



FEB 18 2010

Memorandum For: F/PR – James H. Lecky
Director

From: F/PR1 – P. Michael Payne
Division Chief

Subject: Report on the Application for an Amendment to Scientific Research
Permit No. 13430: Recommendation for Issuance

I recommend the National Marine Fisheries Service (NMFS) issue a permit to the National Marine Mammal Laboratory, Seattle, Washington (Responsible Party: John Bengtson, Director) for research activities on marine mammals.

Summary of requested activities

Species: The marine mammals that are the subject of the research are

- Pacific harbor seals (*Phoca vitulina*), from the Oregon/Washington Coast Stock and the Washington Inland Waters Stock
- California sea lions (*Zalophus californianus*), of the U.S. Stock
- northern elephant seals (*Mirounga angustirostris*), of the California Breeding Stock

Eastern Distinct Population Segment Steller sea lions (*Eumetopias jubatus*) and Southern Resident killer whales (*Orcinus orca*) are not the subject of the research, but are included in the application as species that may be harassed incidental to some research activities.

Location: Research will occur within coastal waters and on pinniped rookeries and haul outs of Washington and Oregon.

Duration: Research activities will begin upon permit issuance and continue through permit expiration on January 31, 2015. Field work would be conducted year-round.

Methods: The permit would allow takes of marine mammals by:

- harassment from surveys (aerial, vessel, and ground) of pinnipeds on rookeries and haul outs and incidental to capture and sampling activities
- capture of individual pinnipeds in water and on land for collection of various tissue samples
- harassment from attaching scientific instruments for collection of data on habitat use and foraging
- harassment from marking (flipper tags, brands, etc.) to allow identification of individual animals for subsequent re-captures or surveys



- harassment from playback experiments involving broadcasts of recorded killer whale vocalizations from an underwater speaker deployed from a small boat anchored offshore from a sea lion haulout
- mortality incidental to research

Objectives: The objectives of the research, as stated by the applicant, are to provide information necessary for stock assessments and for management of Pacific harbor seals, California sea lions, and northern elephant seals in Washington and Oregon, including management of marine mammal predation on threatened and endangered salmon.

Chronology of processing

April 30, 2008	Application received
May 30, 2008	Application returned as incomplete, with recommendations for resubmitting
June 25, 2008	Revised application received
August 27, 2008	Draft Environmental Assessment (EA) provided to NEPA Coordinator for review
September 8, 2008	NEPA Coordinator comments received
September 8, 2008	Application published in the <i>Federal Register</i>
September 8, 2008	Application distributed to reviewers
September 11, 2008	One-year extension of Permit 782-1702 issued for activities included in pending permit (original expiration: September 30, 2008)
October 8, 2008	Close of public comment period
October 24, 2008	Marine Mammal Commission (MMC) comments received
November 13, 2008	MMC comments forwarded to applicant for response
December 17, 2008	Reminder sent to applicant re: pending response to MMC comments
December 29, 2008	Applicant partial responses received
January 2, 2009	Request for response to MMC comment regarding frequency of disturbance sent to applicant
January 5, 2009	Applicant additional responses to MMC comments received
April 14, 2009	Request to initiate Section 7 consultation sent to PR3
August 26, 2009	Amended application received
September 18, 2009	Amended application published in <i>Federal Register</i>
October 19, 2009	Close of public comment period on amended application
October 30, 2009	MMC comments on amended application received
December 16, 2009	Biological Opinion received from PR3
January 22, 2010	Final EA provided to NEPA Coordinator and GCF for review
February 1, 2010	Final EA and FONSI provided to NOAA NEPA for review
February 2, 2010	NEPA coordinator review and comment memo received
February 2, 2010	GCF comments and memo of legal sufficiency received
February 3, 2010	NOAA comments on EA and FONSI received

Summary of external comments and response

NMFS published a notice in the *Federal Register* announcing receipt of the application, making it available for public review. The application was also provided to the Marine Mammal Commission. The following external comments were received regarding the application.

The Marine Mammal Commission (MMC)

In a letter dated October 24, 2008, the MMC stated that, while they are in favor of continuing research that has been “crucial for understanding the status and trends of [these three pinniped stocks] and the risk factors to which they are exposed” they note that “the research process could and should be improved” and it is “incumbent upon researchers to assess the possible unintended affects of their research where potentially significant effects might reasonably be expected ...”

