



# MARINE MAMMAL COMMISSION

30 November 2015

Ms. Jolie Harrison, 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. 19091  
(Southwest Fisheries Science Center)

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). Southwest Fisheries Science Center (SWFSC) is seeking to renew its permit to conduct research on marine mammals in the U.S. territorial and international waters of the Pacific, Atlantic, Southern, and Indian Oceans during a five-year period—permit 14097 authorized similar activities.

SWFSC proposes to conduct research on 5 species of pinnipeds and more than 50 species<sup>1</sup> of cetaceans on a year-round basis in various locations worldwide (see the take tables). The purpose of the research activities is to monitor, characterize, and/or assess abundance and distribution, stock structure, movement patterns, foraging ecology and dive behavior, life history parameters and recruitment trends, and demography of marine mammals. SWFSC would harass, observe, count, photograph, record acoustically, conduct photogrammetry on, sample<sup>2</sup>, and/or instrument<sup>3</sup> individuals of both sexes and various age classes of numerous marine mammal species<sup>4</sup> (see the take tables). Researchers would not biopsy sample calves less than 1 year of age, except large whale<sup>5</sup> calves that are estimated to be at least 2 months of age. They may biopsy sample individual humpback, blue, gray, fin, and Cuvier's beaked whales multiple times to evaluate tissue turnover rates for stable isotopes and hormone changes due to stress (see the application and take table for details). In addition, researchers would not tag calves less than 1 year of age, except large whale<sup>6</sup>

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<sup>1</sup> Including stocks and groups as well.

<sup>2</sup> Including conducting cetacean biopsy sampling, collecting cetacean breath samples via unmanned aerial systems (UASs), and collecting sloughed skin and feces of cetaceans.

<sup>3</sup> Cetaceans could be instrumented with suction-cup and dart (i.e., LIMPET and KiwiSat<sup>®</sup>) tags only. SWFSC recently withdrew its request to deploy deep-penetrating, implantable tags on all species.

<sup>4</sup> SWFSC also withdrew its request to conduct any activities on North Atlantic right whales and Level A activities (i.e., biopsy sampling and tagging) on Bryde's whales in the Atlantic Ocean.

<sup>5</sup> Including blue, sei, fin, humpback, sperm, Bryde's, gray, bowhead, North Pacific right, Antarctic minke and minke whales. Southern right whale calves at least 6 months of age could be biopsy sampled.

<sup>6</sup> Including blue, sei, fin, humpback, sperm, Bryde's, gray, bowhead, North Pacific right, southern right, Antarctic minke and minke whales.

calves that are estimated to be at least 6 months of age. Further, researchers would conduct manned and unmanned aerial surveys, vessel surveys, and ground surveys of pinnipeds<sup>7</sup>. Samples would be imported or exported for analysis, and various species of marine mammals could be harassed incidental to the proposed activities (see the take tables).

To minimize impacts during vessel activities, SWFSC would approach the animals either parallel to their path of travel or from behind and would not make any sudden changes in speed or course. Researchers would not separate female-calf pairs. Animals that react negatively (e.g., aerial behaviors or tail slaps) to the vessel would not be approached. If at any time during the activities, animals exhibit a negative reaction (e.g., rapidly diving, tail slapping, or rapidly swimming away), researchers would cease their activities. During aerial surveys, the aircraft would fly at a constant speed and altitude and overhead passes would be limited. Researchers would approach pinnipeds on land slowly and methodically to minimize the risk of stampede. SWFSC's Institutional Animal Care and Use Committee has reviewed and approved the research protocols.

The Commission understands that SWFSC has requested to approach<sup>8</sup> target animals up to five times to biopsy sample them. Except for the tissue turnover rate and stress projects noted herein, the Commission has concerns regarding the number of approaches requested. SWFSC indicated that the success rate of biopsy darting varies and could be less than 20 percent depending on the combination of the biopsier's and boat driver's skills, weather, and distance to the animal. SWFSC further indicated that while it is rare that an animal would be targeted for biopsy sampling more than twice during one encounter, it conservatively requested five attempts to allow for occasional low success rates. Most researchers include two or three attempts in their biopsy sampling requests, similar to SWFSC's request of three attempts for its tagging efforts. However, the Commission is unaware of any other requests for five biopsy sampling attempts for each animal and believes that those animals could be unduly harassed not only during those biopsy sampling attempts but if those animals are targeted for other activities<sup>9</sup> as well. The Commission understands that SWFSC plans to collect multiple biopsy samples from individual humpback, blue, gray, fin, and Cuvier's beaked whales to evaluate tissue turnover rates for stable isotope analyses and hormone changes due to stress. In those circumstances, the Commission believes five attempts may be necessary to fulfill the objectives of those specific projects rather than for general biopsy sampling needs. Therefore, the Commission recommends that NMFS issue the permit but reduce the number of biopsy sample attempts for all species and projects, except those five species that would be biopsy sampled multiple times for the turnover rate and stress projects.

SWFSC has indicated they would approach animals up to five times to biopsy sample and three times to tag them, but the maximum number of individuals of each species, stock, or group upon which Level A harassment activities would be conducted is quite difficult to ascertain from the take tables. For example, SWFSC requested up to 1,500 expected takes of short-beaked common dolphins during photo-identification and biopsy sampling activities. The Commission finds it unlikely that up to 1,500 biopsy samples would be collected in a given year. Only in the case of Bryde's whales did NMFS ask SWFSC to differentiate between the total expected takes and

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<sup>7</sup> Including collecting spew and scat.

<sup>8</sup> Including instances when the animal is approached but dives, biopsy dart misses the animal, the biopsy dart bounces off the animal, the biopsy dart doesn't penetrate far enough, etc.

<sup>9</sup> Including tagging.

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maximum number of individuals to be sampled or tagged<sup>10</sup>. However, SWFSC should have delineated the maximum number of individuals that could be biopsy sampled or tagged for all species, stocks, or groups of animals as is done in other similar applications. Given the lack of transparency, the Commission recommends that NMFS require SWFSC (and all other applicants) to delineate the maximum number of individuals for each species, stock, or group upon which Level A harassment activities would be conducted, including biopsy sampling and tagging.

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,



Rebecca J. Lent, Ph.D.  
Executive Director

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<sup>10</sup> NMFS requested that information to help address some questions the Commission had regarding Bryde's whales prior to SWFSC withdrawing its request to biopsy sample and tag them. In its original take tables, SWFSC requested 25 expected takes of Bryde's whale calves per year during biopsy sampling but indicated that researchers would biopsy sample a maximum of 5 calves. SWFSC also requested 75 expected takes of Bryde's whale juveniles/adults per year during biopsy sampling but then indicated that researchers would biopsy sample up to 30 juveniles and adults.