



MARINE MAMMAL COMMISSION

6 August 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 proposed rule published in the 7 July 2009 *Federal Register* (74 Fed. Reg. 32265) proposing to issue regulations under section 101(a)(5)(A) of the Marine Mammal Protection Act. The proposed regulations would authorize the U.S. Navy to take small numbers of five species of marine mammals by Level B harassment incidental to military readiness training operations in the Naval Undersea Warfare Center, Keyport Range Complex, in Washington State from September 2009 through April 2014. Activities covered by the authorization would include the use of mid-frequency and high-frequency active sonar and an extended echo-ranging system.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service—

- work with the Navy to ensure that the final rule and any letter of authorization issued under that rule provide authorization for the taking of all marine mammal species that are known to occur in the study area (including those listed under the Endangered Species Act) and that may be exposed to Level A or Level B harassment as a result of the proposed activities; and
- either reconsider its decision to exclude endangered and threatened species from the authorization or provide a well-reasoned, science-based explanation for its apparent belief that the proposed mitigation measures will be much more effective for listed species than for unlisted species.

In addition, the Marine Mammal Commission recommends that, if the National Marine Fisheries Service proceeds with publication of a final rule to authorize the taking of small numbers of marine mammals incidental to the proposed military training operations, it—

- describe the “specified events” that would involve or require special surveys at the Dabob Bay Range site;
- require the Navy to develop and implement a detailed plan to verify the performance of the visual monitoring, passive acoustic monitoring, and other monitoring and mitigation measures being proposed to enable the Navy, the National Marine Fisheries Service, and other interested parties to evaluate their effectiveness; and

- suspend an activity if a marine mammal is killed or seriously injured and the death or injury could be associated with the Navy's activities. Authorization for resumption of the activity should be contingent upon a review by the Service of the circumstances of the death or injury and the Navy's plans for avoiding additional mortalities. If, upon review, those plans are deemed inadequate, then the Navy should be required to halt its operations until it has obtained the necessary authorization.

BACKGROUND

The planned training operations would occur within the Keyport Range Complex, which includes three sites: the Keyport Range Site, Dabob Bay Range Complex, and Quinalt Underwater Tracking Range. The operations would expose various species of marine mammals within this complex to mid-frequency and high-frequency acoustic transmissions from a number of sources, including active sonar (frequencies of 10 to 100 kHz, source levels of less than 203 dB re 1 μ Pa-1m SPL); unmanned undersea vehicle tracking systems (10 to 100 kHz, source levels of less than 195 dB re 1 μ Pa-m); torpedo sonar (10 to 100 kHz, source levels generally less than 233 dB re 1 μ Pa-m SPL); range targets and special tests (5 to 100 kHz with a source level of less than 195 dB re 1 μ Pa-m at the Keyport Range Site and source levels of less than 238 dB re 1 μ Pa-m at the Dabob Bay Range Complex and Quinalt Underwater Tracking Range); special sonar (100 to 2,500 kHz, source level of less than 235 dB re 1 μ Pa-m); sonobuoys and helicopter dipping sonar (2 to 20 kHz, source levels of less than 225 dB re 1 μ Pa-m SPL); side-scan sonar (100 to 700 kHz, source levels of less than 235 dB re 1 μ Pa-m SPL); and other acoustic sources, including acoustic modems, targets, aids to navigation, sub-bottom profilers, and engines (10 to 300 kHz, source levels of less than 210 dB re 1 μ Pa-m SPL).

In addition, the Navy is planning to expand the boundaries of all three sites to support additional range activities, including testing, training, and evaluation of system capabilities such as guidance control and sensor accuracy of manned and unmanned vehicles in multiple marine environments (e.g., differing depths, salinity levels, temperatures, sea states, etc.). These planned expansions would allow the Navy to increase its average use of the Keyport Range Site from 55 to 60 days per year and the Quinalt site from 14 to 16 days per year for offshore activities and from zero to 30 days per year for surf-zone activities. The Navy would not increase its use of the Dabob Bay site (i.e., number of days and types of activities).

RATIONALE

Estimated Taking by Harassment

The Service's *Federal Register* notice identifies eight marine mammal species or stocks that are listed as endangered or threatened under the Endangered Species Act (blue, fin, sei, humpback, North Pacific right, sperm, and southern resident killer whales and Steller sea lions) and could occur in the Keyport Range Complex study area. However, the Navy has not requested and the Service is not proposing to authorize taking of these species based on the expectation that the proposed

