

Central California Tiger Salamander Recovery Plan Questions and Answers



1. What is a recovery plan?

Recovery plans provide a road map with detailed site-specific management actions for private, federal, and state cooperation to conserve species listed as threatened or endangered and their ecosystems. A recovery plan is a non-regulatory document. It provides guidance on how to best help listed species achieve recovery. Any individual, public or private organization, or government agency can voluntarily contribute to the recovery of the Central California tiger salamander (*Ambystoma californiense*) by implementing activities outlined in the plan.

2. What is the goal of the Central California Tiger Salamander Recovery Plan?

The goal of this recovery plan is to reduce the threats to the Central California tiger salamander to ensure its long-term viability in the wild and allow for its removal from the list of threatened and endangered species. The recovery objectives of the plan are:

- a. Secure self-sustaining populations of Central California tiger salamander throughout the full range of the distinct population segment, ensuring conservation of native genetic variability and diverse habitat types (e.g., across elevation and precipitation gradients);
- b. Ameliorate or eliminate the threats that caused the species to be listed and any future threats; and
- c. Restore and conserve a healthy ecosystem supportive of Central California tiger salamander populations.

3. What is the current status of the Central California Tiger salamander?

The Central California distinct population segment of the California tiger salamander was federally listed as threatened in 2004 under the Endangered Species Act, with final critical habitat established in 2005. Note: The California tiger salamanders around Sonoma County (Sonoma distinct population segment) and Santa Barbara (Santa Barbara distinct population segment) are federally listed as endangered.

4. Where is Central California Tiger salamander habitat located?

The Central California tiger salamander occurs in Alameda, Amador, Calaveras, Contra Costa, Fresno, Kern, Kings, Madera, Mariposa, Merced, Monterey, Sacramento, San Benito, San Mateo, San Joaquin, San Luis Obispo, Santa Clara, Santa Cruz, Stanislaus, Solano, Tulare, Tuolumne, and Yolo Counties.

During the California tiger salamander's life cycle, it utilizes both aquatic and terrestrial habitat. Although salamander larvae develop in the vernal pools and ponds in which they were born, once a metamorph leaves its natal pond and enters a burrow, it will then spend the vast majority of its life underground. Adult Central California tiger salamanders engage in mass migrations during a few rainy nights per year. During these rain events, adults leave their underground burrows and return to breeding ponds to mate and will then return to their underground burrows.

5. What threats is the Central California Tiger salamander facing?

Multiple factors have contributed to population declines of this species, including habitat loss and fragmentation; predation from, and competition with, invasive species; hybridization with non-native barred tiger salamanders (*Ambystoma tigrinum*); mortality from road crossings;

contaminants; and small mammal burrow control efforts. Potential threats include introduction of diseases such as ranaviruses and chytrid fungi, and climate change.

6. How will residents of the counties identified in the recovery plan be affected?

Most county residents will not be affected. The plan describes opportunities for implementation of conservation measures including opportunities for sale of conservation easements that could result in financial benefit to local landowners.

7. Will this recovery plan benefit other species?

Healthy, self-sustaining populations of Central California tiger salamanders require open areas of grasslands, woodlands and seasonal breeding pools, home to many other wildlife species. Raptor species (e.g., owl and red-tail hawk) and vernal pool-dependent species (e.g., western spadefoot toad and vernal pool tadpole shrimp) will also benefit from the plan.

8. What are the costs associated with the Central California Tiger Salamander Recovery Plan?

The total estimated cost of recovering Central California tiger salamander through 2067 is \$85,375,000. There is no funding allocated with this plan. The recommended actions are advisory and voluntary only to individuals or entities that choose to assist in the recovery of the species.

For more information about species recovery plans and how you can support species recovery, visit: <https://www.fws.gov/endangered/species/recovery-faq.html>. To learn more about the Service's recovery program visit: <https://www.fws.gov/endangered/esa-library/pdf/recovery.pdf>.