



MARINE MAMMAL COMMISSION

18 November 2016

Ms. Lisa Manning
National Marine Fisheries Service
Office of Protected Resources (F/PR3)
1315 East-West Highway
Silver Spring, MD 20910

Dear Ms. Manning:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's (NMFS) 19 September 2016 *Federal Register* notice (81 Fed. Reg. 64110) proposing to list the North Island subspecies of Hector's dolphin (usually referred to as the Māui dolphin, *Cephalorhynchus hectori maui*) as endangered and the South Island subspecies of Hector's dolphin (*Cephalorhynchus hectori hectori*) as threatened under the Endangered Species Act (ESA). We also reviewed the accompanying August 2016 background document entitled "Draft Status Review Report for Hector's Dolphin (*Cephalorhynchus hectori*)."¹ The Commission offers the following comments and recommendations.

North Island subspecies of Hector's dolphin (Māui dolphin)

The Commission concurs with the proposal to list Māui dolphins as endangered. As detailed in the status review, the most recent published abundance estimate from 2010 and 2011 is 55 dolphins over 1 year of age (95 percent CI: 48-69).¹ While the Government of New Zealand has undertaken significant regulatory measures to reduce the primary threat to this subspecies, fisheries bycatch, the Commission agrees with NMFS's determination that "Māui's dolphins continue to face threats of bycatch, disease, and mining and seismic disturbances; and available evidence suggests the population will continue to decline despite existing management protections." Therefore the Commission recommends that NMFS proceed with publishing a final rule listing the Māui dolphin as endangered under the ESA.

South Island subspecies of Hector's dolphin

There is no question that bycatch in fisheries is a historical and ongoing threat to South Island populations of Hector's dolphins. The Commission finds, however, that the information provided in the proposed rule and status review with regard to overall abundance of the subspecies and its rate of decline around the South Island, the impact of current bycatch, the effectiveness of measures now in place to reduce bycatch, and the "foreseeable future" used to evaluate the impacts of threats are insufficient to support the conclusion that a threatened listing is warranted.

¹ A 20 October 2016 media release from the New Zealand Department of Conservation reports results of surveys conducted from 2014-2016 indicating a slight increase since 2010-11 surveys to 63 adults (95 percent CI: 57-75). <http://www.doc.govt.nz/news/media-releases/2016/new-maui-dolphin-estimate-encouraging/>

Using the summed averages of summer and winter abundance estimates from surveys of the west, north, east, and south coasts of the South Island, a current total population of South Island Hector's dolphins was estimated as 14,849 (95% CI = 11,923-18,492). While there is considerable information on historical bycatch and population decline, data are lacking on how the rate of decline has been reduced as a result of bycatch mitigation measures implemented since 1988. These measures were introduced in the vicinity of Banks Peninsula and extended in 2008 to the east, south, and west coasts. While evidence is presented for some level of continued bycatch around the South Island, it is clear that the bycatch rate has declined. The demographic review indicates that, with current bycatch measures in place, the rate of population decline around Banks Peninsula has been reduced to 0.5 percent per year. By extrapolating to the entire population of South Island Hector's dolphins, NMFS estimates that this annual rate of decline, if constant, could result in a 50 percent decline for the subspecies in about 138 years and an 80 percent decline in about 321 years. NMFS concludes that although the subspecies is not facing an imminent risk of extinction, this decline, combined with a low intrinsic population growth rate, low genetic diversity, limited population connectivity, and ongoing threats of bycatch, disease, and tourism, "provide[s] a strong indication that this subspecies is likely to become an endangered species within the foreseeable future assuming a status quo in conservation." Therefore NMFS proposes a threatened listing.

The Commission has a number of concerns with the analysis that leads NMFS to propose the South Island Hector's dolphin as a threatened subspecies. First, in contrast to Māui dolphins, South Island Hector's dolphins remain fairly abundant. Second, the analysis of decline referenced above indicates that NMFS envisions over 100 years to be the "foreseeable future" used in this evaluation. The foreseeable future is described in the notice as the "horizon over which predictions about the conservation status of the species can be reasonably relied upon" (81 Fed. Reg. 64111). A century-scale view seems unrealistically long in a situation in which management measures to address the primary threat can be put in place or strengthened (or by the same token, abandoned) in an adaptive manner over timeframes of a few to several years. It overestimates our ability to predict the course of these manageable threats over the long term, and at the same time predicts levels of decline that do not merit a threatened listing. Third, the known bycatch threat is being mitigated to some degree by management actions of the Government of New Zealand and the assumption of a management "status quo" is belied by the imposition of progressively stronger protective measures to reduce bycatch for this subspecies over the last 3 decades. There is no indication that the commitment of the Government of New Zealand to this adaptive management approach to reduce bycatch will not continue. The status review reports that these measures are preventing bycatch from causing significant population-level declines in the near term. Finally, while the Commission concurs that the impacts of disease (especially *Toxoplasmosis*) and tourism are potential threats that should be monitored, their population-level impact is uncertain. Therefore the Commission recommends that NMFS revise the length of the "foreseeable future" used for its analysis to a period of time relevant to mitigation of the bycatch threat, reconsider its determination that existing regulatory mechanisms are inadequate to address the threat of bycatch to South Island Hector's dolphins in light of the regulatory measures now in place and shown to be reducing bycatch and, on the basis of these revisions, reconsider its proposal to list the South Island Hector's dolphin subspecies as threatened.

Finally, the Commission notes the proposed determination of need for a listing of the South Island population of Hector's dolphins is based on the aggregate abundance estimate for the entire South Island. The draft status review suggests that there is stock structure below the subspecies

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level, raising the possibility that one or more of the “at least three, genetically distinct regional populations” (draft Status Review pg. 10) might be Distinct Population Segments. The possibility that any of these could merit separate listing consideration or could contribute to a threatened listing of the subspecies has not been explored in the draft status review or the listing proposal. It appears from review of these documents that considerable further analysis and deliberation would be required of NMFS scientists to do so.

I hope these comments and recommendations are helpful. Please let me know if you or your staff have any questions.

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".

Rebecca J. Lent, Ph.D.
Executive Director