



# MARINE MAMMAL COMMISSION

9 August 2012

Mr. P. Michael Payne, Chief  
Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910-3225

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the application submitted by the Washington State Department of Natural Resources seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act to take small numbers of harbor seals by harassment. The taking would be incidental to a habitat restoration project in the Woodard Bay Natural Resource Conservation Area in Puget Sound, Washington. Wood piles, pier superstructure, and fill would be removed from the site between 1 November 2012 and 15 March 2013. The Commission also has reviewed the National Marine Fisheries Service's 30 July 2012 *Federal Register* notice (77 Fed. Reg. 44583) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions. The Commission commented on similar incidental harassment authorizations in previous years.

## RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the incidental harassment authorization, subject to conditions that require the Department of Natural Resources to—

- monitor for the presence and characterize the behavior of marine mammals during all proposed in-water activities (i.e., during vibratory pile-removal activities and during vessel and barge use); and
- monitor before, during, and after all soft-starts of pile-removal activities to gather the data needed to determine the effectiveness of this technique as a mitigation measure.

## RATIONALE

The Washington State Department of Natural Resources plans to (1) remove approximately 500 creosote timber piles and 929 m<sup>2</sup> of pier superstructure to enhance ecological structure and function in the bay and (2) remove 10,188 m<sup>3</sup> of fill and associated piles, timber, metal scraps, and concrete abutment to enhance opportunities for recreation. Completion of those activities will depend on funding, but the Department intends to complete the activities in the fewest possible field seasons to minimize short-term disturbance to the harbor seals. The applicant would use a vibratory hammer, direct pull, and/or diver cutting techniques to remove the 12- to 24-in piles. A

maximum of 50 piles would be removed daily, resulting in 50 minutes of hammer vibration per day. Vibratory extraction could occur for approximately 20 days during what is expected to be a 70-day project. Piles also could be removed during fill removal in Chapman and Woodard Bays. However, most of those piles are on land. The Department would use barges, small vessels, cranes, and heavy equipment to remove the piles, superstructure, and fill. Increased human presence could disturb harbor seals during any of the proposed activities.

The Service preliminarily has determined that, at most, the proposed activities temporarily would modify the behavior of small numbers of harbor seals. It also anticipates that any impact on the affected species and stocks would be negligible. The Service does not anticipate any take of marine mammals by death or serious injury and believes that the potential for disturbance will be at the least practicable level because of the proposed mitigation and monitoring measures. Those measures include—

- limiting the proposed in-water activities to 1 November through 15 March to minimize effects on salmonids and to avoid the harbor seal pupping season;
- surveying the area for seals prior to initiating the activities, approaching the action area slowly from a distance to alert seals to the crew's presence, and removing piles at the farthest location from the seal haul-out sites at the beginning of each day;
- removing only those piles that are greater than 27 m from the haul-out sites;
- using soft-start procedures for the vibratory hammer at the beginning of the work day;
- using a muffler to reduce in-air sound levels from the vibratory hammer;
- suspending activities until seals are at least 15 m from the activity to minimize the risk of direct injury from a piling or portion of a structure striking an animal;
- using one protected species observer to monitor the two seal haul-out sites 30 minutes prior to, during, and 30 minutes after the proposed activities for 15 days during the 70-day work period;
- ceasing activities if extreme reactions of seals occur (e.g., apparent abandonment of the haul-out sites) and consulting with the Service before reinitiating activities;
- reporting injured and dead marine mammals to the Service and local stranding network using the Service's phased approach and suspending activities, if appropriate; and
- submitting a final report.

### **Mitigation and monitoring measures**

Protected species observers will monitor the two nearby harbor seal haul-out sites to detect and document any incidents of Level B harassment for 15 days during the 70-day work period, which includes approximately 20 days of vibratory hammer use. The Service has indicated that it does not intend to require continuous observations during vibratory pile removal and the other activities because it believes that the sound levels from those activities would not cause Level A harassment or mortality, no marine mammal species other than harbor seals are likely to occur in the project area, the operators would be able to estimate adequately the number of animals taken by extrapolating observer effort, and funding limitations require a balance between the level of monitoring necessary to document disturbance adequately and the cost of continuous monitoring.

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For a number of reasons, the Commission believes that protected species observers should monitor all in-water activities (i.e., vibratory pile removal and the use of vessels and barges). The impacts of vibratory pile removal are not well studied, but impacts from vessels have been studied. The Service has noted that harbor seals commonly leave their haul-out sites when approached by powerboats and barges in the project area. The Service also has indicated that the presence of vessels and barges caused greater disturbance than did the use of the vibratory hammer during previous years' activities. Because marine mammal reactions to different sources of disturbance are not always predictable, continuous monitoring is the only way to ensure that unexpected reactions are detected, documented, and evaluated. Intermittent or infrequent observations may be sufficient for characterizing what might be called "normal" responses, but the Service should want to know if, on occasion, those activities cause stronger and more significant responses. For example, if monitoring does not coincide with the presence of marine mammals and associated activity, then the resulting observations may not be indicative of actual impacts and the number of takes may be underestimated. Finally, monitoring during all pile-removal activities and at times when vessels and barges are present is the only way for the applicant and the Service to ensure that they are causing the least practicable impact. For all of these reasons, the Marine Mammal Commission recommends that the National Marine Fisheries Service require the Department to monitor for the presence and characterize the behavior of marine mammals during all proposed in-water activities (i.e., during vibratory pile-removal activities and during vessel and barge use).

The Commission has noted in previous correspondence that the effectiveness of ramp-up as a mitigation measure has yet to be empirically verified. As with the ramp-up of airguns, the Service should not assume, absent empirical verification, that using soft-starts when removing piles constitutes an effective mitigation method. Such verification may require not only collecting opportunistic data but also designing and conducting studies to test specific hypotheses regarding the utility of soft-starts and analysis of responses of the various species encountered. Because the vibratory hammer has the potential to harass marine mammals, the Marine Mammal Commission repeats its recommendation that the National Marine Fisheries Service require the Department to monitor before, during, and after all soft-starts of pile-removal activities to gather the data needed to determine the effectiveness of this technique as a mitigation measure.

Please contact me if you have questions regarding the Commission's recommendations and comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael L. Gork" followed by a flourish and the letters "for".

Timothy J. Ragen, Ph.D.  
Executive Director