30 April 2014

Dr. Tammy Adams, Acting Chief Permits and Conservation Division Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway Silver Spring, MD 20910-3225

Re: Permit Application No. 18528

(Alaska SeaLife Center)

Dear Dr. Adams:

The Marine Mammal Commission (the Commission), 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). Alaska SeaLife Center (ASLC) is seeking to renew permit 14324 to conduct research activities on the western distinct population segment of Steller sea lions in Alaska during a five-year period.

RECOMMENDATION

<u>The Marine Mammal Commission recommends</u> that the National Marine Fisheries Service issue the permit, as requested.

RATIONALE

ASLC proposes to conduct research year-round on Steller sea lions in Alaska, primarily on and near Chiswell Island. The objectives are to continue long-term research investigating (1) vital rates and maternal care, (2) behavior, (3) foraging ecology and physiology, and (4) disease and health of Steller sea lions.

Remote monitoring

ASLC would continue its long-term monitoring of Steller sea lion rookeries and haul-out sites on Chiswell Island, Seal Rocks, Natoa Island, and Cape Resurrection. Up to six live-feed video cameras could be installed on Chiswell Island, with fewer cameras at the other sites. The cameras would include 3D digital imaging and infrared thermal imaging capabilities. Researchers repair and maintain the cameras up to eight times per year but generally conduct those visits when sea lions are not expected to be present or presence is low. Steller sea lions of any age class and either sex would be monitored using ASLC's remote-monitoring capabilities. However, sea lions only would be harassed when the cameras were serviced or repaired (see the Take Table).

Vessel- and ground-based surveys

To conduct resightings of branded/tagged animals or observe injured/entangled animals, researchers would conduct vessel- and ground-based surveys generally from January to May¹, but those surveys could occur year-round. They could conduct up to six vessel- and four ground-based surveys of each haul-out site per year. Researchers would approach the haul-out site generally beyond 100 m but could approach to within 20 m. They would approach slowly and from downwind and would use zoom lenses on their cameras to minimize the need for close approaches. Researchers also would collect scat samples, aborted fetuses, placentas, and carcasses, if feasible. However, they would not collect scat samples during the pupping season at any rookery. If a placenta, fetus, or carcass needs to be collected during the pupping season, researchers would limit disturbance to the localized area of collection and would limit the visit to less than 1 hour. Steller sea lions of any age class and either sex could be harassed incidental to the vessel- and ground-based surveys (see the Take Table).

Capture activities

ASLC would harass, capture, handle, restrain, administer drugs to², measure, weigh, photograph, sample, mark/tag, and conduct other procedures (i.e., ultrasound) on up to 200 pups of either sex each year. Researchers would capture pups (> 5 days old and ≥ 20 kg) by hand and using hoop nets. Pups would be captured when they are approximately 2 weeks to 2 months of age. Groups of pups would be rounded up and at least one researcher would ensure that the pups do not become overheated or pile up and either crush one another or suffocate. Handling time would be kept to a minimum. Researchers would anesthetize pups for up to 20 minutes to mark them with a distinct brand. They would brand only pups greater than 20 kg and without an attached umbilicus. If pups are less than 5 days old and 20 kg³, they would be marked only with flipper tags, with non-toxic paint or hair dye, or by shaving some hair. Researchers also would collect blood, skin, swabs, milk (via lavage), vibrissae, and hair. They would use ultrasound to determine blubber depth and image internal organs. Pups would be observed closely after anesthesia to ensure full recovery prior to release and would be released near a large aggregation of pups away from the water.

During capture activities, all animals would be monitored carefully for signs of stress. If a captured animal shows signs of acute or protracted alarm reaction that could lead to serious injury or death, researchers would cease immediately to treat the animal. Veterinarians and veterinary technicians would participate in the capture activities and would administer aid to any compromised individual⁴. Researchers also would cease activities immediately if there is evidence that the activity may be life-threatening.

Remote biopsy sampling

Researchers would biopsy sample up to 100 adult and 50 juvenile Steller sea lions of either sex each year. They would approach the animals on foot or from a vessel downwind and to within

¹ Primarily for scat collection.

² An experienced marine mammal veterinarian or veterinary technician would be present to anesthetize the animals.

³ Those pups also would be measured and weighed.

⁴ Researchers have crash kits available to administer aid.

Dr. Tammy Adams 30 April 2014 Page 3

20 m to obtain the samples. Adults would be sampled only outside the pupping season (16 July to 31 May). Individuals could be sampled up to three times in any given year to study interseasonal differences in blubber composition and thickness. Researchers would biopsy sample sea lions only if (1) the wind speed is less than 24 km/hour, (2) sea conditions are less than 3 m (if darting from a vessel), and (3) no other sea lions or obstructions exist between the target sea lion and the person firing the biopsy dart. Any sample could be exported for analysis and re-imported.

Researchers could harass non-target Steller sea lions during the capture activities (see the Take Tables). They also are requesting up to four Steller sea lion mortalities (including euthanasia and unintentional deaths) per year. Necropsies would be conducted, if feasible, on any sea lions that die. Further, the Commission understands that the National Marine Fisheries Service (NMFS) may condition the permit to specify that the death of any unborn pup (i.e., a fetus of any age) would be counted against the authorized number of mortalities⁵. The Commission notes that NMFS does not have a consistent policy with respect to when the death of a fetus would be considered a mortality under a permit or for determining when to include such a condition in its pinniped research permits. As such, the Commission is concerned that applicants may not factor the possible deaths of fetuses of any age in their authorization requests and may be forced to suspend their activities if pregnant females are accidentally killed in the course of conducting the proposed research.

The Commission has commented on this matter numerous times in the past and has recommended that only third trimester fetuses should be counted towards any mortality limit. The Commission also has advised NMFS of the need to adopt a consistent approach that provides applicants with clear guidance regarding how and when to account for fetuses that may die as a result of a pregnant pinniped dying during research activities. Until such guidance is provided, NMFS should refrain from conditioning permits to count fetuses against any mortality limit unless it is clear that the applicant anticipated such a possibility. The Commission believes that it would be useful to meet with NMFS to discuss this matter and again requests that a meeting be scheduled. Depending on the issues to be discussed, it might be useful to include veterinarians and pinniped researchers as well.

ASLC has indicated that its Institutional Animal Care and Use Committee has reviewed and approved the proposed procedures. ASLC would collaborate with researchers at National Marine Mammal Laboratory, Alaska Department of Fish and Game, The North Pacific Universities Marine Mammal Research Consortium, and the Alaska Sea Otter and Steller Sea Lion Commission. Therefore, the Commission recommends that the National Marine Fisheries Service issue the permit, as requested.

The Commission believes that the activities for which it has recommended approval are consistent with the purposes and policies of the MMPA.

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

⁵ ASLC did not stipulate what age of unborn pup would count against the mortality limit for permit 18438. However, for ASLC's other recent permit application, 18534, it stipulated that only third trimester fetuses would count against number of authorized mortalities.

Dr. Tammy Adams 30 April 2014 Page 4

Sincerely,

Reberea J. Lew Rebecca J. Lent, Ph.D. Executive Director