

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

20 January 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 20910-3225

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the U.S. Navy's application for authorization to take marine mammals incidentally during proposed Navy training activities in the soon-to-be-designated Undersea Warfare Training Range off the U.S. East Coast, as described in the National Marine Fisheries Service's 19 December 2008 notice and request for comments (73 Fed. Reg. 77631). The application and associated Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS) identify and analyze the environmental effects of the installation and operation of an underwater listening array covering approximately 500 nmi² of the ocean floor and cabled to shore. The application also considers the effects of various activities to be conducted on the range, including vessel movements, torpedo deployments (non-explosive), sonar use and related aircraft, surface vessel and submarine activities associated with various anti-submarine warfare exercises, and mine warfare exercises. The Navy will not use explosives or live ordnance during these training activities.

The Navy has considered four alternative sites for the training range. They are located at the edge of the continental shelf offshore of northeastern Florida, central South Carolina, southeastern North Carolina, and northeastern Virginia. The DEIS also listed an alternative of no action (no range construction) but did not analyze this alternative in detail.

RECOMMENDATIONS

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

- require the Navy to abide by restrictions in the Service's final rule (50 C.F.R. § 224.105) concerning vessel speed restrictions, except as necessary during emergency situations or when inconsistent with essential training objectives, and that it to work with the Service to carry out a study and establish a database that would better characterize the risk to whales as a function of Navy vessel speed, location, season, and other environmental factors;
- work with the Navy to sponsor a peer review of the NODE process and use of existing data for the training range under consideration here as well as at other sites in U.S. waters;
- work with the Navy to devise the studies needed to evaluate existing monitoring and mitigation measures. Such an effort should provide (1) a more realistic appraisal of our

- collective ability to assess the risks to marine mammals and (2) a basis for developing better methods to provide the desired level of protection to marine mammals; and
- require that the Navy immediately suspend operations and consult with the Service if a marine mammal is seriously injured or killed and the injury or death could be the result of Navy operations; operations should resume only after steps have been identified to avoid similar occurrences or the Navy has obtained additional authorization.

RATIONALE

The Commission provides the following rationale for its recommendations.

Avoiding Collisions with North Atlantic Right Whales

The National Marine Fisheries Service recently published its Final Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with Northern Right Whales, effective 9 December 2008 (73 Fed. Reg. 60173). In adopting that rule, the Service determined that a 10-knot speed limit would significantly reduce the risk of serious or lethal collisions with right whales and that such a limit is needed in certain times and areas where right whales are known or likely to occur. In recent letters to the Navy, the Commission has recommended that the Navy abide by the limit set forth in the Service's final rule to the extent possible. The Commission understands the need for exceptions during emergencies or when the need for realism in training requires greater speed or maneuverability. However, the Navy should be otherwise able to comply with the Service's rule when its vessels are traveling to, from, or through the chosen training range.

The Navy has declined to commit to specific vessel speeds but has indicated that its vessels will travel at "safe speeds." Although the Commission appreciates the Navy's willingness to do so, the term "safe speeds" is not clear and therefore prevents reliable estimation of the risk to right whales. That risk is not well defined at all ship speeds or under various environmental conditions, and it would be very useful for the Navy to maintain a database of ship speeds, conditions, and encounters (strikes and near-misses) with right whales to better estimate the level of risk of a collision. The Commission will be recommending to the Navy that it design such a study and collect the needed information, all of which should be done in collaboration with Service scientists familiar with the distribution and movements of right whales. To that end, the Marine Mammal Commission recommends that the National Marine Fisheries Service require that the Navy abide by restrictions in the Service's final rule concerning vessel speed, except as necessary during emergency situations or when inconsistent with essential training objectives, and that it work with the Service to carry out a study and establish a database that would characterize the risk to whales as a function of Navy vessel speed, location, season, and other environmental factors.

Independent Peer Review

The estimation of risk to marine mammals by Navy operations in a suite of training ranges is based on a number of factors, including estimates of the density of marine mammals in those areas.

Density estimates are derived from (1) the so-called NODE report (Navy OPAREA Density Estimation; Department of the Navy 2007, as refined) and (2) the existing data on marine mammal abundance, distribution, and movements in the scientific and gray literature. The Navy's density estimation approach has been developed based on consultation with a variety of marine mammal scientists from both the United States and the United Kingdom. It is likely the most sophisticated approach available. Nonetheless, the resulting density estimates are encumbered by considerable uncertainty, both in the process and the data used. That uncertainty could be addressed, at least in part, through independent peer review, which is a normal scientific procedure. The Commission has recommended that the Navy conduct an independent peer review of the scientific process and data used by the Navy to estimate marine mammal density as part of its overall effort to estimate the risk to marine mammals from its operations.

