Recovery Plan for Red Hills Salamander (*Phaeognathus hubrichti*)
https://ecos.fws.gov/docs/recovery_plan/831123.pdf

Original Approved: November 23, 1983
Original Prepared by: Robert H. Mount

Amendment 1

We have identified the need to amend recovery criteria for Red Hills salamander (*Phaeognathus hubrichti*) (RHS). This proposed modification will be shown as an addendum that supplements the recovery plan by adding delisting criteria which were not developed at the time the initial recovery plan was completed (USFWS 1983, Part II A p. 10). Recovery plans are a non-regulatory document that provides guidance on how best to help recover the species.

For
U.S. Fish and Wildlife Service
Atlanta, Georgia

Approved: Franklin Jarnott III
Acting **Regional Director, U.S. Fish and Wildlife Service**

Date: 9/24/19

METHODOLOGY USED TO COMPLETE THE RECOVERY PLAN AMENDMENT

The proposed amendments to the recovery criteria are based on the most recent and best available information for the species including information from the most recent 5-year review, and the recently completed Species Status Assessment. This information was analyzed by U.S. Fish and Wildlife Service (Service) biologists and managers in the Alabama Ecological Services Field Office in order to develop the delisting criteria for the RHS.

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

The current recovery plan (https://ecos.fws.gov/docs/recovery_plan/831123.pdf) does not provide recovery criteria but it does outline recovery objectives (see pp. 10-11).

Synthesis

The RHS was federally listed as threatened on December 3, 1976 (41 FR 53032). This species is a narrow ranging endemic species found almost entirely in Tallahatta and Hatchetigbee formations of the Red Hills of Alabama, which include Butler, Crenshaw, Conecuh, Covington, Monroe, and Wilcox counties. At the time of listing, major habitat disturbance/destruction due to forestry practices and land conversion was listed as the primary threat to the species. Logging (and related site preparation) continues to be the major threat facing the species (Factors A and D).

Several projects have been funded to study burrow occupancy rates, population structure between disturbed and undisturbed sites, movement, burrow fidelity, and fine-scale genetics. The fine-scale genetics research indicates that the RHS populations are broken into five demes (USFWS 2013). A deme is a subdivision of a population consisting of closely related plants, animals, or people, typically breeding mainly within the group.

The Service has worked with private landowners through the use of Habitat Conservation Plans (HCP) under Section 10(a)(1)(B) of the Act to incorporate practices to reduce habitat destruction while providing assurances to the landowners. The HCPs have benefitted the species, although we are concerned about the limited protection that the current HCPs provide. When HCPs expire or change ownership, the HCP does not automatically renew or transfer. Therefore, they provide no long-term, guaranteed protection for RHS populations (USFWS 2013).

AMENDED RECOVERY CRITERIA

Recovery criteria serves 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. 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 an endangered species to a threatened species. The term "endangered species" means any species (species, sub-species, or DPS) which is in danger of extinction throughout all or a significant portion of its range. The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Revisions to the Lists, including delisting or downlisting a species, must reflect determinations made in accordance with sections 4(a)(1) and 4(b) of the Act. Section 4(a)(1) requires that the Secretary determine whether a species is an endangered species or threatened species (or not) because of threats to the species. Section 4(b) of the Act requires that the determination be made "solely on the basis of the best scientific and commercial data available." Thus, while recovery plans provide important guidance to the Service, States, and other partners on methods of minimizing threats to listed species and measurable objectives against which to measure progress towards recovery, they are guidance and not regulatory documents.

Recovery criteria should help indicate when we would anticipate that an analysis of the species' status under section 4(a)(1) would result in a determination that the species is no longer an endangered species or threatened species. A decision to revise the status of or remove a species from the Federal Lists of Endangered and Threatened Wildlife and Plants, however, is ultimately based on an analysis of the best scientific and commercial data then available, regardless of whether that information differs from the recovery plan, which triggers rulemaking. When changing the status of a species, we first propose the action in the *Federal Register* to seek public comment and peer review, followed by a final decision announced in the *Federal Register*.

We provide recovery criteria for the RHS, which will supersede those included in Red Hills Salamander Recovery Plan (USFWS 1983).

Amended Recovery Criteria

The below recovery criteria describes a recovered species, or a species that should be considered for removal from the List of Endangered and Threatened Wildlife (50 CFR 17).

1. The five (5) delineated demes (USFWS 2018) exhibit a stable or increasing trend, evidenced by natural recruitment, and multiple age classes.

2. At least 50 percent of suitable habitat is occupied within each deme (as defined in Criterion 1) and protected via a long term conservation mechanism.

3. Threats have been addressed and/or managed to the extent that the species will remain viable into the foreseeable future.

Justification

Criterion 1: Protection at the deme level ensures that we are protecting/conserving the genetic differences (representation) and ensures sufficient redundancy such that the species would not have to be re-listed at a later date due to the potential of distinct resilient populations.

Criterion 2: If 50 percent of the suitable RHS habitat in each deme was protected and managed in perpetuity, the species should persist. Any forestry activities conducted in the protected areas would be done in such a way as to be beneficial to the species.

Criterion 3: If the factors that triggered the listing have been managed correctly, then it would be expected that the species would be self-sustaining.

Rationale for Amended Recovery Criteria

The proposed recovery criteria reflects the best available and most up-to-date information for the RHS. The stability of five (5) demes with a minimum of 50 percent occupancy reduces the probability of extinction by providing adequate resiliency, redundancy, and representation. Due to the limited range and private ownership of the habitat, the only way to ensure that the species will not become threatened with extinction in the foreseeable future is to create agreements or management strategies. These agreements should be with private or public landowners within the delineated demes that protects the habitat into perpetuity.

While HCPs protect RHS habitat, these properties can be sold without the new landowners agreeing to continue the HCP. Fortunately, many new landowners agree to the terms of the original HCPs and associated incidental take permits. Best management practices also limit the potential impacts forestry may have on the species.

LITERATURE CITED

U.S. Fish and Wildlife Service [USFWS]. 1983. Red Hills Salamander Recovery Plan. Atlanta, GA. 23 pp.

U.S. Fish and Wildlife Service [USFWS]. 2013. Red Hills Salamander 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service, Daphne, AL. 20 pp.

U.S. Fish and Wildlife Service [USFWS]. 2018. Species Status Assessment for Red Hills Salamander. U.S. Fish and Wildlife Service, Daphne, AL. 55 pp.