



# MARINE MAMMAL COMMISSION

26 July 2021

Ms. Jolie Harrison, Chief  
Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, Maryland 20910

Re: Permit Application No. 24054  
(Terrie Williams, Ph.D.,  
University of California Santa Cruz)

Dear Ms. Harrison:

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). Dr. Williams is seeking authorization to conduct research activities on marine mammals during a five-year period—permit 19590 authorized similar activities.

Dr. Williams is requesting authorization to conduct research on various species of cetaceans and pinnipeds that are held in captivity either permanently or temporarily during rehabilitation. Research would be conducted primarily on animals held at Long Marine Laboratory (LML) in Santa Cruz, California<sup>1</sup> but also could be conducted on animals held at other permitted research or public display facilities. The purpose of the proposed research is to investigate and compare the energetic and cardiovascular responses and diving physiology of marine mammals. Researchers would harass, measure/weigh, sample<sup>2</sup>, attach instruments to, and conduct various procedures on<sup>3</sup> cetaceans and pinnipeds of either sex and any age class. Dr. Williams requested up to one cetacean and one pinniped mortality per year, which could be either unintentional or intentional<sup>4</sup>, for the permanently captive animals and up to 10 cetaceans or pinnipeds per year for the animals undergoing rehabilitation due to their compromised health status. She also requested authorization to import, receive, and possess samples from cetaceans and pinnipeds.

Dr. Williams would use various measures to minimize impacts on marine mammals and also would be required to abide by the National Marine Fisheries Service's (NMFS) standard permit conditions. In addition, she would abide by the requirements and regulations set forth by USDA and the International Air Transport Association when animals are transported to and from LML. Her Institutional Animal Care and Use Committee has reviewed and approved the research protocols.

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<sup>1</sup> Which holds appropriate license issued by the U.S. Department of Agriculture (USDA).

<sup>2</sup> Including blood samples.

<sup>3</sup> Including ultrasound and using a metabolic dome.

<sup>4</sup> Via euthanasia for humaneness purposes.

## General issues

On 8 July 2021, NMFS published Dr. Williams's application in the *Federal Register* (86 Fed. Reg. 36107) for public comment. The application materials available online for review by the Commission and the public included two different applications<sup>5</sup> with take tables in different formats. After inquiring about which application to review, the Commission gleaned from NMFS that the final permit would be informed by the proposed research methods from the "complete application" and the take tables from the APPS application<sup>6</sup>. In addition to the applications including different information, the information provided in the take tables was inconsistent between the two applications. For example, the numbers of takes of adult bottlenose dolphins held by the U.S. Navy and the age classes of Hawaiian monk seals differed between the take tables and certain take tables were omitted from the complete application. Additionally, the complete application included three sections of the same procedures described in varying ways and levels of detail. As such, it remains very difficult to ascertain exactly which activities are considered part of Dr. Williams's "final" application, and it does not appear that NMFS made any attempt to ensure that the application is in a format that would facilitate review by the Commission or the public.

Further, some of the information required in NMFS's 2016 application instructions and its implementing regulations was omitted from or was not clearly articulated in the complete application. For example, the complete application did not specify the maximum amount of blood that could be collected from a pinniped or cetacean on a given day or the youngest age of an animal on which research could be conducted. Unlike Dr. Williams's previous application for permit 19590, it also did not denote which procedures would be conducted or supervised by Dr. Williams as principal investigator (PI) or her co-investigators (CIs). Although Dr. Williams and the CIs presumably have the necessary experience to conduct or supervise the various research procedures, some of the curriculum vitae (CVs) lacked sufficient detail regarding the abilities of the researchers to conduct the various procedures.

Several issues pertain specifically to opportunistic research activities that could be conducted on pinnipeds and cetaceans undergoing rehabilitation. First, the take tables indicated that all activities could be conducted on such animals, while the application stated that those animals would "only be used in studies requiring voluntary preferred activities to maintain wild behaviors for future release". Given that temporarily-held animals would not undergo training to perform such activities voluntarily, it is not clear which activities would be conducted on these animals. If Dr. Williams intends to conduct all activities on temporarily-held animals, it is unclear whether those animals would be sedated prior to the attachment of external instruments (e.g., the custom-designed vests with integrated heart rate sensors for cetaceans), as the drug table included drugs that would be used only for medical purposes, not research. In addition, the application failed to specify whether animals undergoing rehabilitation and involved in the research activities would be held for longer than medically necessary, which would run counter to section 402 of the MMPA.

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<sup>5</sup> NMFS's Authorizations and Permits for Protected Species (APPS) application and an application deemed the "complete application."

<sup>6</sup> It was not clear why take tables were provided in the "complete application, which denoted takes on a monthly rather than annual basis as required in NMFS's 2017 application instructions, if they were not intended to be reviewed or to inform the final permit.

