



MARINE MAMMAL COMMISSION

3 September 2013

Mr. Timothy J. Van Norman
Chief, Branch of Permits
Division of Management Authority
Fish and Wildlife Service
4401 North Fairfax Drive
Arlington, VA 22203

Re: Application No. 672624
(U.S. Geological Survey,
Santa Cruz Field Station)

Dear Mr. Van Norman:

The Marine Mammal Commission (the MMC), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act (the MMPA). The U.S. Geological Survey (USGS) is seeking to renew and amend permit 672624 to conduct research on sea otters in California during a five-year period.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the Fish and Wildlife Service—

- encourage USGS to reassess the estimated number of takes by Level B harassment and, as appropriate, increase that number before issuance of the permit; and
- provide explicit criteria to USGS, and other permit holders, stipulating when a sea otter is to be considered taken during vessel-based surveys and specify in the permit that vessel-based survey activities must be suspended for the remainder of the year once the authorized number of Level B harassment takes for those surveys has been reached.

RATIONALE

USGS proposes to conduct research year-round on the two populations of southern sea otters in California. The objectives are to continue long-term research investigating (1) population trends, (2) demography, (3) movement patterns and habitat use, (4) foraging ecology, and (5) disease and health of sea otters.

Researchers would harass, capture, handle, restrain, administer drugs to, measure, sample, tag, and instrument up to 500 sea otters of either sex each year. They would capture sea otters during daylight hours using Wilson traps, tangle nets, and dip nets. Of the 500 sea otters captured, researchers may release up to 100 without sampling them (i.e., based on age, pregnancy state, and study objectives). The remaining 400 sea otters would be removed from the nets, placed in

ventilated kennels, and transported to a support vessel for sedation and sampling. If a female with a dependent pup is captured, researchers would place the pup either in the same kennel as or in an adjacent kennel to its mother and it would be released with its mother. Researchers would not conduct the proposed activities on dependent pups weighing less than 5 kg. They would sedate each individual and collect blood, skin (including lesions), feces, urine, milk, fur, vibrissae, swabs, saliva, adipose tissue, a liver biopsy, and a pre-molar tooth from each sea otter. To collect milk samples, researchers would administer oxytocin only to females with dependent pups. In addition, they would attach flipper tags to and insert PIT tags into each sea otter. Flipper tags could include plastic temple tags or "smart tags" that would collect geo-location data and/or transmit those data using a solar-powered battery. Researchers would test the smart tags on captive sea otters before deploying on wild sea otters, but they anticipate that those tags eventually would replace the implantable VHF transmitters as a less-invasive, primary means of sea otter tracking and monitoring. For sea otters greater than six months of age (i.e., greater than 9.1 kg), veterinarians could surgically implant 200 of the 300 sea otters each year with a VHF transmitter and time-depth recorder. They would (1) refrain from implanting tags in third trimester females (i.e., females with near-term fetuses that exhibit well-ossified skulls the size of a lemon) and (2) administer antibiotics during the surgical procedure to minimize infection after the procedure. All sea otters could be handled or held for up to two hours. Although USGS plans to recapture individuals generally once to retrieve the instruments, it has requested authorization to capture and handle individual sea otters up to four times during the course of the five-year permit. However, they would recapture individuals only after a 6-month timeframe has elapsed since being captured. Researchers could harass up to 208 non-target sea otters per year during those proposed activities.

USGS also proposes to conduct four vessel-based surveys per week to track the instrumented otters and to assess the populations in Elkhorn Slough and the Santa Barbara Channel (two surveys per week at each location). Researchers would approach a sea otter or a group of otters no closer than 100 m using small whalers or inflatable boats (less than 5.2 m in length) to read flipper tag numbers and observe their behavior. They would remain with each otter or group of otters for approximately 10 minutes. USGS seeks authorization to harass up to 25 sea otters per year during those surveys.

In estimating that up to 25 otters per year may be harassed during vessel-based surveys, USGS assumed a disturbance rate of 1 percent for those otters approached at 100 m but did not provide any explanation for that assumption. In addition, it is unclear what criteria the researchers will use to determine that an otter has been taken by harassment. Based on the large number of surveys to be conducted (208 per year) and the large number of otters that will be approached, the MMC is concerned that the number of potential takes has been underestimated by the applicant. The MMC notes, for example, that the Fish and Wildlife Service (FWS) Marine Mammals Management's permit authorizes up to 100 takes by Level B harassment per year for similar vessel-based surveys, even though surveys under that permit are conducted only weekly. The MMC wants to ensure that USGS and the FWS's permit office has appropriately assessed the potential for harassing otters during the proposed vessel-based surveys such that the USGS does not risk exceeding the annual authorization or having to suspend the surveys part way through the year. Accordingly, the MMC recommends that the FWS encourage USGS to reassess the estimated number of takes by Level B harassment and, as appropriate, increase that number before issuance of the permit. The MMC further recommends that the FWS provide explicit criteria to USGS, and other permit holders, stipulating when a sea otter is to be considered taken during vessel-based

Mr. Timothy J. Van Norman
3 September 2013
Page 3

surveys and specify in the permit that vessel-based survey activities must be suspended for the remainder of the year once the authorized number of Level B harassment takes for those surveys has been reached.

Finally, researchers would collect and conduct necropsies on an unlimited number of dead stranded sea otters each year. USGS is requesting to kill, unintentionally or intentionally via euthanasia, up to two sea otters during the five-year period during any of the proposed activities. They also would carry a crash kit to administer any drugs deemed necessary to aid in resuscitation by the veterinarian. Researchers would perform necropsies on those otters that die during capture activities as well. Samples from both live and dead otters would be analyzed at various laboratories or institutions in the United States.

USGS has indicated that its Institutional Animal Care and Use Committee (IACUC) has reviewed and approved the proposed procedures in the past and that its IACUC will review the procedures again when USGS submits its annual research plans. USGS currently collaborates with researchers from the University of California Santa Cruz, University of California Davis, California Department of Fish and Wildlife, and Monterey Bay Aquarium.

The MMC believes that assessing the two populations of sea otters in California is necessary to provide essential baseline data. In addition, the MMC believes that the activities for which it has recommended approval are consistent with the purposes and policies of the MMPA.

The MMC appreciates the opportunity to comment on this permit application. Kindly contact me if you have any questions concerning the MMC's recommendation.

Sincerely,



Rebecca J. Lent, Ph.D.
Executive Director