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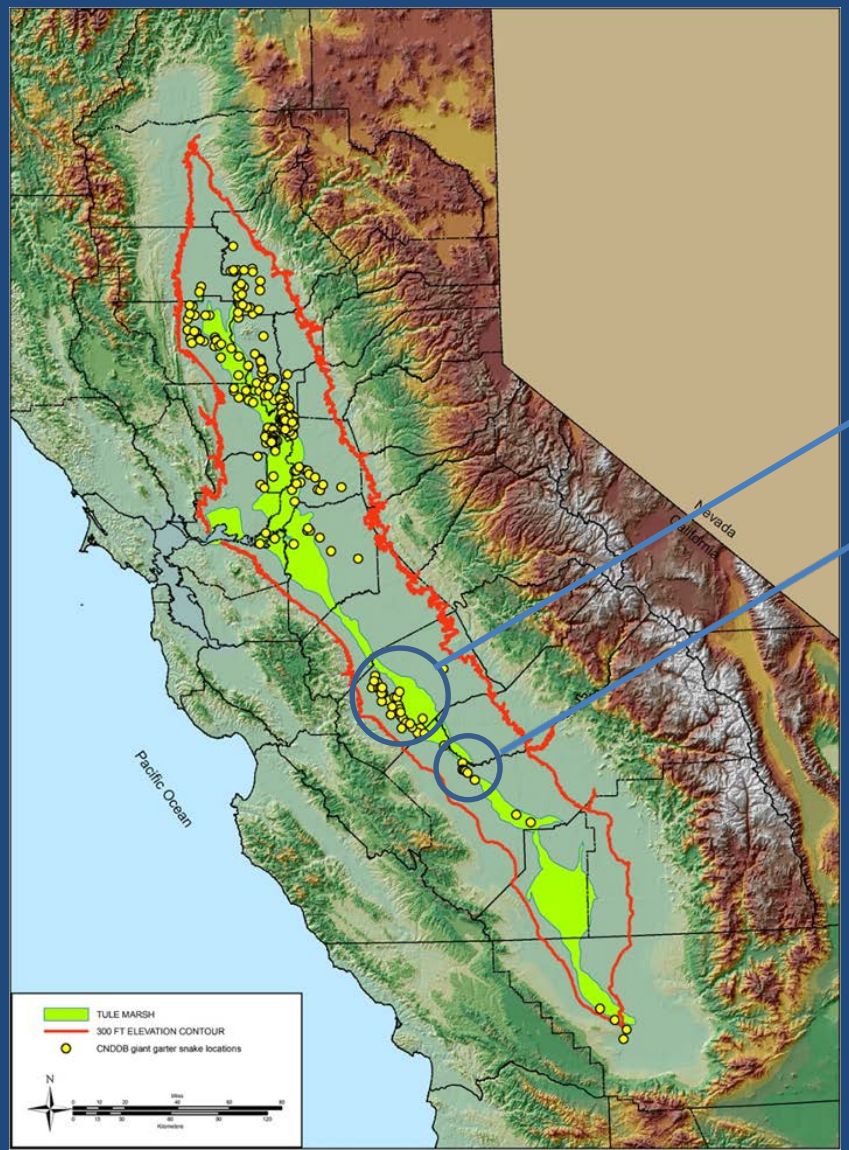
# Giant Garter Snake