As stated in previous Commission letters<sup>7</sup>, it is imperative that an application contain accurate, complete, and consistent information, as the final application is intended to inform the public review of the permit and NMFS's decision whether to issue and how to condition the permit. The Terms and Conditions of each NMFS research permit requires that "the activities authorized herein must occur by the means, in the area, and for the purposes set forth in the permit application." When a permit is issued for an application that contains inaccurate or conflicting information, the permit holder risks unintentionally violating the terms of the permit. When an application contains inconsistent information, the permit holder could be in technical violation of the permit due to the lack of clarity regarding which information the agency thought it had approved.

It is ultimately NMFS's responsibility to ensure that applicants abide by the application instructions and have provided the information necessary to deem an application complete prior to publishing a notice of availability in the *Federal Register*. Therefore, the Commission recommends that, prior to publication of any application in the *Federal Register*, NMFS staff review each application in light of the applicable instructions to ensure that all required information is included, is internally consistent, is consistent with NMFS's policies, and is in a format that facilitates review by the Commission and the public.

In regard to Dr. Williams's permit, the Commission recommends that NMFS (1) require that the PI and each CI provide a qualification form, CV, or biosketch that demonstrates his or her abilities to conduct or supervise the procedures that he or she would be authorized to conduct or supervise under the permit and (2) clarify the inconsistent information in the take tables provided and ensure all final take tables are accurate. The Commission further recommends that NMFS (1) specify in the permit the procedures that the PI and CIs would be authorized to conduct and/or supervise, (2) include all procedures that could be conducted on animals undergoing rehabilitation, including possible sedation, in the appropriate take table, (3) indicate the maximum amount of blood that could be sampled from an animal in a day, (4) specify the youngest age at which an animal could participate in the proposed research, and (5) condition the permit to specify that conducting the various research activities would not preclude or delay release of any animal undergoing rehabilitation.

### **Research to be conducted on animals held for public display**

Dr. Williams stated in her application that cooperative agreements may be established with public display facilities so that she could conduct all of the proposed research activities on marine mammals held under public display without authorization under the requested research permit. She referred to the activities as "non-intrusive" and cited the regulatory definition of intrusive research and its exception for public display animals<sup>8</sup> (50 C.F.R. § 216.3) as justification for not needing such

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<sup>7</sup> e.g., its [14 July 2020 letter](#) for U.S. Geological Survey (USGS), its [10 December 2019 letter](#) for USGS, and [its 27 March 2019 letter](#) for Florida Fish and Wildlife Conservation Commission.

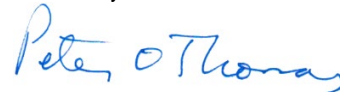
<sup>8</sup> NMFS's implementing regulations stipulate that intrusive research on captive animals does not include procedures that (1) are conducted by the professional staff of the holding facility or an attending veterinarian for purposes of animal husbandry, care, maintenance, or treatment, or a routine medical procedure that, in the reasonable judgment of the attending veterinarian, would not constitute a risk to the health or welfare of the captive animal or (2) involve either the introduction of a substance or object (i.e., as described in this definition) or a stimulus directed at animals that, in the

authorization. Thus, Dr. Williams did not request takes of any marine mammals held under public display in her permit application.

The Commission does not necessarily disagree with Dr. Williams's interpretation of the exception for public display animals. However, it is concerned that NMFS is defining "intrusive" and "non-intrusive" research inconsistently with regard to marine mammals held for public display purposes and seemingly arbitrarily authorizing permit holders to conduct such research on those animals. Most glaringly, NMFS authorized Dr. Williams under her previous permit to conduct *the exact same research activities*, which are now being deemed non-intrusive research not requiring authorization, on bottlenose dolphins held under public display and required her to both request and account for those takes. In recent years, NMFS also authorized similar activities under other permits (e.g., Alaska SeaLife Center permit 18534, Minnesota Zoological Gardens permit 17967). However, when NMFS issued permit 22629 to Mystic Aquarium, it notably decided that the facility did not need authorization to conduct the research activities described in its application<sup>9</sup> on its three public display beluga whales, despite concerns raised in the Commission's [2 December 2019 letter](#) on the application that such activities could in fact injure or harm an animal and did not qualify as "non-intrusive". Therefore, the Commission recommends that NMFS clarify its definitions of "intrusive" versus "non-intrusive" research activities with regard to marine mammals held for public display purposes and authorize permit holders to conduct the various research activities consistently across permits according to those definitions.

The Commission believes that the proposed activities are consistent with the purposes and policies of the MMPA. Kindly contact me if you have any questions concerning the Commission's recommendations.

Sincerely,



Peter O. Thomas, Ph.D.  
Executive Director

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reasonable judgment of the attending veterinarian, would not involve a risk to the health or welfare of the captive animal.

<sup>9</sup> Which included hearing-related research activities.