

MARINE MAMMAL COMMISSION
4340 East-West Highway, Room 700
Bethesda, MD 20814-4447

3 June 2009

Mr. P. Michael Payne, Chief
Permits, Conservation, and Education Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3226

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's 30 April 2009 *Federal Register* notice (74 Fed. Reg. 20156) proposing to issue regulations under section 101(a)(5)(A) of the Marine Mammal Protection Act. The regulations would authorize the U.S. Navy to take marine mammals incidental to its activities at the Naval Surface Warfare Center, Panama City, Florida. The authorization is proposed for five years, from July 2009 through July 2014.

RECOMMENDATION

The Marine Mammal Commission recommends that, if the National Marine Fisheries Service proceeds with publication of a final rule to authorize the taking of marine mammals incidental to the proposed military readiness activities, the Service require the Navy to—

- conduct an external peer review of its marine mammal density estimates, the data upon which those estimates are based, and the manner in which those data were used for that purpose;
- provide additional details concerning its Integrated Comprehensive Monitoring Program, including an estimated time frame for its implementation;
- develop and implement a plan to evaluate the effectiveness of monitoring and mitigation measures before beginning or in conjunction with conducting operations covered by the proposed incidental take authorization;
- implement a minimum 60-minute waiting period when deep-diving species (e.g., sperm and beaked whales) or species that cannot be identified by watchstanders are observed within or are about to enter a safety zone;
- suspend an activity if a marine mammal is seriously injured or killed and the injury or death could be associated with the Navy's activities. The injury or death should be investigated to determine the cause, assess the full impact of the activity potentially implicated (e.g., the total number of animals involved), and determine how the activity should be modified to avoid future injuries or deaths;
- in those cases where authorization is sought to take marine mammals by injury, consult with the Service to consider whether the requested take levels are realistic and adequately take into account the schooling behavior of dolphins;
- submit annual reports that document in full the methods, results, and interpretation of all monitoring tasks; and

- work with the National Marine Fisheries Service to develop a database for storing original records of marine mammal interactions, which will provide a basis for evaluating such interactions over long periods of time and across large areas.

RATIONALE

According to the proposed rule, the Navy anticipates taking each year approximately 2 sperm whales, 2 melon-headed whales, 1 short-finned pilot whale, 2 Risso's dolphins, 614 bottlenose dolphins, 471 Atlantic spotted dolphins, 23 pantropical spotted dolphins, 5 striped dolphins, 23 spinner dolphins, and 5 Clymene dolphins by Level B harassment (i.e., temporary threshold shift or "sub-temporary threshold shift") during its proposed use of mid- and high-frequency sonar and as a result of underwater detonations. The Navy also anticipates taking each year up to two bottlenose dolphins, two Atlantic spotted dolphins, one pantropical spotted dolphin, and one spinner dolphin by Level A harassment (i.e., slight lung injury) incidental to pressures from underwater detonations of explosive ordnance.

Marine mammal density estimation

As the Commission has noted in its previous letters regarding the Navy's requests for authorization to take marine mammals incidental to military readiness activities, risk analyses and take estimates depend on the accuracy of the data in the Navy's underlying reports. To help ensure that the risk analyses and take estimates are accurate, the Marine Mammal Commission reiterates its recommendation that the National Marine Fisheries Service require the Navy to conduct an external peer review of its marine mammal density estimates, the data upon which those estimates are based, and the manner in which those data are being used for that purpose.

Monitoring and mitigation

The Commission supports the Navy's intent to develop an Integrated Comprehensive Monitoring Program to monitor, mitigate, and assess the effects of its activities over time. However, as it has noted previously, the Commission has no basis for evaluating whether the program will be effective until the Navy describes the program in greater detail and describes the manner in which it will be implemented. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service require the Navy to provide additional details concerning its Integrated Comprehensive Monitoring Program, including an estimated time frame for its implementation.

As a related matter, the Commission continues to be concerned that, at present, the Navy and Service's estimated performance for the proposed monitoring and mitigation measures may not be realistic (i.e., performance may be lower than predicted). The Navy's application states that one of the primary goals of its Integrated Comprehensive Monitoring Program is to assess the effectiveness of its marine species mitigation efforts. The Commission supports this goal. However, as we have noted in previous letters, the Integrated Comprehensive Monitoring Program will be useful for assessing and minimizing impacts only if the various monitoring and mitigation measures

incorporated in the Program are, in fact, effective (i.e., the Navy has tested and validated their performance). The Commission believes that (1) the implied efficacy of the Navy's monitoring and mitigation measures is currently over-estimated; (2) absent an evaluation by the Navy of its monitoring and mitigation measures, an avoidable level of uncertainty will persist about the effects of those activities, and (3) the Navy is fully capable of conducting the required testing and validation. The Marine Mammal Commission therefore reiterates its recommendation that the National Marine Fisheries Service require the Navy to develop and implement a plan to evaluate the effectiveness of monitoring and mitigation measures before beginning or in conjunction with conducting operations covered by the proposed incidental take authorization.

