

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

Original Recovery Plan Approved: April 25, 1983

Original Recovery Plan Prepared by: Pacific Region, U.S. Fish and Wildlife Service

Recovery Plan Amendment Approved:


Acting **Regional Director, Pacific Region**
U.S. Fish and Wildlife Service

Date 7 Aug 2019

Species addressed in 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 1983. In this amendment, we discuss the adequacy of the existing recovery criteria, identify amended recovery criteria, and present the rationale supporting the recovery plan modification. The 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 A review of the recovery plan and its implementation may show that the plan is out of date or its usefulness is limited, and therefore warrants modification.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 of Hawai'i 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 action 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 the 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 amended recovery criteria. They met once in person and subsequently by phone and email to develop, refine, and finalize the new 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.

A draft of this recovery plan amendment was published for public review on January 31, 2019 (84 FR 790). In addition, we sought peer review. Please see the Appendix for a summary of the comments received and our responses.

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 statewide 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 rangewide 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 updated downlisting and delisting criteria for the Hawaiian petrel, which 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 may be considered for downlisting when:

- Criterion 1: Viable Hawaiian petrel metapopulations that represent the ecological, morphological, behavioral and genetic diversity of the species occur within their current and historical distribution on seven of the eight main Hawaiian islands.
- Criterion 2: Quantitative surveys show that the population trend at locally monitored sites on each island has been stable or increasing over a period of at least 15 consecutive years, or demographic monitoring shows that each island metapopulation exhibits an average intrinsic growth rate not less than 1.0 over a period of at least 15 consecutive years.
- Criterion 3: Hawaiian petrel breeding sites throughout the current and historical distribution of the species are effectively protected and managed (*e.g.*, ungulate/predator-proof fencing, intensive control of small mammals and avian predators) over an area sufficient 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 may be considered for delisting when:

Criterion 1: Viable Hawaiian petrel metapopulations that represent the ecological, morphological, behavioral and genetic diversity of the species occur within their current and historical distribution on seven of the eight main Hawaiian islands.

Criterion 2: Quantitative surveys show that the population trend at locally monitored sites on each island has been stable or increasing over a period of at least 30 consecutive years, or demographic monitoring shows that each island metapopulation exhibits an average intrinsic growth rate not less than 1.0 over a period of at least 30 consecutive years.

Criterion 3: Hawaiian petrel breeding sites throughout the current and historical distribution of the species are effectively protected and managed (*e.g.*, ungulate/predator-proof fencing, intensive control of small mammals and avian predators) over an area sufficient 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 management 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). Despite the species being highly mobile, recent information on the genetics, foraging behavior, and morphometrics of Hawaiian petrels shows significant differentiation between each island population (Welch *et al.* 2012, Wiley *et al.* 2012, Judge *et al.* 2014). Analyses of genetic data showed significant population structure differentiation between the populations on Hawai'i, Maui, Lāna'i, and Kaua'i (Welch *et al.* 2012). Museum samples from Moloka'i also showed differentiation from all populations except Lāna'i. These findings support genetic isolation

between modern populations of the Hawaiian petrel. Wiley *et al.* (2012) documented geographic foraging segregation between the populations of Hawaiian petrels on the islands of Kaua‘i and Hawai‘i, and also estimated that migration between the 2 islands occurs less than once every 1,000 generations. Morphometric analysis by Judge *et al.* (2014) further supports genetic differentiation between birds on Maui, Hawai‘i, and Kaua‘i given differences in wing chord, culmen length, and tarsus length between birds on those islands. These data provide strong evidence that the populations on each island are independent and not interacting in a genetically meaningful way.

When defining the term “metapopulation” in Downlisting Criterion 1 and Delisting Criterion 1 for Hawaiian petrels, we used the definition applied by Akcakaya *et al.* (2007) wherein a metapopulation is a set of geographically discrete populations that may exchange individuals through migration, dispersal, or human-mediated movement where the mixing of individuals between populations is less than that within them. Thus, we considered each island as a separate metapopulation comprised of multiple populations. We modified Delisting Criterion 1 from the criterion published in the draft amendment because it is not clear that the various interacting populations on the islands of Maui or Hawai‘i would naturally be separated into two distinct metapopulations on the same island, or that such separation would be beneficial for the species. The exclusion of Ni‘ihau from the criterion published in the draft amendment reflected the infeasibility of restoring, managing, and monitoring breeding sites given current lack of access to the island. If accessibility were to improve in the future, breeding populations on Ni‘ihau might potentially contribute to meeting recovery criteria, but Ni‘ihau populations are not required in order to meet the criteria.

