Draft Amendment to the Hawaiian Dark-rumped Petrel and Newell's Manx Shearwater Recovery Plan

Original Approved: April 25, 1983
Original Prepared by: Pacific Region, U.S. Fish and Wildlife Service

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Species addressed in Draft Amendment: Hawaiian Petrel (*Pterodroma sandwichensis*) [originally listed as Hawaiian Dark-rumped Petrel (*Pterodroma phaeopygia sandwichensis*)**]**

We have analyzed all of the best available information and find that there is a need to amend the recovery criteria for the Hawaiian petrel (*Pterodroma sandwichensis*) that have been in place since the recovery plan was completed. In this proposed modification, we discuss the adequacy of the existing recovery criteria, identify amended recovery criteria, and present the rationale supporting the proposed recovery plan modification. The proposed modification is to be shown as an appendix that supplements the recovery plan, superseding only the Objective section (pages 22-24) in Part II (Recovery) of the recovery plan (USFWS 1983).

BACKGROUND INFORMATION

Recovery plans should be consulted frequently, used to initiate recovery activities, and updated as needed. A review of the recovery plan and its implementation may show that the plan is out of date or its usefulness is limited, and therefore warrants modification. Keeping recovery plans current ensures that the species benefits through timely, partner-coordinated implementation based on the best available information. The need for, and extent of, plan modifications will vary considerably among plans. Maintaining a useful and current recovery plan depends on the scope and complexity of the initial plan, the structure of the document, and the involvement of stakeholders.

An amendment involves a substantial rewrite of a portion of a recovery plan that changes any of the statutory elements. The need for an amendment may be triggered when, among other possibilities: (1) the current recovery plan is out of compliance with regard to statutory requirements; (2) new information has been identified, such as population-level threats to the species or previously unknown life history traits, that necessitates new or refined recovery actions and/or criteria; or (3) the current recovery plan is not achieving its objectives. The amendment replaces only that specific portion of the recovery plan, supplementing the existing recovery plan, but not completely replacing it. An amendment may be appropriate in cases where significant plan improvements are needed, but resources are too scarce to accomplish a full recovery plan revision in a short time.

Although it would be inappropriate for an amendment to include changes in the recovery program that contradict the approved recovery plan, it could incorporate study findings that enhance the scientific basis of the plan, or that reduce uncertainties as to the life history, threats, or species' response to management. An amendment could serve a critical function while awaiting a more comprehensive revised recovery plan by: (1) refining and/or prioritizing recovery actions that need to be emphasized, (2) refining recovery criteria, or (3) adding a species to a multispecies or ecosystem plan. An amendment can, therefore, efficiently balance

resources spent on modifying a plan against those spent on managing implementation of ongoing recovery actions.

METHODOLOGY USED TO COMPLETE THE RECOVERY PLAN AMENDMENT

The Hawai‘i listed seabird working group meets in person twice yearly, and via email or phone call as needed, and is comprised of personnel from the U.S. Fish and Wildlife Service (Service), State Division of Forestry and Wildlife, National Park Service, and University of Hawai‘i who are associated with managing listed seabirds. In 2009 this group developed a 5-year action plan (Bailey *et al.* 2009), that has since been updated (Bailey *et al.* 2015). This plan outlines short-term recovery objectives and actionable items to further the recovery of the Newell's shearwater (*Puffinus auricularis newelli*), Hawaiian petrel (*Pterodroma sandwichensis*), and band-rumped storm-petrel (*Oceanodroma castro*). The Service requested the input of this group to develop these draft amended delisting criteria for Newell's shearwater. The group wanted to ensure consistency between the objectives in the action plan (Bailey *et al.* 2015) and the proposed amended recovery criteria. They met once in person and subsequently by phone and email to develop, refine, and finalize the newly proposed criteria. The most up-to-date information, presented in the most recent 5-year review (USFWS 2017) was used to assess the population status and current threats to further refine the criteria.