Monitoring of marine mammals after power-down and shutdown

The Service's proposed rule states that high- and mid-frequency active sonar transmissions would be limited to at least 10 dB below the equipment's normal operating level if a marine mammal is detected within 500 yards (457 m) of the sonar dome, and this would continue until the marine mammal has been observed leaving the area or has not been detected for 30 minutes or the vessel has transited more than 2,000 yards (1,828 m) beyond the location of the last detection. The notice further states that transmissions would be suspended if a marine mammal is detected within 200 yards (183 m) of the sonar dome and would continue until the marine mammal has been observed leaving the area or has not been detected for 30 minutes or the vessel has transited more than 2,000 yards (1,828 m) beyond the location of the last detection.

In its previous letters to the Service and the Navy concerning similar activities, the Commission has recommended that these criteria be replaced to require monitoring periods of 30 minutes for most marine mammals and 60 minutes for deep-diving species (e.g., sperm and beaked whales) unless the animal is resighted at a safe distance before that time. By failing to account for deep-diving marine mammals that may remain submerged for an hour or longer, the Service and the Navy are likely reducing the effectiveness of this mitigation measure and increasing the risk that deep-diving whales will be exposed to intense noise. The Commission also notes that, in many cases, it may be difficult or impossible for watchstanders to determine the species involved, and, in practice, it will be difficult, if not impossible, to confirm that a whale sighted at a safe distance is the same animal sighted within a protection zone. Further, the Commission questions the criterion that allows resumption of sonar use once a vessel has moved a certain distance (e.g., 2,000 yards) after sighting a marine mammal because, if both the sighted marine mammal and the ship are moving, the estimation of separation cannot be judged on the basis of the ship's movements only. If the Navy wishes to use distance as an indicator of safety, it must establish a safe distance criterion that fully accounts for the movements and speeds of both the ship and the marine mammal. The Marine Mammal Commission therefore recommends that the Service work with the Navy to modify the proposed mitigation measures by requiring that the Navy delay resumption of full operational sonar use following a power-down or shutdown for 30 minutes if the sighted animal can be identified to the species level and the species is not deep-diving and 60 minutes if it cannot be identified or is known to be a member of a deep-diving species such as sperm and beaked whales.

Lethal taking and serious injury

The Navy is requesting authorization to take two bottlenose dolphins, two Atlantic spotted dolphins, one pantropical spotted dolphin, and one spinner dolphin by injury (i.e., slight lung injury). The Marine Mammal Commission recommends that the final rule, if issued, require suspension of the Navy's activities if a marine mammal is seriously injured or killed and the injury or death could be associated with those activities. The injury or death should be investigated to determine the cause, assess the full impact of the activity (e.g., the total number of animals involved), and determine how the activity should be modified to avoid future injuries or deaths. Full investigation of such incidents is essential to provide information on potential effects of sound on marine mammals. The Commission also notes that the species for which authorization to take by injury is being requested are all gregarious, social species that generally occur in fairly large schools. This being the case, the Commission questions whether the requested take levels provide sufficient coverage for the Navy's proposed activities. That is, if one or two dolphins are in close enough proximity to an explosion or other activity to sustain an injury, other individuals also are likely to be close enough to suffer similar injuries. The Marine Mammal Commission therefore recommends that the Service and the Navy consider whether the requested take levels are realistic and adequately take into account the schooling behavior of dolphins.

Reporting Requirements

Section 218.184(f) of the proposed rule states that "[t]he Navy shall submit a report annually on September 1 describing the implementation and results (through June 1 of the same year) of the monitoring required in §218.184(e)." Section 218.184(g) states that, at the end of the fourth year of the rule (November 2012), "[t]he Navy shall submit to NMFS a draft report that analyzes and summarizes all of the multi-year marine mammal information gathered during sonar and explosive exercises for which individual reports are required in §218.184 (d-f)." However, the preamble to the proposed rule states that some of the reporting requirements are still under development, that the final rule may contain additional details not contained in the proposed rule and that the reporting requirements in the proposed rule may be modified, removed, or supplemented based on information or comments received during the public review period. It is unclear why the Service did not develop a complete set of proposed reporting requirements before publishing the proposed rule to afford the Commission and other reviewers the opportunity for comment. In any case, the Marine Mammal Commission recommends that the final rule require that annual reports document in full the methods, results, and interpretation of all monitoring tasks.

As a related matter, the proposed rule indicates that the ship's logs and records documenting training operations would be retained only for 30 days. Those logs constitute the original records of actions taken and could be of great value to reviewers seeking to verify the Navy's summary reports, understand the nature of the interactions, and devise more effective mitigation measures. This sort of feedback and adaptive management should be standard practice. Maintaining those records for a longer period of time is essential for fully assessing mitigation efforts and potential effects on marine mammals. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service work with the Navy to develop a database for storing original records of Navy

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interactions with marine mammals. The Commission believes such a database can be developed and used without compromising Navy security requirements.

Please contact me if you or your staff has questions about any of our comments or recommendations.

Sincerely,

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

Timothy J. Ragen, Ph.D.
Executive Director