



**FINDING OF NO SIGNIFICANT IMPACT  
FOR THE ISSUANCE OF AN INCIDENTAL HARASSMENT AUTHORIZATION  
TO THE PORT OF VANCOUVER TO TAKE MARINE MAMMALS BY HARASSMENT  
INCIDENTAL TO PILE DRIVING IN THE COLUMBIA RIVER, WA**

**NATIONAL MARINE FISHERIES SERVICE**

**BACKGROUND**

The National Marine Fisheries Service (NMFS) received an application from the Port of Vancouver, USA (Port), for an Incidental Harassment Authorization (IHA) to take marine mammals, by Level B harassment, incidental to pile driving during construction of the Terminal 5 Bulk Potash Handling Facility. Pursuant to the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1631 *et seq.*), authorization for incidental taking shall be granted provided that NMFS: (1) determines that the action would have a negligible impact on the affected species or stocks of marine mammals; (2) finds the action would not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals for taking for subsistence uses; and (3) sets forth the permissible methods of taking, other means of effecting the least practicable impact on affected species and stocks and their habitat, and requirements pertaining to the mitigation, monitoring, and reporting of such takes.

In accordance with the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*), NMFS completed an Environmental Assessment (EA) titled "*Issuance of an Incidental Harassment Authorization to the Port of Vancouver to Take Marine Mammals by Harassment Incidental to Pile Driving in the Columbia River, WA.*"

NMFS has prepared this Finding of No Significant Impact (FONSI) to evaluate the significance of the impacts of NMFS' action. It is specific to Alternative 2 in the EA, identified as the Preferred Alternative. Under this alternative, NMFS would issue an IHA with required mitigation, monitoring, and reporting measures. Based on NMFS' review of the Port's proposed activities and the measures contained in Alternative 2, NMFS has determined that no significant impacts to the human environment would occur from implementing the Preferred Alternative.

**ANALYSIS**

NAO 216-6 contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 CFR § 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below this section is relevant to making a FONSI 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 (FMP)?**

Response: NMFS does not anticipate that either the Port's proposed action (i.e., pile driving activities) or NMFS' proposed action (i.e., issuing an IHA to the Port) would cause substantial damage to ocean and coastal habitats. The proposed NMFS action would authorize Level B harassment of marine mammals, incidental to pile driving activities occurring over a period of about four months in Vancouver, Washington.

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCA) governs marine fisheries management in waters within the U.S. Exclusive Economic Zone, and requires federal agencies to consult with NMFS with respect to actions that may adversely impact Essential Fish Habitat (EFH). The U.S. Army Corps of Engineers consulted with NMFS Northwest Region on the Port's proposed action. NMFS believes that the proposed action conducted under the requirements of the IHA will have adverse impacts to essential fish habitat (EFH); however, the NMFS Northwest Region section 7 Biological Opinion concludes that the Endangered Species Act Biological Opinion's related Incidental Take Statement Terms and Conditions are necessary and sufficient to avoid, mitigate, or offset the impact of the proposed action on designated EFH for Pacific salmon.

**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 either the Port's proposed action or NMFS' proposed action (i.e., issuing an IHA to the Port that authorizes Level B harassment) to have a substantial impact on biodiversity or ecosystem function within the affected environment. The proposed action area is used by marine mammals for opportunistic foraging but is not considered a primary foraging ground. Mitigation measures are expected to avoid or offset the impact of the proposed action on designated EFH for prey species of pinnipeds.

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

Response: NMFS does not expect either the Port's proposed action or NMFS' proposed action (i.e., issuing an IHA to the Port) to have a substantial adverse impact on public health or safety. The proposed pile driving activities would occur during daylight hours and constant monitoring for marine mammals and other marine life during operations effectively eliminates the possibility of any humans being inadvertently exposed to levels of sound that might have adverse effects. Although the conduct of pile driving activities may carry some risk to the personnel involved (e.g., mechanical accidents), the applicant and those individuals working with the applicant would be required to be adequately trained or supervised in performance of the underlying activity to minimize such risk to personnel.