Peer review of the updated delisting criteria will be concurrent with the public review and comment period on the draft amendment, and comments received will be incorporated into the final recovery plan amendment.

ADEQUACY OF RECOVERY CRITERIA

Section 4(f)(1)(B)(ii) of the Endangered Species Act (Act) requires that each recovery plan shall incorporate, to the maximum extent practicable, "objective, measurable criteria which, when met, would result in a determination…that the species be removed from the list." Legal challenges to recovery plans (see *Fund for Animals* v. *Babbitt*, 903 F. Supp. 96 (D.D.C. 1995)) and a Government Accountability Audit (GAO 2006) also have affirmed the need to frame recovery criteria in terms of threats assessed under the five listing factors.

Recovery Criteria

See previous version of criteria in Part II. Recovery, pages 22-41 of the Hawaiian Dark-Rumped Petrel and Newell's Manx Shearwater Recovery Plan (USFWS 1983).

Synthesis

Threats to the Hawaiian petrel described in the recovery plan continue substantially unabated. Although predator control now occurs at several breeding sites, the threat posed by introduced predators remains significant throughout the species' range. Progress has been made state-wide on increasing public awareness of artificial light induced fallout (attraction of seabirds to lights, causing disorientation and grounding away from the ocean), in refining techniques to yield better data for monitoring population trends, and on the development of predator-free areas. However, none of these efforts has progressed sufficiently to substantially abate threats to this species and, outside of heavily managed areas, little progress has been made toward addressing the chief threats. The population on Kaua‘i has declined 78 percent since 1993, or 6 percent annually

(Raine *et al.* 2017), and range-wide only a fraction of the colonies are managed for control of predators, ungulates, and other threats.

AMENDED RECOVERY CRITERIA

Recovery criteria serve as objective, measurable guidelines to assist in determining when an endangered species has recovered to the point that it may be downlisted to threatened, or that the protections afforded by the Act are no longer necessary and the Hawaiian petrel may be delisted. Delisting is the removal of a species from the Federal Lists of Endangered and Threatened Wildlife and Plants. Downlisting is the reclassification of a species from endangered to threatened. The term "endangered species" means any species (species, subspecies, or distinct population segment) that is in danger of extinction throughout all or a significant portion of its range. The term "threatened species" means any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

We provide both downlisting and delisting criteria for the Hawaiian petrel, which will supersede those included in the Hawaiian Dark-Rumped Petrel and Newell's Manx Shearwater Recovery Plan (USFWS 1983), as follows:

Downlisting Recovery Criteria

The Hawaiian petrel will be considered for downlisting when:

Criterion 1: At least one viable Hawaiian petrel metapopulation occurs on seven of the eight main Hawaiian Islands (excluding Niʻihau). This metapopulation approach is intended to capture the ecological, morphological, behavioral, and genetic diversity of the species among the islands, which will help ensure the persistence of the species. A viable population is self-supporting and is well represented, resilient, and redundant. A metapopulation means a population that exists as a series of subpopulations, linked by movement between them.

Criterion 2: Quantitative surveys show that the number of individuals in each disjunct nesting population has been stable or increasing for 15 consecutive years, or demographic monitoring shows that each population exhibits an average intrinsic growth rate not less than 1.0 over a period of at least 15 consecutive years.

Criterion 3: Thirty percent of suitable Hawaiian petrel breeding habitat is protected and managed (e.g., ungulate/predator-proof fencing, intensive small mammal and avian predator control) to achieve Criteria 1 and 2 above.

Criterion 4: The combination of threats responsible for the decline of Hawaiian petrels have been sufficiently managed to achieve Criteria 1 and 2 above, and the needed threat management will be in place for the foreseeable future.

Delisting Recovery Criteria
The Hawaiian petrel will be considered for delisting when:

Criterion 1: In addition to at least one viable Hawaiian petrel metapopulation on seven of the eight main Hawaiian Islands (excluding Niʻihau), at least two additional viable metapopulations occur on Maui and Hawaiʻi Islands.

