



MARINE MAMMAL COMMISSION

19 December 2019

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 National Marine Fisheries Service's (NMFS) 10 December 2019 notice (84 Fed. Reg. 67404) and the letter of authorization (LOA) application submitted by the U.S. Navy (the Navy) seeking issuance of regulations under section 101(a)(5)(A) of the Marine Mammal Protection Act. The taking would be incidental to conducting construction activities related to building a new ammunition pier at Seal Beach, California, during a five-year period.

The Navy plans to remove and install piles during construction of a new ammunition pier at Naval Weapons Station Seal Beach in Anaheim Bay. Operators would (1) install 992 12- to 24-in steel I-beam or concrete piles¹ using a vibratory and/or impact hammer and (2) remove 127 12- to 24-in steel I-beam, steel pipe, concrete, or timber piles using a vibratory hammer and/or cutting. The Navy's activities could occur on up to 112 days per year during three of the five years. The Navy would limit its pile-driving and -removal activities to daylight hours and five-day work weeks.

NMFS preliminarily has determined that, at most, the proposed activities could cause Level B harassment of small numbers of five marine mammal species. NMFS anticipates that any impact on the affected species and stocks would be negligible. NMFS also 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 measures. The proposed mitigation, monitoring, and reporting measures include—

- ceasing pile-driving and -removal activities if any marine mammal comes within 10 m of the equipment;
- using two qualified protected species observers to monitor the Level A and B harassment zones for 30 minutes before, during, and for 30 minutes after the proposed activities;
- using soft-start, delay, and shut-down procedures;

¹ Including square concrete, octagonal concrete, and concrete filled with fiberglass.

- reporting injured and dead marine mammals to the Office of Protected Resources and the West Coast Regional Stranding Coordinator using NMFS's phased approach and suspending activities, if appropriate;
- implementing adaptive management, as necessary; and
- submitting draft and final annual and comprehensive marine mammal reports.

Cetacean takes

The Navy estimated the number of each cetacean species² that could be taken by Level B harassment based on the number of months of activities and the assumed monthly days present. While this method is reasonable, the Navy estimated the number of months of activities based on 30 days, assuming operators would be working seven days per week, rather than the five-day work week actually planned. That estimation resulted in 3.73 months of activities³ instead of the 5.6 months of activities⁴ that are based on five-day work weeks, thus underestimating the numbers of cetacean takes. In addition, the Navy estimated that bottlenose dolphins would be present on 6 occasions per month and common dolphins would be present on 10 occasions per month based on previous sightings data in Anaheim Bay. Specifically, NMFS stated that bottlenose dolphins have been observed on 21 occasions and common dolphins have been observed on 32 occasions during previous monitoring efforts. That ratio would lead to bottlenose dolphins being present on six occasions and common dolphins being present on nine occasions. Based on these two issues, the resulting numbers of cetacean takes would increase approximately 25 or 35 percent depending on the species. To account for the number of cetaceans that have the potential to occur within the Level B harassment zones and to minimize unnecessary delays in completing the activities should the authorized takes be met, the Commission recommends that NMFS increase the numbers of cetacean takes from 220 to 336 for bottlenose dolphins, 336 to 453 for common dolphins, and 7 to 11 takes for gray whales in the final rule.

Daylight and periods of low visibility

The preamble to the final rule indicated that activities would occur only during daylight hours (84 Fed. Reg. 67415). NMFS specified that conducting activities only during daylight hours was a voluntary description by the Navy of expected construction scheduling that NMFS would not treat as an absolute requirement (84 Fed. Reg. 67415). Thus, the requirement was not included in the proposed rule. The preamble also indicated that the shut-down zone may only be declared clear and pile driving started, when the entire shut-down zone is visible (i.e., when not obscured by dark, rain, fog, etc.) and, if such conditions should arise during impact pile driving that is already underway, the activity would be halted (84 Fed. Reg. 67416). Rather than include that requirement in section 218.34(c)(3) of the proposed rule, NMFS specified a less-stringent requirement that “a determination that the shut-down zone is clear must be made during a period of good visibility (i.e., the entire shut-down zone and surrounding waters must be visible to the naked eye).” The requirement in the proposed rule is vague and could easily be interpreted by the operators as not needing to delay or cease activities if the shut-down zone(s) is not fully visible. Furthermore, the requirement is not consistent with another final rule that was issued recently to the Navy authorizing

² Bottlenose dolphins, common dolphins, and gray whales.