The National Marine Fisheries Service must either depend on the Navy's density and risk estimates or conduct its own assessments when it processes and reviews requests from the Navy to take marine mammals incidentally during the course of its activities. To our knowledge, the former is generally the case. If so, the Service shares some responsibility for demonstrating the reliability of the Navy's estimation process and use of marine mammal data if the Service uses them as a basis for its decision-making regarding issuance of letters of authorization. For that reason, the Marine Mammal Commission recommends that the Service work with the Navy to sponsor a peer review of the NODE process and use of existing data for the training range under consideration here as well as at other sites in U.S. waters. Such a review could highlight the main sources of uncertainty in the density estimation process and data, help identify studies to address those sources of uncertainty, and help identify mitigation strategies to reduce potential effects.

Monitoring and Mitigation

The extent to which anticipated risks exist, are detected, and are reduced is determined, in part, by the effectiveness of monitoring and mitigation measures. The Navy is establishing or has established an integrated comprehensive monitoring plan to structure its monitoring, mitigation, and long-term assessment efforts. If properly implemented, the plan will improve both our understanding of the effects of sound from military activities and our ability to monitor and mitigate such effects. The Marine Mammal Commission strongly supports the development and implementation of this plan.

The Navy's application and draft environmental impact statement for the Undersea Warfare Training Range, however, do not convey realistic estimates of performance for its proposed mitigation measures, nor do those documents contain a plan to verify and validate the levels of performance of watchstanders or other monitoring tools such as passive acoustics. The Commission has repeatedly recommended that the Navy address these concerns and continues to believe that the probability of detecting marine mammals is low using existing monitoring measures and the likelihood of implementing effective source-level reductions and other mitigation measures also is low. The studies needed to evaluate the efficacy of monitoring and mitigation measures are feasible and the costs are well within the Navy's capability. The Commission believes that the value of

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verifying and validating mitigation effectiveness fully justifies the relatively small effort and time required for that purpose.

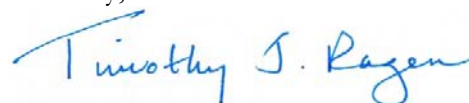
Here again, the Service must either be depending on the Navy's opinion that the monitoring and mitigation measures are adequate or have some other substantiated basis for concluding that the measures are adequate. If the former, the Service has a responsibility to work with the Navy to complete the needed evaluations. If the latter, the Service should provide its basis for confidence and subject it to review by the Commission and other interested parties. Because we believe the former is more likely to be true, the Marine Mammal Commission recommends that the National Marine Fisheries Service work with the Navy to devise the studies needed to evaluate existing monitoring and mitigation measures. Such an effort should provide (1) a more realistic appraisal of our collective ability to assess the risks to marine mammals and (2) a basis for developing better methods to provide the desired level of protection to marine mammals.

Serious Injury or Mortality

The Navy has chosen not to request authorization for Level A harassment of marine mammals during its proposed activities in the Undersea Warfare Training Range. As we have noted in our response to other recent Navy requests, we do not agree that the proposed monitoring and mitigation measures provide 100 percent assurance that no mortalities will occur. Without authorization for Level A taking, the Navy will not be covered if its operations injure or kill a marine mammal, and it will be in violation of the Marine Mammal Protection Act. Therefore, the Marine Mammal Commission recommends that the Service require that the Navy immediately suspend operations and consult with the Service if a marine mammal is seriously injured or killed and the injury or death may have been caused by those operations. A determination of potential cause should be based on reasonable pre-defined criteria. Those criteria were not included in the Navy application and will not be proposed here but should be developed for the rulemaking and associated issuance of a letter of authorization. Further, if an injury or death does occur, the Navy and the Service should investigate the possible causes to learn more about the effects of Navy operations and to improve mitigation measures. To that end, the Service should work with the Navy to determine protocols for the recovery, preservation, and post-mortem studies of any marine mammals killed in association with naval activities. Finally, the Navy should not resume its operations until it can ensure that they will not result in additional injuries or deaths and until the Navy has obtained authorization for additional taking. This is standard procedure for scientific research permits and is particularly pertinent when the exact cause of a problem and its magnitude are uncertain, which is still the case for sound-related effects.

Please contact me if you have questions about any of our recommendations or comments.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director

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Cc: Mr. Craig Johnson, NOAA/NMFS OPR
RADM Larry Rice, CNO N45
Hon. Donald Schregardus, DASN E