



Draft Recovery Plan for the Southern California Distinct Population Segment of Mountain Yellow-Legged Frog

QUESTIONS AND ANSWERS

The mountain yellow-legged frog (*Rana muscosa*) is a yellowish-brown frog that lives in two distinct areas of California: the Sierra Nevada and the mountain ranges of Southern California. The U.S. Fish and Wildlife Service listed the Southern California Distinct Population Segment of mountain yellow-legged frog as endangered under the Endangered Species Act in 2002.



At the time of listing, fewer than 100 adult frogs remained in three isolated populations occupying habitat in portions of the San Gabriel Mountains, San Bernardino Mountains and San Jacinto Mountains.

This native species is one of Southern California's last living "true" frogs. True frogs are those that live in and near water, and need water to survive. Historically, at least 166 known populations of mountain yellow-legged frog ranged across four mountain ranges in Southern California. Today, only 10 small populations remain across the three mountain ranges.

This species faces a series of manmade and natural threats including loss of suitable habitat, predation by nonnative trout species, chytrid fungus, wildfire and contaminants from illegal marijuana cultivation. Since listing, the Service and its partners have been implementing a series of conservation actions to reduce threats to the mountain yellow-legged frog, and to boost its population in the wild through ongoing captive breeding and release efforts.

Q. What is a Recovery Plan?

A. When a species is listed under the ESA, the Service develops a recovery plan to identify actions needed to restore self-sustaining populations, so that it no longer requires protection under the ESA. Recovery Plans are not regulatory documents and do not require any agency or landowner to undertake specific recovery actions.

Q. How was the Recovery Plan developed?

A. The Draft Recovery Plan for the Southern California Distinct Population Segment of the Mountain Yellow-legged Frog solicited input from a variety of stakeholders, including partners who are currently implementing conservation actions to aid the frog. The Service identified strategies for reducing threats

and also enhancing the frog's resilience (its ability to bounce back from a large-scale event such as a wildfire or drought). Strategies are accompanied by measurable criteria and objectives. The final Recovery Plan will incorporate comments and information received during the comment period on the draft plan. The Service is on schedule to release a final recovery plan by December 28, 2018, the deadline determined through a settlement agreement with Center for Biological Diversity.

Q. How does the Recovery Plan identify areas to focus conservation actions for the mountain yellow-legged frog?

A. The draft Recovery Plan for the mountain yellow-legged frog identifies three Recovery Units for the species. These units are areas necessary for the recovery of the species as a whole, and represent distinct geographic areas within the species' range in Southern California. The three units include Gabriel Mountains; the San Bernardino Mountains; and the San Jacinto Mountains /Palomar Mountain area.

Q: How will the Recovery Plan help the mountain yellow-legged frog?

A: The draft recovery plan outlines strategies, accompanied by measurable criteria and objectives, to help recover the mountain yellow-frog to the point where the species may be downlisted from endangered to threatened or potentially delisted from the federal List of Threatened and Endangered Species.

Recovery strategies identified in the draft plan include research, rangewide surveys and monitoring, habitat restoration, reducing the spread of disease and predation of non-native trout, and augmenting wild populations with a captive breeding and release program.

Q. What is the estimated cost of recovering the mountain yellow-legged frog?

A. We estimate the cost of completing conservation actions such that all recovery criteria have been met and the southern population of the mountain yellow-legged frog may be considered for removal from the protections of the ESA to be approximately \$5.5 million. Costs are variable and would be mainly incurred based on the following recovery actions: rangewide monitoring, research, and population augmentation through a captive-breeding and release program.

Q. Are there recovery actions already being implemented for this species?

A. Yes. There are numerous federal, state and local organizations are actively working to conserve the mountain yellow-legged frog.

Q. When could the mountain yellow-legged frog be downlisted from endangered to threatened, or removed from the ESA's protections (delisted)?

A. As defined by the ESA, an endangered species is in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. When we evaluate whether or not a species warrants downlisting or delisting, we consider whether the species meets either of these definitions. A recovered species is one that no longer meets the definition of threatened or endangered under the ESA due to amelioration of threats. Determining whether a species should be downlisted or delisted requires consideration of the same five categories of threats which were considered when the species was listed and which are specified in the ESA.

