



MARINE MAMMAL COMMISSION

29 September 2021

Dr. Mary Cogliano, Chief
Branch of Permits, MS: IA
Division of Management Authority
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, Virginia 22041-3803

Re: Permit Application No. 186914
(Monterey Bay Aquarium)

Dear Dr. Cogliano:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit amendment application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act (the MMPA). The Monterey Bay Aquarium (MBAQ) is seeking to renew its permit to conduct research on southern sea otters that have been rescued from the wild, are undergoing rehabilitation, and could be returned to the wild¹. MBAQ's proposed research addresses basic biological (e.g., energetics, physiology, reproduction) and ecological (e.g., population dynamics, demographics, foraging strategies) questions. MBAQ's research protocols for its Institutional Animal Care and Use Committee (IACUC) have been developed but it is not clear whether they have yet been submitted for review.

Completeness and accuracy of MBAQ's application

In December 2020, FWS asked the Commission to informally review MBAQ's application and provide any comments or questions. During its review of the application, the Commission noted that the majority of the information required in the U.S. Fish and Wildlife Service's (FWS) 2017 application instructions was lacking, unclear or insufficient. In general, the application was missing information on the requested research activities and the associated take numbers of southern sea otters, as well as the purposes and methods of those activities. The Commission provided over 75 comments and questions to FWS with the understanding that the agency would send them to MBAQ, ask MBAQ to address the Commission's concerns, and incorporate all relevant responses into a revised version of the application. Given the extent of the Commission's comments, the Commission staff also reached out informally to the applicant to explain their context and encourage responses that would address the concerns in a revised application.

On 10 September 2021, FWS published MBAQ's application in the *Federal Register* (86 Fed. Reg. 50734) for public comment. The package of application materials is now over 300 pages in

¹ MBAQ also is seeking to renew Permit 032027 to take southern sea otters for rescue, rehabilitation, and release to the wild. The application is currently under review.

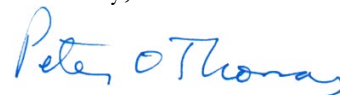
length and apparently in no particular order. It includes MBAQ's original application, numerous email exchanges, expired and current IACUC protocols, various sea otter scientific publications, copies of other authorizations, and reports from MBAQ's previous permit. On review, only a few of the Commission's comments and questions were addressed, some of them inadequately. As such, it has become even more difficult to ascertain exactly which activities are considered part of MBAQ's "final" application, and FWS has not ensured that the application was in a format that could facilitate review by the Commission or the public.

It is FWS's responsibility to ensure that applicants provide consistent information, abide by the application instructions, and provide the information necessary to establish that an application is complete prior to publishing a notice of availability in the *Federal Register*. By publishing applications with missing, insufficient, or inconsistent information, FWS perpetuates a review process that lacks transparency and makes it difficult for the Commission and the public to provide meaningful reviews. As stated repeatedly to FWS in recent years, the Commission again recommends that, prior to publication of any application in the *Federal Register*, FWS staff review each application in light of the applicable instructions to ensure that all required information is included, is internally consistent, is consistent with FWS's policies, and is in a format that facilitates review by the Commission and the public.

Most of the information required in FWS's 2017 application instructions is still lacking in MBAQ's application, and it remains unclear what research activities involving southern sea otters would be authorized under the permit². The majority of the Commission's initial comments and questions remain unaddressed. The Addendum to this letter provides a list of *some* of the outstanding issues with this application. Based on these remaining deficiencies, the Commission recommends that FWS not issue a permit to MBAQ until (1) all outstanding questions from FWS's 2017 application instructions are addressed and the relevant information is incorporated into the final application, (2) responses provided in supplementary documentation are incorporated into the final application, (3) inconsistencies between supplementary documentation and the final application are rectified, and (4) FWS ultimately determines whether the *bona fide* and humaneness criteria under section 104 of the MMPA have been met.

Kindly contact me if you have any questions concerning the Commission's recommendations.

Sincerely,



Peter O. Thomas, Ph.D.
Executive Director

cc: Dr. Carolyn McKinnie, Animal and Plant Health Inspection Service

² In review, the current IACUC protocols appear to offer more insight into MBAQ's proposed research than the permit application itself.

Addendum

Some of the Commission's concerns with the above-referenced permit application include its failing to—

