

# THE CALIFORNIA NEVADA ADAPTATION PROGRAM



The California Nevada Adaptation Program (CNAP) work focuses on adaptation, with an intentional transition from statewide climate research toward preparing communities for local-level action to address regional climate hazards. This emphasis on adaptation provides opportunities to address some of the most pressing climate issues in California and Nevada at the regional and community level.

#### **IMPACTS**

California and Nevada will be increasingly impacted by extreme heat, wildfire and smoke, flooding, drought, and coastal flooding. These climate impacts intersect and will strain the region's communities. CNAP is working to create a network of scientists, local institutions and community members to help create a climate resilient future.

#### **APPROACH**

CNAP's approach to climate resilience is built on three key pathways — convening and connecting, co-produced research, and catalyzing solutions. These pathways are supported by five core tenets: knowledge-to-action partnerships, mental/physical health, JEDI principles (Justice, Diversity, Equity, and Inclusion), climate literacy, and community resiliency.

#### **PROJECTS**

Our multi-disciplinary team focuses on the region's acute climate impacts: extreme heat, wildfire smoke, coastal flooding, water scarcity, and mental health. Six core research projects work with community partners to leverage local knowledge to promote equitable adaptation approaches:

#### **PARTNERING INSTITUTIONS:**

- Scripps Institution of Oceanography, UCSD
- University of California, Merced
- · University of Nevada, Reno
- University of Nevada, Las Vegas
- Kern Community College District
- Climate Science Alliance
- DRI

**Constructing Climate** 

**Resilient Communities,** 

Landscapes, and Coasts

in California and Nevada

### MISSION

To improve resilience in California and Nevada by providing decision makers usable climate information through integrating cutting-edge physical and social science.



#### The Southern Nevada Heat Resilience Lab (SNHRL)

- SNHRL will grow the capacity for Southern Nevada to increase heat resilience in communities by implementing effective and just adaptation.
- Brings together local agencies and community organizations with researchers who assist in designing potential solutions.

### Building Water Resiliency through Climate Information and Workforce Development in the San Joaquin Valley

- Addresses the variability of California's water supply and the changing water policy landscape in one of the nation's most agriculturally productive regions.
- This project centers local technical and educational staff from the Kern Community College District and the Central Mother Lode Regional Consortium of community colleges in creating a local knowledge-to-action pathway for water resource use, management, and adaptation.

### **Evaluating Nature-Based Solutions for Coastal Adaptation** in Southern California

- Explores how nature based solutions and Dynamic Adaptation Pathway Planning can reduce coastal flooding and erosion that threatens some of the West Coast's most heavily accessed beaches.
- Marginalized Indigenous communities maintain their connection to these coastal places and resources and are leading dialogue about coastal resources stewardship.
- This project will demonstrate how interdisciplinary knowledge can better support coastal communities to start making investments in adaptation actions.

## Supporting Household Health Adaptation to the Compound Events of Extreme Heat and Wildfire Smoke

Addresses household tradeoffs between cooling and wildfire

- smoke exposure in communities that lack or are financially unable to operate traditional air conditioning.
- This project will increase the opportunities for achieving optimal, equitable holistic household health outcomes in Northern Nevada and California related to the compound events of extreme heat and wildfire smoke.

#### **Adaptive Mind**

 Confronts the increasing mental health challenges associated with climate change, including from traumatic climate-related disasters, as well as from the pervasive impacts of a changing climate and the existential threat of climate change.

### Building Capacity through Reciprocity with Tribal Communities

- Through the Climate Science Alliance's Tribal Working Group, support Indigenous involvement in CNAP activities by identifying Tribal research priorities and center the co-production of that research through fellowships, compensation for Indigenous science consultants, and funding for Tribal led projects
- Bring together researchers and partners to engage frontline and historically excluded communities to address community identified local adaptation challenges and solutions. All projects recognize the critical importance of incorporating local and traditional knowledge in project processes, outputs, and outcomes.

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