

Climate Change Research Program Round 3 Awards

University of California, Riverside

Resilient Restoration: Advancing Ecological, Cultural, and Community Resilience with Tribal Nations in Southern California

Principal Investigators: Helen Regan and Janet Franklin (UC Riverside) \$990,350.00

Partners:

- San Diego State University
- Climate Science Alliance
- Tribal Working Group (collaboration of 18 Southern California tribes)
- Intertribal Agriculture Council

Research Priority Area(s) addressed:

- Supporting and Protecting Vulnerable Communities from the Impacts of Climate Change
- Integrating Land Use, Conservation, and Management into Climate Change Programs

Crosscutting Thematic Lenses:

- Social Dimensions of Change
- Integrating climate vulnerability/adaptation with climate-smart approaches

Research Activities:

The objective of this project is to promote Tribal resilience by developing knowledge and supporting actions that enhance persistence of cultural practices with a focus on preserving the ecosystems and species that are integral to tribal communities. The research will advance understanding of the impacts of climate change on a suite of native plant species that serve as the foundation of southern California's biodiversity and are critical to Tribal culture, health, and well-being. Research activities will assess the vulnerability of a suite of culturally significant plants to climate change impacts, inform restoration actions to maintain biodiversity, increase food security, and ensure that the Tribes have access to culturally significant plants for their health, wellness, and tribal practices. The project will also identify and provide seed funding for pilot projects to test restoration and climate adaptation strategies on Tribal Lands and build capacity for tribal professionals, community members and youth.

Facilitates Greenhouse Gas Emissions Reductions:

By informing climate adaptation through restoration and preservation of native ecosystems and culturally significant native plants, particularly oaks and riparian forest species, our project will also facilitate the reduction of greenhouse gases (GHGs). Implementing climate adaptation and restoration activities in these natural systems can increase carbon stocks, prevent further degradation of carbon sink ecosystems, and maintain landscape spatial heterogeneity and diversity.

Benefits Disadvantaged, Low-Income, and/or Underserved Communities:

Climate adaptation planning is critical to communities living at the wildland-urban interface, notably for the 18 federally recognized Tribes in southern California. This research will inform adaptation planning and implementation, supporting the unique needs of underserved tribal communities with integration and consideration of cultural resilience throughout the work. The project addresses a priority identified by the tribal communities directly, and furthermore, through an interdisciplinary research-tribal partnership, this project will facilitate capacity building for tribes through intertribal coordination.