³ 112 work days/30 days per month.

⁴ 112 work days/5 days per week and 4 weeks per month.

it to take marine mammals during construction activities in the inland waters of Washington. Section 218.24(c) of that final rule stipulated that the entire shut-down zones and surrounding water must be visible to the naked eye *and unobscured by dark, rain, fog, poor lighting conditions, etc.* (84 Fed. Reg. 15984).

Following the Commission's recent recommendation that NMFS include a requirement that activities only occur during daylight hours, NMFS responded that it had included a requirement that "should environmental conditions deteriorate such that marine mammals within the entire shut-down zone would not be visible (e.g., fog, heavy rain), pile driving and removal must be delayed until the PSO is confident marine mammals within the shut-down zone could be detected" (84 Fed. Reg. 68130). NMFS stated that the requirement implies that a shut-down zone should either be visible due to daylight, or an applicant must illuminate the shut-down zone to allow sufficient visibility (84 Fed. Reg. 68130). Thus, it did not need to stipulate that the activities occur only during daylight hours. Given that NMFS did not include the specified requirement in the proposed rule, the same rationale does not apply for the Navy's proposed activities. And, since NMFS did not propose to authorize Level A harassment takes, it is imperative that activities be delayed or cease if the shut-down zone(s) is obscured by dark, rain, fog, etc. and the activities not begin until the extents of the zones are visible. Otherwise, the Navy could incur unauthorized takes. It is unclear why NMFS is refusing to include what can be considered standard mitigation measures⁵, particularly since doing so would not change the manner in which the Navy plans to conduct its activities. Thus, the measures are in fact practicable and necessary for the Navy to effect the least practicable adverse impact on the various marine mammal species. As such, the Commission recommends that NMFS include in section 218.34(c) of the final rule the requirement that the Navy (1) conduct pile-driving and -removal activities during daylight hours only and (2) if the entire shut-down zone(s) is not visible due to darkness, fog, or heavy rain, delay or cease pile-driving and -removal activities until the zone(s) is visible.

Unauthorized taking

The Commission informally noted that NMFS omitted from the preamble and proposed rule the standard measure to delay or cease pile-driving and -removal activities, if a species for which take has not been authorized or for which the authorized number of takes has been met is observed approaching or within the Level B harassment zone. NMFS indicated that the requirement to cease and delay activities is explicit in the standard prohibitions in section 218.33 of the proposed rule. Section 218.33 specifies only that no person may take any marine mammal not specified in the LOA or any marine mammal specified in the LOA in any manner other than as specified—the section makes no mention of exceeding the numbers of authorized takes. In addition, the standard prohibitions do not explicitly state that the Navy would have to delay or cease its activities, it is merely assumed or implied that it would in order to avoid violating the final rule.

The standard measure is included in the mitigation sections of nearly all incidental harassment authorizations, as well as implied in the standard prohibition portions of those authorizations (section 4 and 3, respectively). NMFS included the standard measure in the mitigation section of the Navy's recent final rule for inland waters of Washington (section 218.24(c)(6); 84 Fed. Reg. 15984). In that rule, the standard prohibitions were similar to those in the Navy's proposed rule for Seal Beach. Thus, it was not deemed redundant in that rule. The standard measure is practicable

⁵ As they have been included in numerous incidental harassment authorizations.

and seeks to clarify the measures that should be taken to ensure that the Navy is in compliance with section 218.33 of the rule. Therefore, the Commission recommends that NMFS include in section 218.34(c) of the final rule the requirement to delay or cease pile-driving and -removal activities, if a species for which take has not be authorized or for which the authorized number of takes has been met is observed approaching or within the Level B harassment zone.