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mitigation measures will prevent harassment of these species. The Service's notice indicates that consultation under the Endangered Species Act will be concluded prior to issuance of a final rule and a letter of authorization, and that consultation likely will concur with this expectation. In numerous letters to the Service and Navy (see 4 August 2008 letter, enclosed), the Marine Mammal Commission has questioned the assumption that such mitigation measures are 100 percent effective, which would be inconsistent with virtually all scientific information pertaining to surveys and detection of marine mammals at sea. The Marine Mammal Commission therefore reiterates its recommendation that the National Marine Fisheries Service work with the Navy to ensure that the final rule and any Letter of Authorization issued under that rule provide authorization for the taking of all marine mammal species that are known to occur in the study area (including those listed under the Endangered Species Act) and that may be exposed to Level A or Level B harassment as a result of the proposed activities. The information provided in the Navy's Request for Authorization for the Keyport Range Complex, (see, e.g., Table 6-23, 24, 25 on pages 171 and 172 of that document) points out the inconsistency, indicating that these same mitigation measures are much less effective in reducing the numbers of takes of other marine mammal species. For example, the Navy predicts that the mitigation measures set forth in its range operating policies and procedures will reduce the number of takes of killer whales by Level B harassment from 54 to zero in Dabob Bay but will have no effect on the number of takes of sea lions or harbor seals. Similarly, the Navy claims that the mitigation measures for the Quinault Underwater Tracking Range will reduce the number of takes of all listed species, including one pinniped species (Steller sea lions), from 10 to zero, while providing no reduction in the predicted number of takes for harbor porpoises and four other pinniped species. The Navy and Service should therefore explain how mitigation measures predicted to result in little or no reduction in the number of takes of unlisted species are expected to be 100 percent effective when applied to endangered and threatened species. This different treatment of listed and unlisted species seems entirely inconsistent with our understanding of these species and the efficacy and selectivity of mitigation measures. Therefore, the Marine Mammal Commission recommends that the Service either reconsider its decision to exclude endangered and threatened species from the authorization or provide a well-reasoned, science-based explanation for its apparent belief that the proposed mitigation measures will be much more effective for listed species than for unlisted species.

Monitoring and Mitigation

The proposed rule would require that in 2009 the Navy complete an integrated comprehensive monitoring program. That program would require annual review by the Navy and Service of monitoring results, Navy research and development activities, and the best available science upon which to base monitoring and mitigation methods. In addition, the proposed rule would require a workshop to be convened by the Navy in 2011 to review the Navy's monitoring plans and results and to recommend to the Navy and the Service ways of improving those plans. The Marine Mammal Commission believes these requirements are essential to ensure that the Navy's activities do not have more than negligible effects on marine mammals in the affected areas.

The proposed rule also would require that each year the Navy conduct a minimum of two special surveys using vessel and shore-based monitoring and passive acoustic monitoring at the Dabob Bay Range site. Data from the surveys would be used to estimate the number of marine mammals exposed to different received levels (based on distance to the source, bathymetry, oceanographic conditions and the type and power of the acoustic source) and to describe the animals' corresponding behavior. These surveys would be conducted one day before and one or two days after "specified events," but the proposed rule does not describe these events. To better inform the interested public, the Marine Mammal Commission recommends that the final rule, if issued, describe the "specified events" that would involve or require a special survey at the Dabob Bay Range site.

In addition to the above requirements, the Commission believes that further efforts are needed to ensure that mitigation measures achieve their stated purpose. To that end, the Commission has repeatedly recommended that the Navy develop and implement a plan for obtaining performance data for the prescribed monitoring and mitigation measures. Doing so is necessary to verify the efficacy of those measures and the Navy's confidence in them, and is otherwise standard operating procedure for the Navy. Those measures include watchstander training and detection of marine mammals in safety/shutdown zones (to obtain measures of the probability of detecting various marine species of concern under different conditions), use of various types of equipment to improve vision at night, and use of passive acoustic monitoring. To that end, the Marine Mammal Commission recommends that, if the Service issues the letter of authorization, it require that the Navy develop and implement a detailed plan to verify the performance of the visual monitoring, passive acoustic monitoring, and other monitoring and mitigation measures being proposed. Such verification is essential to enable the Navy, the National Marine Fisheries Service, and other interested parties to evaluate their effectiveness.

Lethal Taking and Serious Injury

Because neither the Service nor the Navy anticipates that marine mammal strandings or deaths will result from the proposed activities, the proposed rule does not provide authorization for any lethal taking of marine mammals. The proposed rule does not, but should require that, in the event of a death of a marine mammal, activities be temporarily suspended until an initial investigation of the cause of the death is conducted. Among other things, such an investigation is needed to help ensure that additional deaths of marine mammals do not occur. To that end, the Marine Mammal Commission recommends that, if issued, the incidental take regulations require that the Navy suspend an activity if a marine mammal is killed or seriously injured and the death or injury could be associated with the Navy's activities. Authorization for resumption of the activity should be contingent upon a review by the Service of the circumstances of the death or injury and the Navy's plans for avoiding additional mortalities. If, upon review, those plans are deemed inadequate, then the Navy should be required to halt its operations until it has obtained the necessary authorization.

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Please contact me if you have questions about the Commission's recommendations or rationale.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is written in a cursive style with a prominent initial 'T'.

Timothy J. Ragen, Ph.D.
Executive Director

Enclosure