When evaluating population growth under Downlisting Criterion 2 and Delisting Criterion 2 we will utilize several metrics, including demographic monitoring within managed units. Because the managed units are likely to be a subsets of a breeding colony, we modified the criteria using the term “locally monitored sites” to describe those managed and monitored units. The unit size and monitoring protocols may vary among islands depending on habitat characteristics and dispersion of nest sites within the colonies. Overall metapopulation viability is assessed at the scale of each island.

We modified Downlisting Criterion 3 and Delisting Criterion 3 from the criteria published in the draft amendment, because we determined that it would not be feasible to quantify the specific percentage of suitable breeding habitat being protected and managed. In particular, the denominator of such a percentage is difficult to clearly define because the species historically bred in a wide variety of habitats throughout the Hawaiian islands; breeding success is primarily dependent on site management and predator protection at a local scale, and on maintaining safe movement corridors at the landscape scale, rather than the availability of suitable habitat with boundaries that could be delineated on the basis of topography or vegetation. It is important to emphasize that site management must be effective at minimizing predation impacts in order for viable self-supporting populations to exist.

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.

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APPENDIX. SUMMARY OF PUBLIC, PARTNER, AND PEER REVIEW COMMENTS RECEIVED

Summary of Public Comments

We published a notice of availability in the *Federal Register* on January 30, 2019 (84 FR 790-795) to announce that the draft amendment to the Hawaiian Dark-rumped Petrel and Newell's Manx Shearwater Recovery Plan was available for public review, and to solicit comments by the scientific community, State and Federal agencies, Tribal governments, and other interested parties on the general information base, assumptions, and conclusions presented in the draft revision. An electronic version of the draft amendment was posted on our Species Profile website

(https://ecos.fws.gov/docs/recovery_plan/HAPE_Draft_Recovery_Plan_Amendment_20180806.pdf).

We also developed and implemented an outreach plan that included: (1) publishing a news release on our national webpage (<https://www.fws.gov/news/>) on January 30, 2019, (2) sending specific notifications to Congressional contacts in Hawaii's first and second Congressional Districts, and (3) sending specific notifications to key stakeholders in conservation and recovery efforts. These outreach efforts were conducted in advance of the *Federal Register* publication to ensure that we provided adequate notification to all potentially interested audiences of the opportunity to review and comment on the draft amendment.

We received five responses in total. These included comments from interested citizens as well as non-governmental organizations and interest groups.

Public comments ranged from providing minor editorial suggestions to specific recommendations on plan content. We have considered all substantive comments. We thank the reviewers for these comments and to the extent appropriate, we have incorporated the applicable information or suggested changes into the final recovery plan amendment. In response to comments expressing confusion about some of the terminology in the proposed revised recovery criteria, we updated Downlisting and Delisting Criterion 1 through 3 to address those concerns, and provided scientific references to support the new criteria and definitions for our terminology in the Rationale for Recovery Criteria section. Below, we provide a summary of public comments received; however, some of the comments that we incorporated as changes into the recovery plan amendment did not warrant an explicit response and, thus, are not presented here. We also provided copies of all comments received during the formal public comment period to all relevant Federal agencies for their consideration prior to implementation of the final recovery plan, in accordance with section 4(f)(5) of the Act.

Comment (1): Concern that, "criteria are being added in the absence of any scientific peer review and that this will lead to a failure on the Service's part to follow the best-available science."

Response: Peer review was conducted following the publication of the Notice of Availability, and in accordance with the requirements of the Endangered Species Act (Act). Below we provide a detailed summary of peer review comments and our responses, where appropriate.

Comment (2): Concern that, “the decision to update recovery criteria for these 42 species as a group is indicative of the Service moving away from utilizing recovery teams and outside scientific expertise.”

Response: Section 4 of the Act provides the Service with the authority and discretion to appoint recovery teams for the purpose of developing and implementing recovery plans. The current effort to update recovery plans with quantitative recovery criteria for what constitutes a recovered species is not indicative of the future need for, and does not preclude the future utilization of, recovery teams to complete recovery planning needs for listed species.

Comment (3): New and significant information has been developed in the years since the existing recovery plan was adopted. Updating this plan can serve to better inform the Service, the regulated community, and Federal, State, and local resource agencies.

Response: A recovery plan should be a living document, reflecting meaningful change when new substantive information becomes available. Keeping a recovery plan current increases its usefulness in recovering a species by ensuring that the species benefits through timely, partner-coordinated implementation based on the best available information.