Level B harassment zones and reporting requirements

NMFS included the calculated Level B harassment zones⁶ in Table 5 of the *Federal Register* notice. However, the Navy contracted Dr. Peter Dahl to conduct sound propagation modeling to estimate the Level B harassment zones⁷ for impact installation of 12-in piles and vibratory removal of the 12-in piles and 24-in steel pipe piles⁸. The modeled Level B harassment zone for impact installation of 12-in piles is greater than the calculated Level B harassment zone (424–439 m vs 251 m, respectively). Conversely, the modeled Level B harassment zones for vibratory removal of 12- and 24-in piles are less than the calculated Level B harassment zones (821–1,498 m vs 21,544 m for 12-in piles and 770 m vs 21,544 m for 24-in piles, respectively). It is important that the correct Level B harassment zones be included appropriately in the LOA.

The Commission also understands that the Navy is constructing a breakwater that would block the sound emitted during construction of the new pier and installation of some of the mooring buoys from exiting Anaheim Bay. However, the Navy would install two mooring buoys (OSCAR 4 and 8; Figures 6-6 and 6-7 in the application) on the seaward side of the breakwater. Thus, the sound would not be confined to Anaheim Bay and would be emitted through the entrance when the 12-in I-beam piles are removed with a vibratory hammer. Although the Navy would be monitoring the waters of Anaheim Bay, it would not be monitoring seaward of the bay entrance. As such, the numbers of Level B harassment takes would need to be extrapolated, not only to those portions of the Level B harassment zones that the PSOs are unable to monitor within Anaheim Bay during the various activities⁹, but also those portions outside the bay when the 12-in I-beams are removed. The Commission recommends that NMFS (1) include in the preamble and the LOA the modeled extents of the Level B harassment zones for impact installation of 12-in piles and vibratory removal of the 12-in piles and 24-in steel pipe piles based on Table 6-4 in the application and (2) include in the preamble and section 218.35(d)(1)(ii) of the final rule the reporting requirement to extrapolate the numbers of Level B harassment takes, not only to those portions of the Level B harassment zones that the PSOs are unable to monitor within Anaheim Bay during the various activities but also those portions outside the bay when the 12-in I-beams are removed.

It is unclear whether the Navy would be keeping a running tally of the extrapolated takes to ensure the authorized takes are not exceeded. The Commission does not believe that keeping track of only the observed takes is sufficient, particularly for pinnipeds. Thus, adjusting the takes based on the extent of the Level B harassment zone should be a simple calculation based on the effective

⁶ Based on the source level and an assumed 15 log R propagation loss. These calculated zones also were specified to represent the monitoring/disturbance zones in the mitigation section of the preamble.

⁷ See Table 6-4 in the application for the extents of the various Level B harassment zones.

⁸ Vibratory installation of 30-in pipe piles was modeled and used as a proxy for vibratory removal of the 24-in piles.

⁹ The Commission informally noted that NMFS did not include this reporting measure or the requirement to submit the raw sightings datasheets in the preamble or section 218.35(d)(1)(ii) of the proposed rule. NMFS indicated both reporting measures would be included in the preamble and final rule.

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sighting distance and number of PSOs monitoring at a given time. As such, the Commission recommends that NMFS ensure that the Navy keeps a running tally of the total takes for each species to comply with section 218.33 of the final rule.

Finally, the Commission informally noted that the reporting requirements included in the preamble and section 218.35(d)(1)(ii) are fewer and less detailed than those that have been included in recent draft and final incidental harassment authorizations¹⁰. The more-detailed reporting requirements have been necessitated based on the quality and type of (or lack of) information provided in various monitoring reports. So as to ensure that the data the Navy collects and reports is useful and can inform other authorizations, the Commission recommends that NMFS include in section 218.35(d)(1)(ii) of the final rule reporting requirements consistent with the authorizations noted herein.

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

Sincerely,



Peter O. Thomas, Ph.D.,
Executive Director

¹⁰ e.g., <https://www.fisheries.noaa.gov/webdam/download/99494590> and <https://www.fisheries.noaa.gov/webdam/download/100017216>