The Marine Mammal Commission recommended approval of a permit upon resolution of the following outstanding issues related to the request:

- Verification of review and approval of the protocols by an Institutional Animal Care and Use Committee (IACUC) as required under the Animal Welfare Act (AWA)
- Identification of the mechanism by which the taking of Steller sea lions incidental to the proposed research would be authorized
- Receipt of a science- or data-based justification from the applicant for why efforts to assess the impacts of such high levels of disturbance are not necessary or consideration by NMFS of how the disturbance might reasonably be evaluated over time to address these uncertainties
- Receipt of science- or data-based evidence from the applicant that branding without anesthesia provides significant advantages that outweigh the benefits of anesthesia or development by NMFS of a method of collecting the essential information as the research progresses
- Receipt of science- or data-based evidence from the applicant that no elephant seal mother-pup bonds are disrupted during research or development by NMFS, in conjunction with the applicant, of a method to collect appropriate data to address this uncertainty

The MMC also recommended the permit be conditioned to require that:

- Activities be suspended, pending review and authorization to proceed, if five California sea lions, five harbor seals, or two northern elephant seals are accidentally injured or killed in a given year
- Researchers monitor effects of activities that are focused on or result in disturbance of mother-pup pairs to determine whether there are lasting or significant effects on the mother or the pup
- The research is coordinated and data is shared with that of other permit holders who might be conducting research on the same species in the same areas to avoid unnecessary duplication of research and disturbance of animals

Response: With regard to the first issue, compliance with the AWA is the responsibility of the researchers, and is not an approval necessary for NMFS issuance of the permit. In an email dated December 29, 2008, the applicant noted that they intend to adhere to NMFS policy for compliance with AWA when such policy becomes effective.

On the second issue, regarding takes of Steller sea lions, the applicant amended their request subsequent to receipt of this comment from the MMC, and asked for inclusion of permission to harass Steller sea lions incidental to the proposed research.

Regarding the issues related to uncertainties about effects of the research, the applicant provided responses to the MMC concerns in emails dated December 29, 2008, and January 5, 2009.

Regarding the recommended permit conditions, the MMC routinely recommends such permit conditions related to limits on mortality, monitoring of effects of research, and coordination among permit holders. NMFS finds these types of mitigation and monitoring measures reasonable and practicable and has made them standard conditions in previous research permits. The subject permit also includes conditions responsive to these recommendations.

Subsequent to the comment period on the original application, the applicant submitted an amended application with a request to include permission for takes of Steller sea lions and Southern Resident killer whales. That application was made available for public review and provided to the Marine Mammal Commission.

In a letter dated October 30, 2009, the MMC reiterated their concerns and recommendations regarding the original application. They further recommended that NMFS deny the permit unless the applicant demonstrates that the proposed research has been approved by an IACUC.

Applicable federal permits and consultations

Marine Mammal Protection Act (MMPA) permit: Permits for scientific research on marine mammals are issued under section 104 of the MMPA and NMFS's implementing regulations at 50 CFR Part 216. These permits exempt *bona fide* scientific research activities on marine mammals from the MMPA's take prohibition. An MMPA section 104 permit is required for the research described because it will result in takes of marine mammals by harassment and other forms of take otherwise prohibited under the MMPA.

This section of the MMPA specifies that NMFS may issue a permit if

- the applicant submits information with their application indicating that the taking is required to further a *bona fide* scientific purpose
- the applicant demonstrates that the taking will be consistent with the purposes of the MMPA and applicable regulations
- NMFS finds that the manner of taking is "humane" as defined in the MMPA

- the applicant demonstrates that a non-lethal method of conducting research is not feasible, when requesting lethal taking of a marine mammal

NMFS has promulgated regulations to implement the permit provisions of the MMPA (50 CFR 216) and has produced OMB-approved application instructions that prescribe the procedures (including the form and manner) necessary to apply for permits. All applicants must comply with these regulations and application instructions in addition to the provisions of the MMPA.

Endangered Species Act (ESA) permit and consultation: Permits for scientific purposes are issued pursuant to Section 10(a)(1)(A) of the ESA, and must also be consistent with Section 10(d) of the ESA. Section 10(d) requires NMFS to find that exceptions (permits) granted under subsection 10(a)(1)(A) were

- applied for in good faith
- if granted and exercised, will not operate to the disadvantage of endangered species
- will be consistent with the purposes and policy of section 2 of the ESA

The research will result in takes of threatened Steller sea lions and endangered Southern Resident killer whales; therefore, an ESA permit is required.

In addition to the requirements of Section 10 of the ESA, NMFS issuance of permits is a federal action subject to the interagency cooperation (i.e., consultation) requirements of Section 7 of the ESA. Section 7 requires federal agencies to use their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of endangered and threatened species. NMFS is required to insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any threatened or endangered species or result in destruction or adverse modification of habitat for such species.

National Environmental Policy Act (NEPA) documentation

NOAA Administrative Order Series 216-6 (May 20, 1999) specifies that issuance of scientific research permits under the MMPA and ESA is among a category of actions that are generally exempted (categorically excluded) from further environmental review, except under extraordinary circumstances. Extraordinary circumstances may include public controversy based on potential environmental consequences, prior or threatened litigation, and involvement of species listed under the ESA.