Comment (4): The Service should consider whether the updated recovery criteria would be less burdensome on Federal agencies and the regulated community than the existing criteria.

Response: Recovery plans are guidance documents that outline how best to help listed species achieve recovery, but they are not regulatory documents. Recovery plans are intended to establish goals for long-term conservation of listed species and define criteria that are designed to indicate when the threats facing a species have been removed or reduced to such an extent that the species may no longer need the protections of the Act.

Recovery criteria are achieved through the funding and implementation of recovery actions by both the Service and our partners. In addition to the existing recovery actions included in each of these recovery plans, the amendments address the need for any new, site-specific recovery actions triggered by the modification of recovery criteria, along with the costs, timing, and priority of any such additional actions. Because recovery plans are not regulatory documents, identification of an action to be implemented by any public or private party does not create a legal obligation beyond existing legal requirements. Nothing in a recovery plan should be construed as a commitment or requirement that any Federal agency obligate or provide funds.

Comment (5): The Service should consider whether the recovery criteria are achievable, because including unattainable recovery criteria could render such plans meaningless, or impede other processes under the Act.

Response: The National Marine Fisheries Service and U.S. Fish and Wildlife Service Interim Endangered and Threatened Species Recovery Plan Guidance (2010) emphasizes the development of recovery criteria that are specific, measurable, achievable, realistic, and time-referenced (SMART). The achievable component of SMART criteria implies that the authority, funding, and staffing needed to meet recovery criteria are feasible, even if not always likely.

In developing recovery criteria specifically, we attempt to establish criteria that are both scientifically defensible and achievable to the greatest extent possible. At times, however, the feasibility of achieving certain criteria can be, or appear to be, constrained by the particular, difficult circumstances that face a species. Even in such cases, criteria serve to guide recovery actions and priorities for the species. Furthermore, as recovery progresses, periodic reevaluation of the species status through the 5-year review process may reveal that the barriers to achieving certain criteria have been removed or that circumstances or our understanding of the species have evolved. In that event, the Service can revise recovery criteria to ensure that they reflect the strategy most likely to succeed in the goal of recovery.

Comment (6): The Service should consider conservation efforts that have been put into place for the listed species since the previous iteration of the recovery plan, especially where the Service has supported conservation efforts, in formulating recovery criteria that will be established or amended by the revised draft plan.

Response: While section 4 of the Act directs the Service to specifically develop and implement recovery plans, several other sections of the Act and associated programs and activities also provide important opportunities to promote recovery. Information from these programs and activities about the biological needs of the species can inform recovery planning (including the formulation or revision of recovery criteria) and implementation. These conservation efforts have been considered during the development of this and other recovery plans.

Comment (7): The Service should determine whether ongoing species conservation efforts beneficially address one or more of the listing factors set forth in the Act implementing regulations addressing species listings and designation of critical habitat.

Response: All Service decisions that affect the listed status or critical habitat designation of a particular species, including our 5-year review of each listed species, are made by analyzing the five factors described in section 4 of the Act. Such an analysis necessarily includes an assessment of any conservation efforts or other actions that may mitigate or reduce impacts on the species. While our objective with this particular effort was to establish objective, measurable criteria for delisting, conservation actions play a crucial role in determining if and when those criteria have been satisfied.

Comment (8): The Service should be mindful of the impacts that recovery plan criteria can have on the section 7 process of the Act for the regulated community, because the Service and other Federal resource agencies sometimes request that recovery criteria be addressed in biological assessments and other planning processes under the Act addressing listed species.

Response: Recovery plans can both inform, and be informed by section 7 processes of the Act. When revising a recovery plan, existing section 7 consultations may provide helpful information on: recent threats and mechanisms to avoid, minimize, or compensate for impacts associated with those threats; a summarized status of the species; and indication of who important partners may be. Section 7 consultations can inform the need for revised recovery actions, recovery

implementation schedule activities, recovery criteria, or species status assessments to provide more comprehensive recovery planning while the species remains listed.

Comment (9): The Service should include the full panoply of current information available for the species in all revised draft recovery plans.

Response: Our recovery planning guidance recommends that recovery planning be supported by compilation of available information that supports the best possible scientific understanding of the species. Although it is not necessary to exhaustively include all current information within the text of the recovery plan, to the extent that this information is specifically relevant and useful to recovery, the recovery plan may summarize such material or incorporate it by reference. Supporting biological information may also be included within a species status assessment or biological report separate from the recovery plan document itself.

