California Red-legged Frog Project Fact Sheet

Translocation Summary

- On March 14, 2020, California red-legged frog (*Rana draytonii;* CRLF), the California State Amphibian, was reintroduced to southern California nearly 20 years after it became locally extinct creating a 420 km range gap between northern Los Angeles County and Baja California, Mexico.

- CRLF egg masses were transferred from the Sierra de San Pedro Mártir Mountains in Baja California, Mexico, to the 8,400-acre Santa Rosa Plateau Ecological Reserve in Riverside County, and a privately-owned ranch in Mesa Grande in San Diego County.

- Many threats contributed to the estimated 70% decline and 1996 Federal listing of CRLF, including habitat loss, water diversions, drought and predation by nonnative species (e.g. bullfrogs and crayfish). The primary threat at each reintroduction site (bullfrog and invasive fish) were eliminated in advance of the reintroductions. In addition, the reintroduction sites are regularly monitored by biologists to provide early detection and removal of any returning invasive species.

Partners and Roles

- This reintroduction event is the culmination of decades of preparation by partner organizations, including the United States Fish and Wildlife Service (USFWS), the U. S. Geological Survey (USGS), the San Diego Natural History Museum (SDNHM), The Nature Conservancy (TNC), and the Mexican nonprofit organization, Conservación de Fauna del Noroeste (FAUNO).

- **The Nature Conservancy (TNC)** initially began assembling and managing protected lands at the Santa Rosa Plateau in 1984, and between 1989 and 2000, TNC undertook a massive bullfrog eradication effort to save the California red-legged frog at this site. Despite eradicating bullfrogs from the site in the early 2000s, CRLF disappeared from the site in 2002. An aggressive monitoring and control program for bullfrogs has continued to facilitate the reintroduction of California red-legged frog one day. At Santa Rosa Plateau Ecological Reserve, bullfrogs have not been detected since 2012. In 2018, TNC constructed artificial ponds adjacent to native habitat to serve as refuge habitat for aquatic species during drought conditions. In 2007, TNC worked with a private landowner to establish a Conservation Easement over an area of private land in San Diego County with a remarkable representation of oak woodlands and riparian habitat. The development of the Conservation Easement will ensure the property is protected in perpetuity. The landowner's exemplary dedication to use of the property for recovery of declining species led to cooperation with USFWS Recovery Program and USGS to eliminate bullfrogs and restore habitat on the property.

- In 1996, the **United States Fish and Wildlife Service** determined the California red-legged frog was threatened with extinction, and in 2002, a Recovery Plan for the species was developed that identifies core areas for recovery, including the Santa Rosa Plateau. In 2020, USFWS developed a Programmatic Safe Harbor Agreement to facilitate reintroduction of CRLF to non-federal lands. This agreement will provide landowners, including the private rancher, protection from take prohibitions while encouraging the wider use of non-federal lands for recovery of this species.

- Since 1999, **USGS** has performed extensive surveys for CRLF throughout southern California to document and monitor populations. USGS is a pioneer in the development of novel techniques to recover this species and the agency has led translocation of egg masses elsewhere in the state, including in the Santa Monica Mountains National Recreation Area. In 2014, the US Geological Survey confirmed and built upon genetic results concluding that extirpated CRLF populations south of Los Angeles County had been most closely related to populations in Baja California. This and subsequent genomic data prompted the idea to reintroduce genetically similar individuals from the Mexico populations back to the United States.

- Efforts to determine the status of red-legged frogs in Baja California started in 2006 by USGS and **SDNHM**. In 2016, the Mexican conservation organization, **FAUNO**, led the team and its discovery of the remaining remnant populations in the mountains in northern Baja California. FAUNO has also aggressively worked on habitat conservation for the species, which has stabilized conditions for the recovery of CRLF. In 2018 and 2019, additional breeding ponds were built at two sites with assistance of **The Wildlife Projec**t and SDNHM. One of these ponds provided the source population egg masses for this first translocation event.

Looking Ahead

- Pending continued breeding success in Baja California, additional translocation events are possible in 2020. If CRLF populations are successfully reestablished within the United States, they will be used as a domestic source to repopulate other locations throughout the range gap in both the United States and Mexico.

- This project seeks to:
    - 1) Create greater resilience for this species through establishment of new populations in the historical range;
    - 2) Develop a cooperative and mutually beneficial binational partnership with a Mexican conservation organization critical to the range-wide recovery of this species;
    - 3) Reestablish the species at the Santa Rosa Plateau, a Core Area for recovery in the United States (USFWS 2002); and,
    - 4) Demonstrate the potential for privately-owned lands to actively contribute to declining species' recovery;
    - 5) Improve our understanding of California red-legged frog natural history and share this information with the public at large to foster support for conservation; and
    - 6) Restore the historical biodiversity of the southern California wetlands as this species plays an important role in the ecological integrity of these systems.