**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 EA evaluates the affected environment and potential effects of NMFS' (i.e.,

issuing an IHA to the Port) and the Port's (i.e. pile driving activities) actions, indicating that only the acoustic activities have the potential to affect marine mammals in a way that requires authorization under the MMPA. These temporary acoustic activities would not affect physical habitat features, such as substrates and water quality.

NMFS has determined that the proposed activity may result in some Level B harassment (in the form of short-term and localized changes in behavior) of small numbers, relative to the population sizes, of three species of marine mammals, one of which is listed under the Endangered Species Act (ESA; 16 U.S.C. 1531 *et seq.*). Effects to EFH and critical habitat were addressed in questions 1 and 2. The Biological Opinion for this action concluded that the action is not likely to jeopardize the continued existence of Steller sea lions or result in the destruction or adverse modification of critical habitat.

The following mitigation measures are planned for the proposed action to minimize adverse effects to protected species:

- (1) temporal restrictions;
- (2) limited use of an impact hammer;
- (3) exclusion zone;
- (4) pile driving shutdown and delay;
- (5) soft-start procedures;
- (6) visual monitoring; and
- (7) hydroacoustic monitoring.

Taking these measures into consideration, responses of marine mammals from the preferred alternative are expected to be limited to temporary avoidance of the area around the sound source and short-term behavioral changes, falling within the MMPA definition of "Level B harassment."

NMFS does not anticipate that marine mammal take by injury (Level A harassment), serious injury, or mortality would occur and expects that harassment takes would be at the lowest level practicable due to the incorporation of the mitigation measures required by the IHA. Numbers of individuals of all marine mammal species taken by harassment are expected to be small (relative to species or stock abundance), and the take is anticipated to have a negligible impact on any species or stock. The impacts of the proposed action on marine mammals are specifically related to acoustic activities, and these are expected to be temporary in nature, negligible, and would not result in substantial impact to marine mammals or to their role in the ecosystem.

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

Response: The primary impacts to the natural and physical environment are expected to be acoustic and temporary in nature (and not significant), and not interrelated with significant social or economic impacts. Issuance of the IHA would not result in inequitable distributions of environmental burdens or access to environmental goods.

NMFS has determined that issuance of the IHA would not adversely affect low-income or minority populations. Further, there would be no impact of the activity on the availability of the

species or stocks of marine mammals for subsistence uses. Therefore, no significant social or economic effects are expected to result from issuance of the IHA or the proposed action.

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

Response: The effects of this action on the quality of the human environment, that is, NMFS' issuance of an IHA for the take of marine mammals incidental to pile driving activities, are not highly controversial. Specifically, there is not a substantial dispute about the size, nature, or effect of potential impacts from NMFS's proposed action or the Port's proposed project.

**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: Issuance of the IHA is not 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 as it would only authorize harassment to marine mammals. The action area does not contain, and is not adjacent to, areas of notable visual, scenic, historic, or aesthetic resources that would be substantially impacted.

While there may be adverse impacts to EFH and habitat for federally listed species, those impacts are likely to be minor, localized and short-term (see responses to questions 1, 2 and 4).

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

Response: The potential risks of pile driving are not unique or unknown, nor is there significant uncertainty about impacts. NMFS has issued numerous IHAs for pile driving activities in the Northwest region and conducted NEPA analysis on those projects. Each of these projects required marine mammal monitoring and monitoring reports have been reviewed by NMFS to ensure that activities have a negligible impact on marine mammals. In no case have impacts to marine mammals, as determined from monitoring reports, exceeded NMFS' analysis under the MMPA and NEPA. Therefore, the effects on the human environment are not likely to be 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: Currently, the only reasonably foreseeable project planned for this portion of the Columbia River under NMFS authority is the Columbia River Crossing. This project involves construction activities for the Columbia River I-5 bridges, located at river mile 106, approximately three miles from the Terminal 5 action area. However, the Columbia River Crossing project is not expected to begin until after the Terminal 5 in-water pile driving activities are complete. Bridge construction activities would begin in 2013 and may be complete by 2017, but the Federal Transit Administration and Federal Highway Administration have applied for a five-year rulemaking to authorize the incidental take of three species of marine mammals (harbor seal, California sea lion, and Steller sea lion). Any other future authorizations will have to undergo the same permitting process and will take the Terminal 5 project into consideration when addressing cumulative effects.