Comment (10): The Service should consider whether the existing recovery plan should be revised or replaced in its entirety rather than amended in part.

Response: Under guidance established in 2010, partial revisions allow the Service to efficiently and effectively update recovery plans with the latest science and information when a recovery plan may not warrant the time or resources required to undertake a full revision of the plan. To further gauge whether we had assembled, considered, and incorporated the best available scientific and commercial information into this recovery plan revision, we solicited submission of any information, during the public comment period, that would enhance the necessary understanding of the species' biology and threats, and recovery needs and related implementation issues or concerns. We believe the recovery plan amendment, which targets updating recovery criteria, is appropriate for the species. However, we will also continue to evaluate the accuracy and usefulness of the existing recovery plan with respect to current information and status of conservation actions, and may pursue a full revision of the plan in the future, if appropriate.

Comment (11): The Service should commit to regular evaluations of the trends and metrics in Criterion 1 and Criterion 2, internally and with external experts such as a formal recovery team to adaptively manage effort by the Service and partners.

Response: Regular monitoring of the recovery criteria will inform management decisions, and several opportunities currently exist to do so. Recovery permits issued for Hawaiian petrel monitoring, reports from existing section 7 consultations under the Act, and existing and in-process section 10 habitat conservation plans will provide us with some of those measures. Further, the Service is a partner in a listed seabird working group that consists of local and Federal agencies directly involved in listed seabird management and recovery which will also be a source of information and expertise.

Comment (13): The proposed criteria do not address the concept of minimum viable population; the species needs to have numerical population targets established for the populations on each island and for the listed entity as a whole.

Response: We do not currently have a method for directly measuring the population size of the Hawaiian petrel. Their nocturnal habits and cryptic nesting sites make it difficult to directly count individuals. Instead we have relied upon radar surveys and downed bird retrieval as an index on the island of Kaua'i. On Kaua'i and Lāna'i, nighttime auditory and visual surveys within colonies also provide an indicator of abundance but are not reliable measures of population size. On the islands of Maui and Hawai'i, burrow monitoring is the most consistent measure used. More recently, we have used remote sensing automated acoustical units that record calls within a colony to both assess activity levels within a colony and to survey new sites for calling activity. None of these measures can be used to develop a population estimate for the species; thus, we are dependent on estimating population trends using proxy measures as described in the criteria. If, in the future, we have a reliable way of estimating the population, and if those numbers were necessary to describe recovery, we would either identify those targets in our management plans or revise the criteria to include population targets.

Comment (14): Quantifiable measures of the 3Rs (resiliency, representation, and redundancy) should be used as criteria for this species.

Response: As discussed above, numerical targets that effectively measure the population are difficult to establish for this species. However, the revised criteria do provide measures of the 3Rs. Criterion 1 addresses redundancy and representation by ensuring the species' range is maintained, which protects the inherent genetic diversity and existing biogeographic variability. Criterion 2, in part, measures resiliency. Criteria 3 and 4 help ensure resiliency, redundancy, and representation are maintained.

Comment (15): Criterion 3 should focus on currently occupied nesting colonies.

Response: Protecting currently occupied habitat is a priority. If we developed a step-down outline with these criteria, then the outline would prioritize protecting occupied habitat. However, this species lives in extremely remote and rugged terrain and in some cases management tools such as fencing and effective predator control may not be an option. In such situations, we might choose to protect adjacent habitat and attract birds to that site.

Comment (16): Criterion 4 should require the management needed to reach and maintain target population levels and population growth rates.

Response: As discussed above, estimation of population sizes are difficult to establish for this species; thus, we do not specify population targets in our criteria. We ensure that threats and trend are addressed.

Summary of Peer Review Comments

We solicited independent peer review between the draft and final amendment in accordance with the requirements of the Act from the State of Hawaii Division of Forestry and Wildlife, U.S. Navy, U.S. Air Force, National Fish and Wildlife Foundation, Hawaii Volcanoes National Park, Haleakala National Park, and the University of Hawaii Pacific Cooperative Studies Unit. Criteria used for selecting peer reviewers included their demonstrated expertise and specialized

knowledge related to Hawaiian petrel, seabird biology, land management, and threats to the Hawaiian petrel and its habitat. The qualifications of the peer reviewers are in the decision file and the administrative record for this recovery plan amendment.

In total, we solicited review and comment from 12 peer reviewers and 7 partner agencies. We did not receive any comments from peer reviewers or partner reviewers.