NMFS prepared an Environmental Assessment (EA) to evaluate the cumulative impacts of permit issuance, and because some of the research activities in the proposed permit have been the subject of litigation and controversy. A Finding of No Significant Impact was made based on the analysis and information in the EA; NMFS determined that issuance of a permit will not significantly impact the quality of the human environment and that preparation of an Environmental Impact Statement is not necessary.

Summary of processing

NMFS recommends applicants allow at least six months to process an MMPA permit, and at least 12 months for processing if threatened or endangered species are involved. The applicant submitted the original application less than five months before their current permit was due to expire. The applicant has ongoing research projects for these species of pinnipeds, and their previous permit, No. 782-1702, was due to expire on September 30, 2008. Because the applicant allowed insufficient time to process their new application to avoid a gap in permit coverage for their pinniped research, NMFS issued a one-year extension of 782-1702 to allow continuation of research while the new application was being processed. However, the applicant's failure to account for takes of ESA species in their original application resulted in a delay in processing and the extended permit expired before the replacement permit could be issued.

The original application lacked sufficient information to comply with NMFS regulations regarding permit applications and for NMFS to make the necessary findings under MMPA or ESA, or to evaluate environmental impacts under NEPA. The application was returned as incomplete, with a list of specific information needed to proceed with processing. Among the deficiencies identified was the omission of a request to take threatened Steller sea lions and cetacean species, including endangered Southern Resident killer whales, present in the action area and likely to be harassed by the aerial surveys and audio broadcasts.

The applicant supplied a revised application, but elected not to request takes of the additional marine mammal species recommended by NMFS. The applicant asserted that takes of Steller sea lions during aerial surveys would be covered by Permit No. 782-1889, held by NMML, for research on Steller sea lions. The applicant indicated that surveys for Steller sea lions and California sea lions are flown by the same person at the same time to avoid unnecessary disturbance of animals. As the expiration date for Permit No. 782-1889 was August 1, 2009 it would not have overlapped with the effective dates of the proposed new permit, nor does it cover harassment of Steller sea lions incidental to playback experiments.

Because the applicant did not request takes of all marine mammal species that could be affected by the research, the Permits Division initiated ESA Section 7 consultation with a draft permit that included conditions requiring the researchers to remain a specified distance away from marine mammal species not listed in the application to avoid the possibility of take. During consultation it was determined that takes of Steller sea lions and Southern Resident killer whales incidental to the research was likely. The NMFS Endangered Species Division indicated they could not issue an Incidental Take Statement (ITS) exempting take for these species until NMFS Permits Division issued an MMPA take exemption for them.

The applicant therefore submitted an amendment to their permit application, with a request to include takes of Steller sea lions and Southern Resident killer whales. The amended application was made available for public review and comment and provided to the Endangered Species Division for consultation. Because the proposed permit, to be issued jointly under the MMPA

and ESA, would cover the incidental harassment of these species, there was no longer a need for an ITS.

For the same reasons that Southern Resident killer whales are likely to be taken by the research, non-ESA listed killer whales and various other toothed whales in the action area may be taken by the research. The permit does not authorize take of these species or contain conditions requiring avoidance of them. Rather, the applicant will be advised in the cover letter to the permit that they should apply for additional permit coverage prior to engaging in research that could result in takes of species not listed in the permit.

Findings and Recommendation

As required by the MMPA and NMFS regulations, the information provided by the applicant demonstrates that:

- the taking is required to further a *bona fide* scientific purpose
- the taking will be consistent with the purposes of the MMPA and applicable regulations
- the proposed research will not likely have significant adverse effects on any other component of the marine ecosystem of which the affected species or stock is a part
- for activities that may result in mortality, a nonlethal method of conducting research is not feasible

The Permits Division's review of the application and other relevant information, including MMC comments, indicates that the research methods ("manner of taking") are consistent with the MMPA's definition of "humane." The results of the research are likely to directly benefit the target species or stocks.

As required by the MMPA, the permit specifies: (1) the effective date of the permit; (2) the number and kinds (species and stock) of marine mammals that may be taken; (3) the location and manner in which they may be taken; and (4) other terms and conditions deemed appropriate. Other terms and conditions deemed appropriate relate to minimizing potential adverse impacts of specific activities (e.g. capture, sampling, etc.), coordination among permit holders to reduce unnecessary duplication and harassment, monitoring of impacts of research, and reporting to ensure permit compliance. These terms and conditions are consistent with those in other permits NMFS has issued for research on pinnipeds.

As required by the ESA, NMFS engaged in formal consultation under Section 7. The consultation concluded with a Biological Opinion in which it was determined that the research is not likely to jeopardize the continued existence of listed species or adversely modify critical habitat.

For these reasons, I recommend you find that the permit is consistent with the requirements of section 104 of the MMPA and Section 10(d) of the ESA, and sign the permit, with the terms and conditions as drafted by the Permits Division.