

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

19 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 20910-3225

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the application submitted by Scripps Institution of Oceanography under section 101(a)(5)(D) of the Marine Mammal Protection Act. The applicant is seeking authorization to take small numbers of marine mammals by harassment incidental to conducting an ocean-bottom seismograph deployment and a magnetic, bathymetric, and seismic survey program in the Pacific Ocean approximately 25 to 110 km (15.5 to 68.4 mi) off the coast of Oregon. We also have reviewed the National Marine Fisheries Service's 26 May 2009 *Federal Register* notice (74 Fed. Reg. 24799) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

RECOMMENDATION

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the requested authorization, provided that—

- the authorization include all of the proposed monitoring and mitigation measures to minimize the likelihood of serious injury to the potentially affected marine mammal species;
- the Service clarify when the use of night vision devices will be required and provide additional justification for its implied conclusion that observers will be able to achieve a high nighttime detection rate; and
- the authorization require that operations be suspended immediately, pending review by the Service, if a dead or seriously injured marine mammal is found in the vicinity of the operations and the death or injury could have occurred incidental to the seismic survey.

RATIONALE

The Service's *Federal Register* notice states that, with the exception of minor updates to the project description and updated marine mammal population estimates, the proposed survey is virtually identical to one conducted by the applicant under an incidental harassment authorization issued in September 2007. The proposed activities are to be conducted at 16 sites off the coast of Oregon from 14 to 20 July 2009. The purpose of the program is to record micro-earthquakes in the forearc to determine whether seismicity on the plate boundary is characteristic of a locked or a freely slipping fault plane. The principal means of taking would be by disturbance from use of a single generator injector airgun (with a discharge volume of 45 in³, 0-to-peak output of 225.3 dB re 1 μ Pa-m) and from a 3.5 and 12 kHz sub-bottom profiler (maximum source output [downward] 211 dB re

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1μ Pa-m) that would be used continuously throughout the survey. The National Marine Fisheries Service has preliminarily determined that the proposed activities would result, at most, in Level B harassment of up to 13 species of cetaceans (2 humpback whales, 1 fin whale, 1 blue whale, 8 sperm whales, 1 pygmy sperm whale, 1 Baird's beaked whale, 1 *Mesoplodon* sp. whale, 1 killer whale, 9 short-beaked common dolphins, 9 Pacific white-sided dolphins, 7 northern right whale dolphins, 4 Risso's porpoises, and 65 Dall's porpoises) and up to four species of pinnipeds (26 northern fur seals, 1 harbor seal, 1 Steller sea lion, and 52 northern elephant seals). The Service also has preliminarily determined that take by injury or death is unlikely, that the potential for temporary or permanent hearing impairment is very low, and that any effects on individual marine mammals are expected to have no more than a negligible impact on the affected marine mammal species and stocks due to the proposed monitoring and mitigation provisions (i.e., vessel speed and/or course alteration, shutdown procedures, and minimizing approach to slopes and submarine canyons, if possible).

The Commission believes that the Service's preliminary determinations are reasonable, provided that the proposed mitigation and monitoring measures are adequate to ensure that marine mammals are not being taken in unanticipated ways or numbers. In this regard, our comments on this request are essentially the same as those provided regarding the applicant's previous requests to conduct similar studies. With respect to nighttime operations, the *Federal Register* notice states that night vision devices "will be available, when required." However, it is not clear under what circumstances such devices would or would not be required or how effective they will be in detecting all marine mammals within the identified exclusion zones. The Marine Mammal Commission therefore recommends that the Service clarify when the use of night vision devices will be required and provide additional justification for its implied conclusion that observers will be able to achieve a high nighttime detection rate.

Because the applicant is requesting authority to take marine mammals by harassment only, the Marine Mammal Commission recommends that the National Marine Fisheries Service require that operations be suspended immediately if a dead or seriously injured marine mammal is found in the vicinity of the operations and the death or injury could have occurred incidental to the seismic survey. Any such suspension should remain in place until the Service has reviewed the situation and determined that further deaths or serious injuries are unlikely to occur or has issued regulations authorizing such takes under section 101(a)(5)(A) of the Act.

Please contact me if you or your staff has questions about the Commission's comments and recommendation.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director