Downlisting Criteria - In order to downlist the Southern California population of mountain yellow-legged frog to threatened status, threats to the species due to degraded or limited habitat must be reduced. This will have been accomplished if the following have occurred in the following categories of threats as defined under the ESA:

Factor A: Present or Threatened Destruction, Modification, or Curtailment of Habitat or Range

- A.1: Impacts due to recreational activity in occupied habitat are effectively managed, avoided or minimized.
- A.2: Potential impacts due to illegal marijuana plantations are monitored and avoided.
- A.3: Appropriate vegetation management projects are designed and implemented to help minimize the potential impacts of wildfire. Individuals are translocated or removed from the wild and brought into captivity to avoid severe post-fire impacts, as appropriate.

Factor B: Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

No known threats exist under this factor, therefore no criteria are necessary.

Factor C: Disease or Predation

- C.1: Trout are absent from areas occupied by Southern California mountain yellow-legged frogs. Trout are removed from downstream areas below occupied occurrences of the frog as well as from re-establishment sites to allow for population expansion. Effective barriers are established as appropriate.
- C.2: Impacts from disease are appropriately understood and managed.

Factor D: Inadequacy of Existing Regulatory Mechanisms

No known threats exist under this factor, therefore no criteria are necessary.

Factor E: Other Natural or Manmade Factors Affecting Its Continued Existence

- E.1: The threat of small population size is addressed. At least 20 occurrences will exist with a minimum of 50 adults per occurrence or allowances for periodic translocations or movements of frogs to augment

populations smaller than 50 adults (Appendix I and II). To ensure redundancy, at least five occurrences will need to be occupied in each Recovery Unit. Monitoring will detect these numbers for at least 5 years.

Delisting Criteria - In order to safely delist southern mountain yellow-legged frog the following additional criteria must be met:

Factor E: Other Natural or Manmade Factors Affecting Its Continued Existence

E.2: Genetic studies document that the mountain yellow-legged frog has long-term genetic sustainability, including consideration of minimum effective population size.

E.3: The potential effects of contaminants, ultraviolet radiation, pesticides, and acid precipitation have been considered and appropriately addressed.

E.4: In addition to the downlisting criteria, at least one occurrence with a minimum population size of 500 adults shall occur within each of the three Recovery Units mentioned above, to help increase resiliency of each unit and ensure the long term genetic representation of the species through protection from stochastic events such as wildfire. Monitoring will detect these numbers for at least 5 years.

Q. Are there actions that the general public can take that will help the frog recover?

A. Yes, there are actions that individuals may take to help maintain the integrity of mountain yellow-legged frog habitat:

- Follow guidelines at recreational areas concerning authorized and unauthorized activities;
- Use appropriate trash cans, or pack trash with you when you depart recreation areas;
- Appropriately and safely dispose of chemical products (e.g. please do not dump used motor oil or pesticides in streams or rivers);
- Participate in local stream cleanups;
- Sanitize shoes before/after entering riparian areas to reduce the spread of chytrid fungus into pristine areas;
- Never dispose of fish or aquarium contents into waterways;
- If you find evidence of an illegal marijuana grove, leave the site immediately and report it to local law enforcement and the land manager;
- Safely extinguish campfires and follow local fire restrictions when you recreate on public land.

Q. Where can I read the Recovery Plan for the mountain yellow-legged frog?

A. You may obtain a copy of the recovery plan from our national ECOs website or the Carlsbad Fish and Wildlife Office website: <http://www.fws.gov/endangered/species/recovery-plans.html>. Alternatively, you may contact the U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, 2177 Salk Avenue, Suite 250, Carlsbad, CA, 92008; telephone (760) 431-9440.

Q. How do I comment on the draft recovery plan?

A. Anyone wishing to provide comment or additional information on the status of the mountain yellow-legged frog in Southern California may do so during the 60-day public comment period from July 19, 2018 – September 17, 2018.

Comments can be submitted by mail, hand delivery to the Carlsbad Fish and Wildlife Office or email.

- Submit email comments to: fw8cfwocomment@fws.gov.
- U.S. Mail or hand delivery: Field Supervisor, U.S. Fish and Wildlife Service, 2177 Salk Avenue, Suite 250, Carlsbad, CA 92008.
- Comments must be mailed and received by September 17, 2018 to be taken into consideration as we develop the Final Recovery Plan for the mountain yellow-legged frog.