

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

27 October 2008

Naval Facilities Engineering Command, Atlantic
Attention: Code EV22LL
6506 Hampton Boulevard
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The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors, has reviewed the Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS) provided by the Navy to evaluate its proposed Undersea Warfare Training Range (USWTR) activities. The DEIS identifies and analyzes the environmental effects of the installation and operation of an underwater listening array covering approximately 500 square nautical miles of the ocean floor and cabled to shore. The DEIS also considers vessel movements, torpedo deployments (non-explosive), sonar use and related aircraft, surface vessel and submarine activities associated with various anti-submarine warfare, and mine warfare exercises to be conducted on the range. The use of explosives or live ordnance is not a part of USWTR training activities and is not considered in the DEIS.

Four alternative sites are considered, all located some 34 to 50 nautical miles east of the coastline at the edge of the continental shelf: offshore of northeastern Florida, offshore of central South Carolina, offshore of southeastern North Carolina, and offshore of northeastern Virginia. An alternative of no action (no range construction, training activities conducted at various other sites) also was listed but was not analyzed in detail.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the Navy—

- adopt and abide by the restrictions described in the National Marine Fisheries Service's Final Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with Northern Right Whales in all but emergency situations, and include in its EIS and observe similar seasonal speed restrictions as it moves to, from, over, and through the selected USWTR site;
- subject its marine assessment data and the analytical procedures used to estimate risks to marine mammals at the alternative sites to expert peer review;
- implement a plan to validate the effectiveness of monitoring and mitigation measures before beginning, or in conjunction with, operations under the final EIS and anticipated issuance by the National Marine Fisheries Service of an incidental harassment authorization; and
- (1) modify section 6.1.4 (page 6-16) on coordination and reporting to include immediate suspension of activities when a dead or injured marine mammal is detected and the cause could be related to Navy activities; and (2) consult immediately with the National Marine Fisheries Service to consider jointly the steps that should be taken to avoid similar occurrences.

RATIONALE

Revisions to the DEIS are recommended in the following areas:

Right Whale Collision Avoidance

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 December 9, 2008 (73 Fed. Reg. 60173). The rule is necessary to reduce the risk of ship strikes to North Atlantic right whales, ship strikes being one of the two major human-related causes of right whale injury and mortality and, therefore, one of the two main impediments to recovery of this highly endangered species. The Marine Mammal Commission recommends that, in all but emergency situations, the Navy adopt and abide by the restrictions described in the final rule.

The Marine Mammal Commission also recommends that the Navy include in its EIS similar seasonal speed restrictions as it moves to, from, over, and through the selected site. All USWTR alternative range sites are seaward of known migratory, feeding, and calving areas. However, despite considerable research on this species, its migratory, feeding, and calving areas are not well known. As vessel activity in the vicinity of the selected site will increase when the Navy begins its operations, the risk of a right whale/vessel collision will increase. The species simply cannot withstand additional mortality from vessel strikes.

Expert Peer Review

The Navy has thoroughly reviewed the existing data on marine mammal occurrence in the four alternative sites, and in some cases has supplemented the data by conducting additional surveys. All of the resulting data were analyzed using procedures outlined in the Navy's Operating Area Density Estimates Report. However, both the data and the procedures used to analyze them are confounded by a considerable degree of variation, interpretation, and uncertainty and would benefit from peer review. The Commission has previously recommended that the Navy subject its analytical procedures to such review, which constitutes one of the fundamental elements of credible science. Because decisions regarding the best possible site are based in part on perceived risks to marine mammals (Level A and Level B harassment), and the data and procedures used to estimate that risk have not been subjected to careful peer review, the basis for making informed decisions is unnecessarily confounded. To reduce that uncertainty, the Marine Mammal Commission recommends that the Navy subject its marine assessment data and the analytical procedures used to estimate risks to marine mammals at the alternative sites to expert peer review.

Monitoring and Mitigation

The extent to which anticipated risks are realized, detected, and reduced is determined by monitoring and mitigation measures. The Navy is establishing or has established an Integrated Comprehensive Monitoring Plan to carry out a structured program of monitoring, mitigation, and long-term assessment. 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. At present, however, the USWTR DEIS does not convey realistic estimates of performance for proposed mitigation measures, nor does it contain a concrete plan to verify and validate the levels of performance of watchstanders or other monitoring tools such as passive acoustics. The Commission remains firm in its opinion that the probability of detection from existing monitoring measures, and the subsequent likelihood of implementing source-level reductions and other mitigation measures, are far below 100 percent or similarly high levels suggested by the Navy. We also believe that the feasibility and cost of necessary verification and validation tests are well within the Navy's capability.

Further, the value of validating mitigation effectiveness fully justifies the relatively small effort and time required for that purpose. We have previously noted (AFAST DEIS comments dated 31 March 2008) that the Navy's own most recent SURTASS LFA EIS included similar analyses. In the absence of such information for the fleet activities described in the USWTR DEIS, the Commission believes it is incumbent upon the Navy to include a plan for obtaining performance data to justify its confidence in its monitoring and mitigation measures, including the use of watchstanders and their ability of detect marine mammals and other species of concern. Validation and verification of system performance is a familiar, well-established, and standard part of the research, development, testing, and evaluation processes that precede Navy systems for acquisition and fleet use. It should be incorporated into assessment of environmental impact mitigation systems as well. For these reasons, the Marine Mammal Commission recommends that the Navy implement a plan to validate the effectiveness of monitoring and mitigation measures before beginning, or in conjunction with, operations under the Final EIS and the anticipated issuance by the National Marine Fisheries Service of an incidental harassment authorization.

Serious Injury or Mortality

The Commission notes that the Navy has chosen not to request authorization for Level A harassment, which means that should Navy operations result in the serious injury or mortality of a marine mammal, the Navy will not be covered for such taking. This will place the Navy in violation of the Marine Mammal Protection Act, and it will need to halt operations until it can provide assurance that further injuries or mortalities will not occur or has obtained authorization for such taking. Furthermore, if a serious injury or mortality does occur, the Navy and the Service may be able to learn about the potential effects of Navy operations, information that may be useful for avoiding additional injuries or mortalities. For that reason, the Marine Mammal Commission recommends that if a serious injury or mortality should occur and it could be the result of Navy operations, then the Navy immediately suspend operations and consult with the National Marine Fisheries Service to investigate the circumstances and consider jointly the steps that should be taken to avoid similar occurrences. In such cases, the issue usually can be resolved quickly and the activity resumed. 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 sonar-related effects.

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

Sincerely,



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Executive Director

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