation of other Federal, State, or local law or requirements imposed for the protection of the environment.

14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: No target species are involved with the proposed action. The purpose of conditions in the IHA is to minimize impacts to marine mammals and their habitat as they may be incidentally taken during the proposed action. The IHA would not authorize harassment at a level if, alone or in combination with other actions, the result would have more than a negligible adverse impact on the affected species or stock. Therefore, the

proposed action is not reasonably expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species.

DETERMINATION

In view of the information presented in this document, the analysis contained in the NOAA RC 2010 TSEA prepared for the Parsons Slough Project, which is hereby incorporated by reference, and review of public comments, it is hereby determined that the issuance of an IHA to NOAA RC will not significantly impact the quality of the human environment, for purposes of NEPA. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environment Impact Statement for this action is not necessary.

James H. Lecky
Director, Office of Protected Resources

Nov 22, 2010
Date