- describe the research that could be carried out under the permit and justify how the activities meet the *bona fide* requirement under the MMPA, including (1) the objectives, hypotheses and associated methodology of the research, (2) background information discussing relevant published literature on the subject of the proposal, (3) an explanation of how the study is different from, builds upon, or duplicates past research, (4) how take numbers were determined, and (5) the disposition of animals or remaining specimen material once the project is complete³;
- specify the short- and long-term anticipated effects of each of the requested activities alone or cumulatively on the behavior and physiology of the target animals and how any potentially negative effects would be mitigated⁴;
- for recapture of sea otters to “facilitate long-term health assessments and replacement of telemetry equipment or other instrumentation” as stated in response to Item 6a of the application instructions, specify (1) the manner in which animals would be captured, the type of gear used, and deployment method (e.g., from shore or boat approach and net deployment), (2) the methods of restraint and holding, including dimensions/type of holding container, if used, (3) the holding time required prior to transport or release of the animal, (4) the number and roles of personnel participating in the captures, (5) the duration of restraint/holding from capture to release, and (6) the number of non-target sea otters that could be incidentally harassed during capture activities, and precautions that would be taken to minimize incidental harassment of non-target animals⁵;
- if females with pups are to be recaptured, describe (1) how pups would be held, (2) which procedures could be conducted on them, (3) the duration of time the pair would be separated, and (4) the procedures used to reunite the pair, and if they do not reunite, explain the disposition of the pup⁶;
- provide a description of the use of drugs during recapture, including the (1) names of the drugs/chemicals that could be used, their dosage rates, methods of administration, and purpose, (2) duration of drug and required holding time, (3) names and qualifications of the personnel who would administer the drugs, (4) provisions to minimize adverse reaction(s), including the use of appropriate drug reversals, (5) procedures to be used to minimize the chance that drugged animals could escape or enter the water prior to complete immobilization, (6) measures to be taken to ensure

³ Items 17 and 18 in FWS's 2017 application instructions.

⁴ Items 6b and 6d in the application instructions.

⁵ Items 10a-10e, 20d, and 24 in the application instructions. It is not sufficient to state that sea otter capture protocols would either “follow stranding capture methods or occur in conjunction with USGS permitted research activities (Permit # MA 672624) following their capture methods”.

⁶ Items 10fi-fiii in the application instructions.

- that animals are fully recovered prior to release, and (7) the emergency procedures that would be employed (e.g., drugs, bagging, CPR, etc.) in the event that an animal's condition starts deteriorating during capture activities⁷;
- for instrumenting, marking and tagging (MTI) of sea otters, specify (1) the type of MTI(s), including dimensions and mass, (2) the maximum number and total mass of MTIs to be attached to/implanted in an animal at a given time, (3) the methods and location of attachment, (4) if surgeries for implantable tags are to be conducted, the names and qualifications of those who would be conducting them, where these would occur (e.g., in the field), and if antibiotic prophylactics would be administered, (5) the maximum number of times an animal would be fitted with MTIs in a given year, (6) whether recapture would be necessary, and if so, how many times animals would be captured annually, (7) whether the instrument/tag would have a release mechanism or would fall off, (8) whether the proposed MTIs have been used previously on southern sea otters, (9) the potentially adverse effects and the means of monitoring new MTIs for adverse effects, and (10) the actions that would be taken in the event that the MTI has a significant adverse impact on the animal⁸;
 - for samples collected for research purposes, and not diagnostic or clinical purposes⁹, indicate (1) whether sampling would be remote or under restraint, (2) whether local anesthetics would be administered, (3) the target sampling location on body, (4) the maximum number of samples per animal per day and per year, (5) sampling intervals, (6) collection method and equipment/materials used (e.g., dart fired from rifle, dart depth, sterilization/disinfection), (7) if restrained, description of treatment of site of sample collection (e.g., cleansing, wound left open or closed), (8) the number of attempts per animal per day, including total number of attempts needed for all work if multiple procedures requested on same animal on the same day, (9) names and qualifications of the personnel who would conduct the sampling, and (10) sample preservation and analysis¹⁰;
 - for the metabolic, energetic, sensory, and cognition studies indicated in response to Item 6a, describe (1) the methods and equipment to be used, (2) the duration and times of testing and data analyses, (3) and the methods used to decondition the animals that would be released to the wild after testing¹¹;
 - indicate in a table (1) the maximum number of southern sea otters expected to be taken by each procedure annually, broken down by sex and age class, (2) the number of takes per animal per year, (3) the estimated number of animals that might be incidentally harassed, and (4) the time-periods and specific locations of the takes¹²;

⁷ Items 10g-10h and 20a in the application instructions.

⁸ Item 20e in the application instructions.

⁹ Samples requested under this permit had been previously authorized under MBAQ's permit as enhancement activities, not research.

¹⁰ Item 20f in the application instructions.

¹¹ Item 20g in the application instructions.

¹² Item 21 in the application instructions.

- clarify whether research would be conducted on a female/pup pair if one was rescued¹³;
- specify the age classes of animals on which research could be conducted¹⁴;
- indicate how the research methods involve the least possible degree of pain and suffering and why there are no feasible alternative methods to obtain the desired data or results¹⁵;
- clarify whether life-history transmitter tags would be implanted in sea otters and if so, (1) include at least one mortality for the permit duration, consistent with MBAQ's previous permit, (2) describe the steps that would be taken to reduce the likelihood of deaths or injuries, and (3) if euthanasia could occur, provide the method of euthanasia (e.g., gunshot, drug, etc.) and who would conduct the euthanasia procedure¹⁶; and
- list the personnel that would be authorized either as principal investigator (PI) or co-investigator (CI) that would be directly involved in the research activities, describe the specific activities that each would perform under the permit, e.g. blood sampling, and indicate in a curriculum vitae or biosketch his or her ability to perform the activity under the permit¹⁷.

¹³ Item 22 in the application instructions.

¹⁴ Item 23 in the application instructions.

¹⁵ Item 25 in the application instructions.

¹⁶ Item 26 in the application instructions.

¹⁷ Item 30 in the application instructions.