## Historic Decline and Plan for Recovery

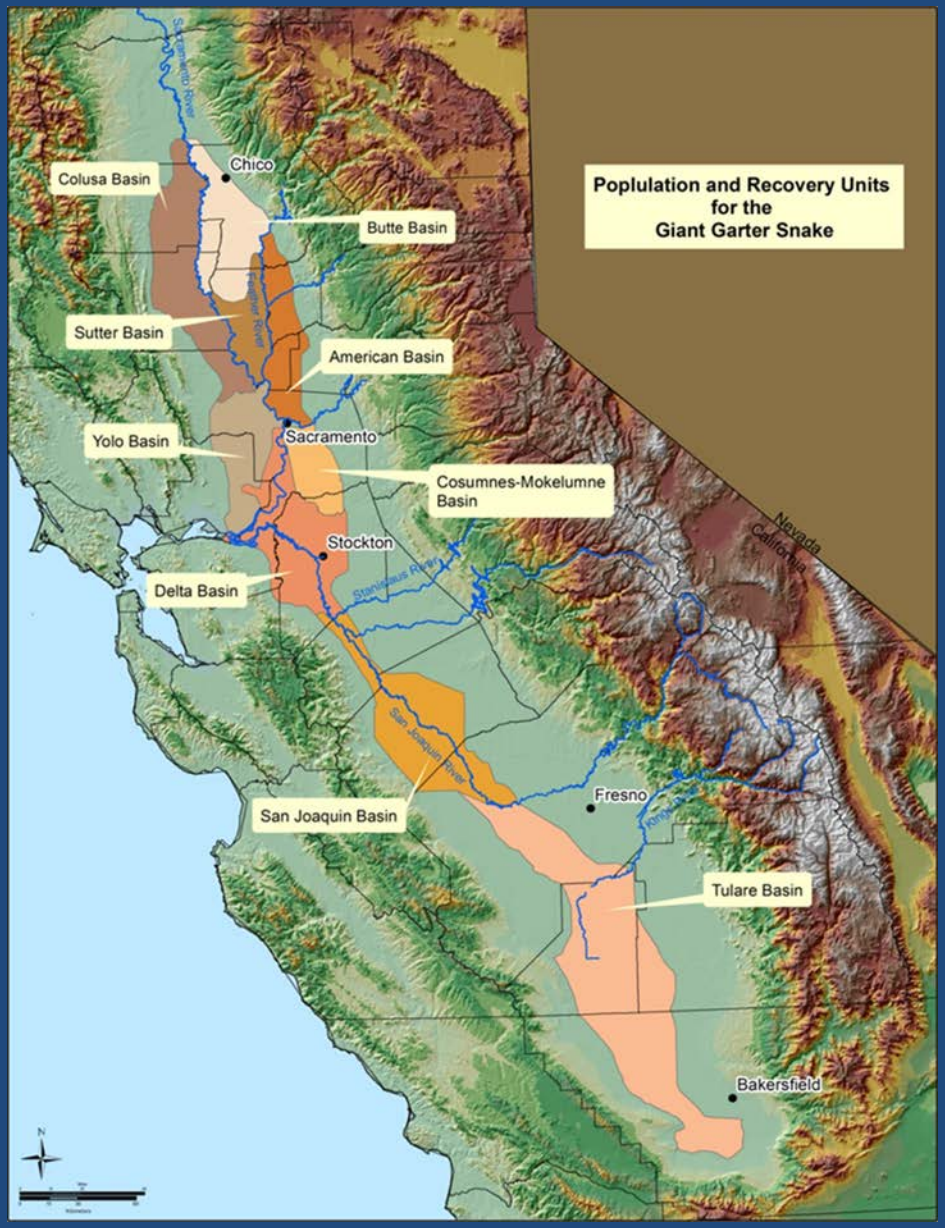



**Grasslands Ecological Area**

**Mendota Wildlife Area**

Exhibit GWD-11, p. 002


- 2017 USFWS Recovery Plan calls for at least 12 preserves in San Joaquin Valley wetlands that receive CVP water from the Delta.
- Water availability and reliability is critical to species recovery: USFWS will work with USBR and SWRCB to secure it.
- Long-term success requires monitoring that includes a 3-year drought period to "ensure that giant garter snakes are no longer threatened by an insufficient water supply."




- Recovery Plan takes an ecosystem approach that will also assist other species
- San Joaquin and Tulare Basin Recovery Units include all CVPIA refuges south of the Delta
- Southernmost known breeding population is in the Grasslands Ecological Area

Exhibit GWD-11, p. 004

# CVP Water Uses and Wildlife Benefits on Refuges

- Aquatic habitat required for breeding and genetic diversity
- Wetland vegetation provides cover from predators and foraging habitat
- Production of small fish, tadpoles, and frogs for food supply

# Potential Impacts of WaterFix Project

- Loss of aquatic habitat in spring and summer, and reduced food supply → decreased mating and survival, unstable reptile and amphibian populations, likely extirpation of giant garter snake in San Joaquin Valley
- Reduced wetland plant production → increased predation, lower survival rates
- Failure to achieve Recovery Plan goals → loss of genetic diversity, decline of species