Criterion 2: Quantitative surveys show that the number of individuals in each disjunct nesting population has been stable or increasing for 30 consecutive years, or demographic monitoring shows that each population exhibits an average intrinsic growth rate not less than 1.0 over a period of at least 30 consecutive years.

Criterion 3: Fifty percent of suitable Hawaiian petrel breeding habitat is protected and managed (e.g., ungulate/predatore proof fencing, intensive small mammal and avian predator control) to achieve Criteria 1 and 2 above.

Criterion 4: The combination of threats responsible for the decline of Hawaiian petrels have been sufficiently managed to achieve Criteria 1 and 2 above, and will be in place for the foreseeable future.

All classification decisions consider an analysis of the following five factors: (1) is there a present or threatened destruction, modification, or curtailment of the species' habitat or range; (2) is the species subject to overutilization for commercial, recreational scientific or educational purposes; (3) is disease or predation a limiting factor; (4) are there inadequate existing regulatory mechanisms in place outside the Act (taking into account the efforts by states and other organizations to protect the species or habitat); and (5) are other natural or manmade factors affecting its continued existence. When delisting or downlisting a species, we first propose the action in the *Federal Register* and seek public comment and peer review of our analysis. Our final decision is announced in the *Federal Register*.

Rationale for Recovery Criteria
The amended delisting criteria are based upon the most up to date information about the species' biology, the most recent 5-year review (USFWS 2017), expert opinion, and the Newell's Shearwater, Hawaiian Petrel, and Band-Rumped Storm-Petrel Action Plan (Bailey *et al.* 2015).

The recovery criteria reflect the best available and most up-to-date information about the species and its habitat. The recovery criteria reflect all known threats to this species. These include protection of suitable habitat to sustain the ecological, morphological, behavioral and genetic diversity of the species (Factor A), predation (Factor C), and management of anthropogenic threats (Factor E) such that the populations are self-sustaining and stable. Please see USFWS (2017) for the most recent analysis of threats to, and ongoing conservation efforts for, the Hawaiian petrel.

The amended recovery criteria for Hawaiian petrel support representation by ensuring the ecological, morphological, behavioral and genetic diversity of the species is conserved throughout its range. The criteria support resiliency through stable or increasing populations. The

criteria support redundancy by recommending distribution throughout the species' historical range. The recovery criteria are objective and measurable. Information is accurate, unbiased, and based upon the best available data known at this time.

LITERATURE CITED

Bailey, C., F. Duvall, H. Freifeld, N. Holmes, D. Hu, M. Laut, A. Raine, and J. Penniman (2009). Newell's shearwater, Hawaiian petrel, and band-rumped storm-petrel recovery: 5-year action plan 2009-2014.

Bailey, C., F. Duvall, H. Freifeld, N. Holmes, D. Hu, M. Laut, A. Raine, and J. Penniman (2015). Newell's shearwater, Hawaiian petrel, and band-rumped storm-petrel recovery: 5-year action plan 2015-2020.

[GAO] Government Accountability Office. 2006. Endangered species recovery. GAO-06-463R. April 6, 2006. 27 pp.

Raine, A.F., N.D. Holmes, M. Travers, B.A. Cooper, and R.H. Day. 2017. Declining population trends of Hawaiian Petrel and Newell's Shearwater on the island of Kauaʻi, Hawaiʻi., USA. The Condor 119(3):405-415.

[USFWS] U.S. Fish and Wildlife Service. 1983. Hawaiian Petrel and Newell's Manx Shearwater Recovery Plan. Portland, Oregon. 61 pp.

[USFWS] U.S. Fish and Wildlife Service. 2017. Hawaiian petrel 5-year review. https://ecos.fws.gov/docs/five_year_review/doc5234.pdf