



MARINE MAMMAL COMMISSION

31 January 2017

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) 3 January 2017 notice (82 Fed. Reg. 684) and the letter of authorization 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 waterfront construction activities at Naval Submarine Base Kings Bay (NSB Kings Bay) in Georgia during a five-year period.

The Navy plans to repair and replace in-water structures, construct a new support facility, and extend a pier at NSB Kings Bay. The Navy would install steel, composite, and concrete piles ranging in diameter from 14 to 30 in using a vibratory hammer and/or impact hammer. It also would remove steel, concrete, and timber piles using a vibratory hammer and/or direct pull. The Navy would use only one method (vibratory or impact hammer) at any given time. Activities are expected to occur on 267 days during the five-year period and would be limited to daylight hours only.

NMFS preliminarily has determined that, at most, the proposed activities would modify temporarily the behavior of small numbers of bottlenose dolphins. 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 mitigation, monitoring, and reporting measures include—

- conducting source level measurements during (1) impact driving of 18- to 24-in concrete piles and 14-in steel H-piles and (2) vibratory removal of 16-in timber piles and 24-in concrete piles and adjusting the Level A or B harassment zones as necessary;
- 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 if a species for which authorization has been granted but the authorized takes are met, approaches or is observed within the Level B harassment zone¹;
- using 1-5 qualified protected species observers to monitor the Level A and B harassment zones for 15 minutes before, during, and for 30 minutes after pile-driving and -removal activities;
- conducting surveys of bottlenose dolphins to refine the spatial and temporal distributions and densities of dolphins in the project area², subject to funding availability;
- reporting injured and dead marine mammals to NMFS and the Southeast Regional Stranding Coordinator using NMFS's phased reporting approach and suspending activities, if appropriate; and
- submitting annual marine mammal monitoring reports, acoustic monitoring reports, and a final comprehensive monitoring report to NMFS.

In-situ acoustic measurements

In the preamble to the final rule, NMFS indicated that the Navy would implement a source level verification study and that data collection would be targeted towards impact and vibratory driving³ of concrete, timber, and composite piles because data are relatively lacking for those pile types. However, the preamble then indicated that only concrete, timber, and steel H-piles would be monitored. The Commission agrees that source level data are lacking for the various pile types and associated installation/extraction methods. The Commission further notes that, due to the lack of data, the Navy used source levels from vibratory installation of 16-in timber piles as a proxy for vibratory installation of 16-in composite piles. Further, installation of composite piles would occur on only four days during fiscal year 2017, which is when some, if not all, of the other pile types would be monitored. Thus, requiring source level verification of vibratory driving of composite piles should not pose an additional exorbitant financial burden. The Commission recommends that NMFS require the Navy to conduct source level measurements during vibratory driving of a representative number of 16-in composite piles in addition to the other pile types and methods proposed to be monitored.

In addition, the Commission understands that the Level A and B harassment zones would be adjusted based on the in-situ source level measurements and, presumably, practical spreading loss. Normally, those adjustments are based on sound propagation measurements taken in concert with the source level measurements. However, it appears that only source level measurements would be collected for the proposed activities. Given that data do not exist regarding sound propagation conditions or measurements in coastal waters of Georgia, those measurements should be obtained as well. The Commission recommends that NMFS require the Navy to conduct sound propagation measurements in addition to source level measurements during the various activities that would be monitored acoustically to refine the extent of the Level A and B harassment zones.

¹ NMFS omitted this measure from the *Federal Register* notice but indicated that it would be included in the final rule.

² The Commission fully supports the Navy for proposing to conduct the associated surveys.

³ The Commission notes that removal would occur as well.

Monitoring measures

The Navy would monitor Level A harassment zones for all activities and Level B harassment zones associated with impact driving of concrete, timber, composite, and steel H-piles 100 percent of the time. However, the Navy would monitor Level B harassment zones for the remaining activities, including vibratory driving/removal of the various pile types and impact driving of steel pipe piles, during only a subset of the total project days. That would amount to 30 to 69 percent of the time, depending on the activity year.

The preamble to the final rule indicated that approximately half of Level B harassment zone monitoring effort was proposed for allocation during the first two years of project activities to provide verification during the early stages of the project regarding assumed numbers of bottlenose dolphins present in the area⁴. The preamble further noted that, if compliance monitoring results suggest that the actual number of incidental takes differs significantly from the number originally authorized, the Navy would consult with NMFS. The Commission agrees with the premise of the approach the Navy, and thus NMFS, proposed to employ. However, the first two years of monitoring effort account for only 21 percent of the overall monitoring effort rather than approximately 50 percent as stipulated in the preamble. Further, it appears the Navy did not propose to conduct monitoring of the Level B harassment zone during impact driving of any of the steel pipe piles, which includes zones with estimated radii of 1 to 1.6 km. To fulfill the intent of the preamble to allocate more monitoring effort in the first two years of activities to ensure the number of authorized takes are sufficient, the Commission recommends that NMFS require the Navy to reallocate additional monitoring effort to the first two years of activities and ensure that monitoring occurs during a representative portion of the various pile sizes, types, and methods including during impact driving of steel pipe piles.

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

Sincerely,



Rebecca J. Lent, Ph.D.
Executive Director

⁴ Given that the densities are 10 years old and new surveys would be conducted only as funding allows.

Public comment #1

I found the proposed rule to be thorough and inclusive of practical mitigation measures. I do agree that the Naval Submarine Base Kings Bay in Georgia needs to be retrofitted and improved, as our Navy's submarine fleet is a crucial component of our national security, especially as conflicts in the South Pacific and seas surrounding Asia continue to escalate. Concerning the bottlenose dolphin, the NOAA does categorize the Western North Atlantic South Carolina/Georgia Coastal Stock as "depleted" in their Marine Mammal Stock Assessment Reports, last updated in 2015. Thankfully, the project does not pose a permanent or fatal threat to the bottlenose dolphin as it stands. My worry is that the length of the project may result in long-term avoidance and have permanent adverse effects on the Western North Atlantic South Carolina/Georgia Coastal Stock of bottlenose dolphins. Such long-term avoidance would not only impact the bottlenose dolphins, but also other species in the region that directly or indirectly benefit from the presence of the bottlenose dolphin. The proposed rule does acknowledge a lack of research in this area, as well as hearing loss, changes in dive behavior, and disruption of feeding behavior. I recommend that researchers use this opportunity to fill gaps in research, so that at a minimum, this construction project provides insight on the human impact on marine mammals.

Public comment #2

Protection of marine life is critical to maintaining balanced ecosystems. Mass stranding of marine life are not only devastating, but bad publicity as well.