



MARINE MAMMAL COMMISSION

14 September 2015

Ms. Jolie Harrison, Chief
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3225

Dear Ms. Harrison:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the U.S. Navy's application seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act to take marine mammals by harassment. The taking would be incidental to pile driving and removal in association with a pier replacement project in San Diego Bay, California, during a one-year period. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 2 September 2015 notice (80 Fed. Reg. 53115) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

Background

The Navy plans to install and remove piles during demolition and replacement of the fuel pier at Pt. Loma Naval Base. This would be the third authorization for the four-year project. During the third year of activities, the Navy would install 226 18- to 30-in steel pipe, concrete, or concrete-filled fiberglass piles using a vibratory and/or an impact hammer. The Navy would remove up to 102 concrete, plastic, or steel piles using dead pull, a diamond belt saw, pile cutter, or vibratory hammer. The Navy expects the in-water activities to occur for a maximum of 115 days, primarily from 1 October 2015–30 April 2016. Activities would be limited to daylight hours only.

NMFS preliminarily has determined that, at most, the proposed activities would temporarily modify the behavior of small numbers of harbor seals, California sea lions, northern elephant seals, bottlenose dolphins, common dolphins, Pacific white-sided dolphins, Risso's dolphins, and gray whales. It also anticipates that any impact on the affected species and stocks would be negligible. NMFS does not anticipate any take of marine mammals by death or serious injury and believes that the potential for temporary or permanent hearing impairment would be at the least practicable level because of the proposed mitigation measures. The proposed mitigation, monitoring, and reporting measures include—

- conducting empirical in-water and in-air sound measurements of (1) installation of the various sizes of piles using a vibratory and impact hammer¹, (2) removal of the piles using various demolition tools, and (3) ambient underwater sound;
- using soft-start, delay, and shut-down procedures;
- using delay and shut-down procedures if a species for which authorization has not been granted or for which the authorized numbers of takes have been met approaches or is observed within the Level B harassment zone;
- using two to six qualified protected species observers (land-, pier-, and/or vessel-based) to monitor the Level A² and B harassment zones for 15 minutes before, during, and for 30 minutes after pile driving and removal activities;
- ceasing other heavy machinery work if any marine mammal comes within 20 m of the vessel or equipment;
- reporting injured and dead marine mammals to NMFS and the local stranding network using NMFS's phased reporting approach and suspending activities, if appropriate; and
- submitting draft and final acoustic and marine mammal monitoring reports to NMFS.

Types of taking

The Navy documented pinnipeds in both the in-water and in-air³ Level B harassment zones and the Level A harassment zone during the second year of activities. Although the Level B in-air harassment zone is subsumed by the in-water harassment zone, NMFS had proposed in the *Federal Register* notice to authorize additional in-air takes. NMFS has since informed the Commission that it would not authorize additional in-air taking⁴, because the original take estimation method for in-water Level B harassment already accounted for those animals in the in-air zone. The Commission agrees with that approach.

Because the Navy observed marine mammals within the Level A harassment zone, it increased the size of the Level A harassment zone to include an additional buffer zone⁵ during the second year of activities. The Commission commends the Navy for amending its mitigation measures using an adaptive approach. Although the Navy monitored larger Level A harassment zones, 4 of the 107 California sea lion sightings for which shutdowns were initiated were first observed within the actual Level A harassment zone of 75 m rather than within or approaching the buffer zone of 150 m. The Commission would expect that since California sea lions can hold their breath longer than 10 seconds and can traverse more than 150 m on a single breath. The Navy noted that none of the sea lions observed within the Level A harassment zone showed any signs of disturbance—one was observed swimming toward the pile being driven, diving under the pile-driving barge and crane, and surfacing while eating a fish and another surfaced beside the pile-driving barge and swam amidst the piles.

¹ Including measurements of sound propagation.

² These include an additional buffer zone to reduce further the potential for Level A harassment.

³ Multiple sea lions remained hauled out within the zone during impact pile driving.

⁴ However, those instances of solely in-air taking should still be documented in the monitoring report.

⁵ Based on the approximate time that shutdown of pile driving could be implemented by the monitoring staff and construction contractors (8–10 sec) and a literature review of swim speeds for California sea lions (5 m/sec) and coastal bottlenose dolphins (10 m/s).

Given that a few California sea lions were observed within the actual Level A harassment zone even with an additional buffer zone, the Commission expected NMFS to propose to authorize a small number of Level A harassment takes for the third year of activities at Pt. Loma. However, NMFS did not propose taking by Level A harassment but rather indicated that the proposed mitigation and monitoring measures (i.e., buffered Level A harassment zones) are expected to minimize the possibility of Level A harassment such that NMFS believes it is unlikely. The Commission disagrees. The same mitigation and monitoring measures were not fully effective in the previous year, as demonstrated by four sea lions entering the Level A harassment zone. Therefore, it is unclear why NMFS is assuming that those same measures would be more effective in preventing Level A harassment during the upcoming year of activities.

In addition, NMFS has proposed to authorize taking by Level A harassment in similar situations in which marine mammals may enter the Level A harassment zone before the activity can be stopped (e.g., 80 Fed. Reg. 51211, 80 Fed. Reg. 53624⁶). For the project in Kodiak, NMFS proposed to authorize Level A harassment takes of Steller sea lions that could enter the Level A harassment zone of only 4 m. The applicant indicated that 40 Steller sea lions are likely to pass by the project site each day, thus it was estimated that up to 30 sea lions could be taken by Level A harassment during the 22 days of activities. Similarly for Pt. Loma, the Navy indicated that an average of 90 individual California sea lions occurred in the project area each day. Given the larger Level A harassment zone of 75 m, the greater number of California sea lions present in the action area, and the sea lions' demonstrated proclivity to swim into the Level A harassment zone unobserved during impact pile driving, a small number of Level A harassment takes should be authorized.

The Commission understands that many of the standard mitigation measures included in incidental take authorizations rely on visual monitoring, and implementation may not occur until an animal is observed within the specified zone. Those situations regularly occur for impact pile driving and seismic surveys. Thus, it would follow that NMFS should be proposing to authorize Level A harassment takes when there is a likelihood that some animals will enter the Level A harassment zone before shutdown can occur, especially since many action proponents indicate in their monitoring reports that such taking has occurred⁷. Absent such authorizations, those action proponents technically could be considered to be in violation of their authorization. To address these issues, the Commission recommends that NMFS (1) authorize a small number of Level A harassment takes of California sea lions for construction activities at Pt. Loma and (2) take a consistent approach in authorizing Level A harassment for other activities in which there is a potential for Level A harassment to occur (i.e., impact pile driving and seismic surveys). Further, the Commission recommends that NMFS develop criteria and provide guidance to applicants regarding the circumstances under which it will consider requests for Level A harassment takes⁸ under section 101(a)(5)(D) of the MMPA.

⁶ The Commission understands NMFS plans to authorize Level A harassment takes in a consistent manner for seismic surveys with large exclusion zones, including research-based geophysical surveys.

⁷ With respect to animals being observed within the Level A harassment zone.

⁸ But not for taking by serious injury, which would require the promulgation of regulations under section 101(2)(5)(A).

Ms. Jolie Harrison
14 September 2015
Page 4

The Commission hopes its comments are useful. Please contact me if you have questions regarding the Commission's recommendations.

Sincerely,

A handwritten signature in blue ink that reads "Rebecca J. Lent". The signature is written in a cursive style with a large initial "R" and a distinct "Lent" at the end.

Rebecca J. Lent, Ph.D.
Executive Director