

Larger numbers of odontocetes may be affected by the proposed activities, but the population sizes of most of the species are large and the numbers potentially affected are small relative to the population sizes. 38 sperm whales, or 0.3 percent of the estimated North Atlantic sperm whale population, would receive seismic sounds ≥ 160 dB. Similarly, 78 beaked whales from the 5 beaked whale species may be affected by the proposed activities. This is 2.4 % of the estimated total of all 5 species of beaked whales (3196) that occur along the northeast coast of the U.S. Because the CETAP (1982) surveys were conducted from an airplane, few beaked whales were seen, or at least identified, and densities of beaked whales were estimated to be zero during the autumn surveys. However, LDEO believes there are probably small numbers of beaked whales in the proposed survey area throughout the year, so LDEO used the mean density for the entire year to estimate the densities of beaked whales that might be present during autumn. Most of the proposed seismic survey area is outside of the area for which this estimate was made, and only a very small part of beaked whale habitat in the North Atlantic was included in the estimate. Thus the actual population estimate is more than likely much larger than 3196, and the percentage of animals that might receive seismic sounds ≥ 160 dB during the proposed cruise is believed to be less than 1 percent of the 3196 estimated North Atlantic population of the 5 species of beaked whales.

The best estimate of the total number of common dolphins, pilot whales, bottlenose dolphins, Risso's dolphins and striped dolphins that might be exposed to ≥ 160 dB re 1 μ Pa (rms) in the proposed survey area near Bermuda are 3941, 3345, 1871, 858 and 277, respectively. Of these, about 1191, 1011, 565, 259 and 84, respectively might be exposed to ≥ 170 dB. These figures are <0.1 to <1.1 percent of the North Atlantic population. Based on the relatively low numbers of marine mammals that will be exposed at levels ≤ 160 dB and the expected impacts at these levels, NMFS has determined that this action will have a negligible impact on the affected species or stocks.

Altogether, the mitigation measures explained in this document (See Mitigation) will reduce short-term reactions to disturbance, and minimize any effects on hearing sensitivity.

Effects on Pinnipeds

Very few if any pinnipeds are expected to be encountered during the seismic survey near Bermuda. However,

a few stray hooded and grey seals could be encountered. The best estimate of the numbers of each of the more common (but unlikely) species that might be taken by Level B harassment is no more than two and is most likely zero. It is estimated that a maximum of 10 pinnipeds (five for each species) may be affected by the seismic survey. None of the pinniped species is considered endangered or depleted.

No pinnipeds regularly occur in the survey area and thus none are expected to be encountered. If pinnipeds are encountered, the seismic activities would have, at most, a short-term effect on their behavior and no long-term impacts on individual seals or their populations. Responses of pinnipeds to acoustic disturbance are variable, but usually quite limited. Effects are expected to be limited to short-term and localized behavioral changes falling within the MMPA definition of Level B harassment. Therefore, based on these effects and the relatively low numbers of pinniped species that may be exposed, NMFS has determined that this action will have a negligible impact on the affected species or stocks.

Endangered Species Act (ESA)

NMFS has concluded consultation under section 7 of the ESA on NMFS' issuance of an IHA to take small numbers of marine mammals, by harassment, incidental to conducting an oceanographic seismic survey in the Northwest Atlantic Ocean near Bermuda by LDEO. The consultation concluded with a biological opinion that this action is not likely to jeopardize the continued existence of marine species listed as threatened or endangered under the ESA. No critical habitat has been designated for these species in the area of the survey; therefore, none will be affected. A copy of the Biological Opinion is available upon request (see ADDRESSES).

National Environmental Policy Act (NEPA)

On August 7, 2003, the NSF made a determination, based on information contained within its Environmental Assessment (EA), that implementation of the subject action is not a major Federal action having significant effects on the environment within the meaning of Executive Order 12114. NSF determined therefore, that an environmental impact statement would not be prepared. On October 9, 2003 (68 FR 58308), NMFS noted that the NSF had prepared an EA for this activity and made it available upon request. In accordance with NOAA Administrative Order 216-6 (Environmental Review

Procedures for Implementing the National Environmental Policy Act, May 20, 1999), NMFS has reviewed the information contained in NSF's EA and determined that the NSF EA accurately and completely describes the proposed action alternative, reasonable additional alternatives, and the potential impacts on marine mammals, endangered species, and other marine life that could be impacted by the preferred alternative and the other alternatives. Therefore, based on this review and analysis, NMFS is adopting the NSF EA under 40 CFR 1506.3 and has issued its own Finding of No Significant Impact. As a result, NMFS has determined that it is not necessary to issue either a new EA, supplemental EA or an environmental impact statement for the issuance of an IHA to LDEO for this activity. A copy of the NSF EA for this activity is available upon request (see ADDRESSES).

Determinations

Based on the information contained in the LDEO application, the NSF EA, the October 9, 2003, proposed authorization notice (68 FR 58308) and this document, NMFS has determined that conducting a marine seismic survey by the *R/V Maurice Ewing* in the Northwest Atlantic Ocean near Bermuda by LDEO would result in the harassment of small numbers of marine mammals; would have no more than a negligible impact on the affected marine mammal species or stocks; and would not have an unmitigable adverse impact on the availability of stocks for subsistence uses. This activity will result, at worst, in a temporary modification in behavior by affected species of marine mammals. While behavioral modifications may be made by these species as a result of seismic survey activities, this behavioral change is expected to result in no more than a negligible impact on the affected species. Also, while the number of actual incidental harassment takes will depend on the distribution and abundance of marine mammals in the vicinity of the survey activity, the number of potential harassment takings is estimated to be small. In addition, no take by injury and/or death is anticipated, and the potential for temporary or permanent hearing impairment is low and will be avoided through the incorporation of the mitigation measures mentioned in this document and required under the IHA. For these reasons therefore, NMFS has determined that the requirements of section 101(a)(5)(D) of the MMPA have been met and the authorization can be issued.