



# MARINE MAMMAL COMMISSION

28 October 2016

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 Amendment Application No. 17845  
(Rachel Cartwright, Ph.D.,  
Keiki Kohola Project)

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 amendment application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act (the MMPA). Dr. Cartwright is seeking to amend permit 17845 that authorizes her to conduct research on cetaceans in Hawaii, California, and Alaska—the permit expires on 31 January 2019. She currently is authorized to observe, harass, photograph/videotape<sup>1</sup>, conduct focal follows on, and attach suction-cup tags to humpback whales. Various species of marine mammals can be harassed incidental to the authorized activities. The purpose of the research is to investigate humpback whale habitat-use patterns, foraging ecology, and behavior.

Dr. Cartwright is proposing to harass, observe, photograph/videotape<sup>1</sup>, acoustically record, and conduct playback studies<sup>2</sup> on up to 300 humpback whales per year in Hawaii. The purpose of the new research is to empirically measure the hearing range of a mysticete through behavioral observation audiometric procedures. She would not conduct playback studies on females with calves. Various species of marine mammals could be harassed incidental to the proposed activities (see the Take Tables).

If an extreme response (i.e., a behavior not in the animal's natural repertoire) occurs during a playback session, the sound source would be shut down. To minimize repeat playbacks on individuals in a given day, researchers would crosscheck the photo-id catalog prior to conducting the playback. In addition, playbacks would not be conducted if other marine mammals are observed<sup>3</sup> within 500 m of the target whales. The Commission believes that the proposed activities are

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<sup>1</sup> Including using snorkelers and unmanned aerial systems (UASs) and conducting photogrammetry.

<sup>2</sup> Using a sound source that emits a 60-second signal at a source level of no more than 160 dB re 1  $\mu$ Pa at 1 m in the frequency range of 20 Hz to 40 kHz.

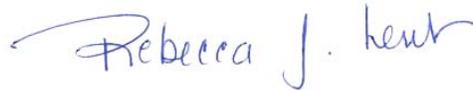
<sup>3</sup> Including via passive acoustic monitoring.

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consistent with the purposes and policies of the MMPA and therefore recommends that NMFS issue the permit amendment, provided that the current permit conditions remain in effect.

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

Sincerely,

A handwritten signature in blue ink that reads "Rebecca J. Lent". The signature is written in a cursive style with a large initial "R" and a long horizontal flourish extending to the left.

Rebecca J. Lent, Ph.D.  
Executive Director