Should NMFS receive an application from applicants requesting authorization to take marine mammals incidental to specified activities in the action area, NMFS would also consider cumulative impacts to the affected species or stock, as required under NEPA.

**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 would not take place in any areas listed in or eligible for listing in the National Register of Historic Places and would not cause loss or destruction of significant scientific, cultural, or historical resources, as none exist within the action area.

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

Response: The proposed action cannot be reasonably expected to result in the introduction or spread of a non-indigenous species. The spread of non-indigenous species general occurs through ballast water or hull attachment. Support vessels used during construction would likely be small, local vessels that do not make trans-ocean trips. As such, no non-indigenous species are likely to enter the Columbia River through support vessels used during the specified activity.

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

Response: The proposed action would not set a precedent for future actions with significant effects or represent a decision in principle. Each MMPA authorization applied for under 101(a)(5) must contain information identified in NMFS' implementing regulations with no exceptions. NMFS considers each activity specified in an application separately and, if it issues an IHA to the applicant, NMFS must determine that the impacts from the specified activity would result in a negligible impact to the affected species or stocks.

NMFS has issued many authorizations for similar pile driving activities. A finding of no significant impact for this action, and for NMFS's issuance of an IHA, may inform the environmental review for future projects but would not establish a precedent or represent a decision in principle about a future consideration.

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

Response: Issuance of the proposed IHA would not result in any violation of federal, state, or local laws for environmental protection. The applicant consulted with the appropriate federal, state, and local agencies during the application process and would be required to follow associated laws as a condition of the IHA.

**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: The proposed action allows for the taking, by incidental harassment, of marine mammals during the proposed pile driving activities. NMFS has determined that marine mammals may exhibit behavioral changes such as avoidance of or changes in foraging patterns within the action area. However, NMFS does not expect the authorized harassment to result in significant cumulative adverse effects on the affected species or stocks. As discussed in response to question 9, the Columbia River Crossing project is planned in the future. However, because each project's impacts would be short term and localized and each Holder is required to comply with mitigation and monitoring measures designed to minimize exposure and impacts, no substantial adverse cumulative impacts are anticipated. Pile driving activities and the issuance of an IHA are not expected to result in any significant cumulative adverse effects on target or non-target species incidentally taken by harassment due to pile driving activities.

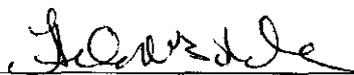
Cumulative effects refer to the impacts on the environment that result from a combination of past, existing, and reasonably foreseeable human activities and natural processes. As evaluated in the EA, human activities in the region of the proposed action consist of heavy industrial land use. Those activities, as described in the EA, when conducted separately or in combination with other activities, could adversely affect marine species in the proposed action area. Because of the relatively small area of ensonification and mitigation measures, the action would not result in synergistic or cumulative adverse effects that could have a substantial effect on any species.

The proposed action does not target any marine species and is not expected to result in any individual, long-term, or cumulative adverse effects on the species incidentally taken by harassment due to these activities. The potential temporary behavioral disturbance of marine species might result in short-term behavioral effects for these marine species within the ensonified zones, but no long-term displacement of marine mammals, endangered species, or their prey is expected as a result of the proposed action conducted under the requirements of the IHA. Therefore, NMFS does not expect any cumulative adverse effects on any species as a result of pile driving activities.

#### DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting EA titled "*Issuance of an Incidental Harassment Authorization to the Port of Vancouver to Take Marine Mammals by Harassment Incidental to Pile Driving in the Columbia River, WA*," and documents that it references, NMFS has determined that issuance of an IHA to the Port for the take, by Level B harassment only, of small numbers of marine mammals incidental to conducting pile driving activities in the Columbia River in accordance with Alternative 2 in NMFS' 2012 EA would not significantly impact the quality of the human environment, as described in this FONSI and in the EA.

In addition, all beneficial and adverse impacts of the action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environmental Impact Statement for this action is not necessary. The EA thereby provides a supporting analysis for this FONSI.



Helen M. Golde,  
Acting Director, Office of Protected Resources,  
National Marine Fisheries Service

MAY 14 2012

Date