



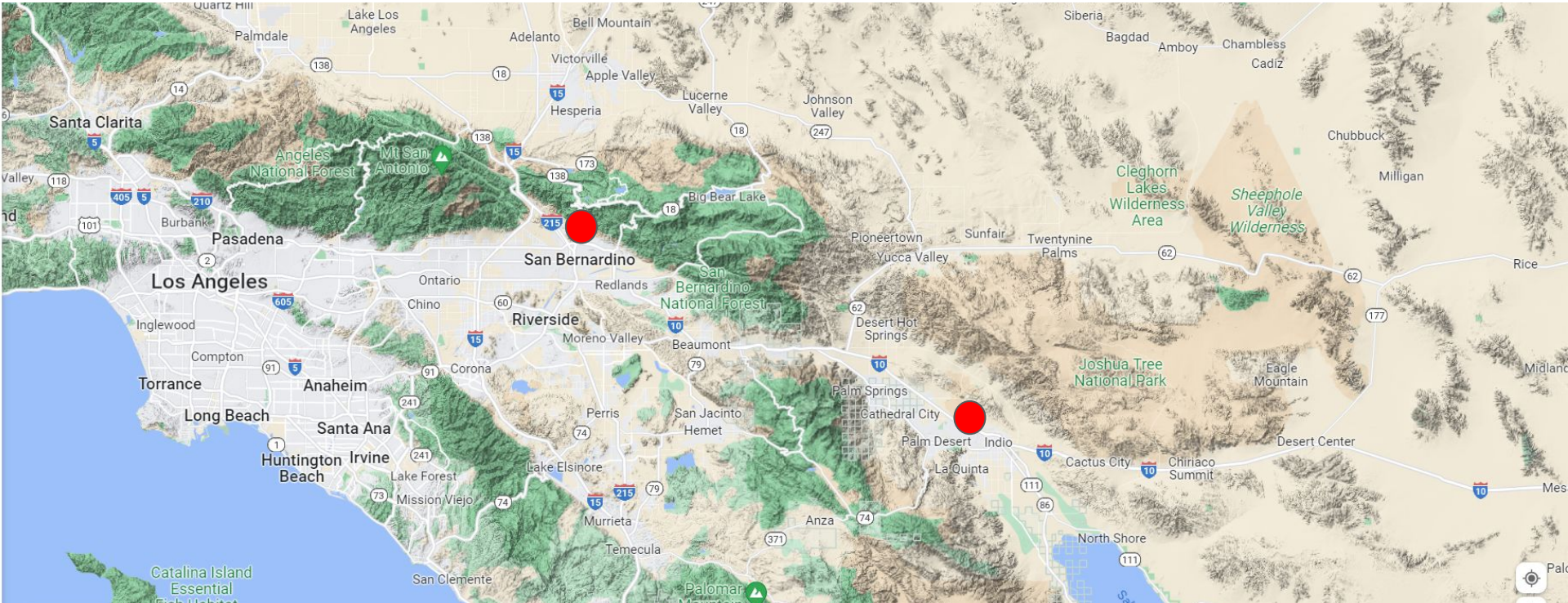
Institute for
Watershed
Resiliency




CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

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CSU San Bernardino Campus Locations



Community-Agency-University Partnerships

Support Best Practices & Innovations through Workforce Development & Student Learning



Mitigating Drought: Professional Development & Community-Based Research

- Regional Forest & Fire Capacity Program
- Headwaters Water Monitoring Program
- Headwaters Resiliency Partnerships
- “Academic Threading”
 - Course Curriculum
 - Student Fellowship Programs
 - Field Experiences
 - CSU-CSU Partnerships
 - Alumni Network



**National
Forest
Foundation**



CENTER FOR GEOSPATIAL
SCIENCE & TECHNOLOGY

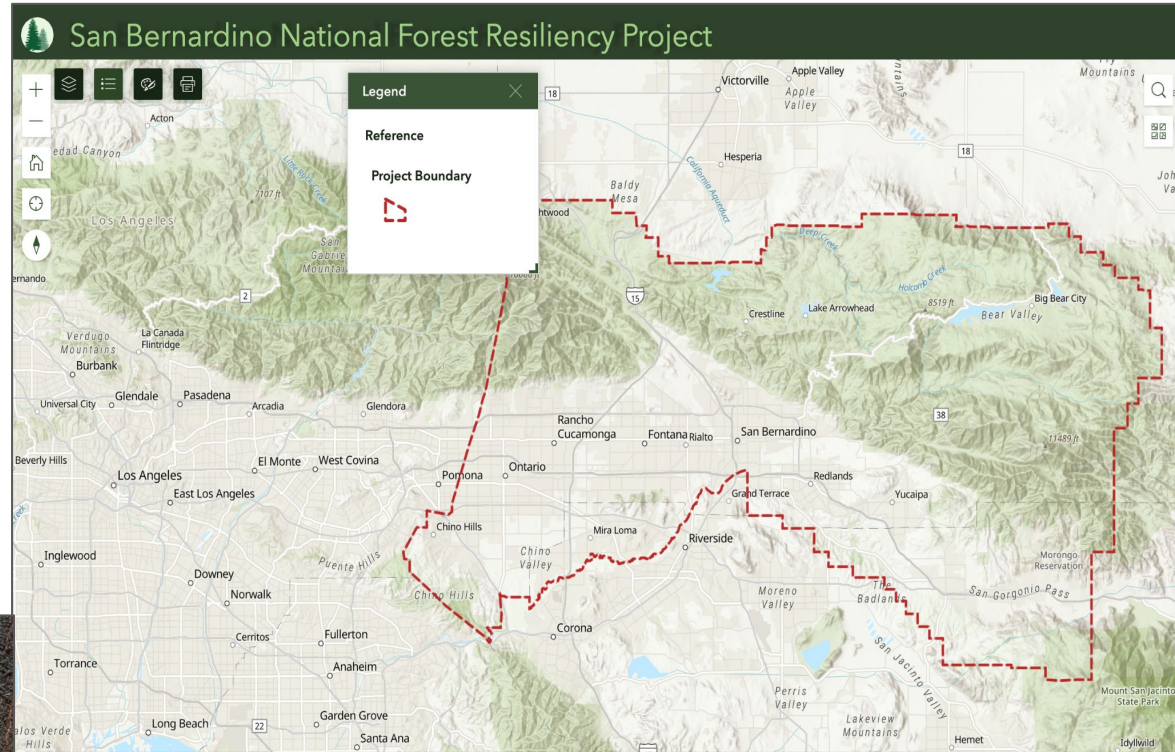


CSU **The California State University**
WATER ADVOCACY TOWARDS EDUCATION & RESEARCH

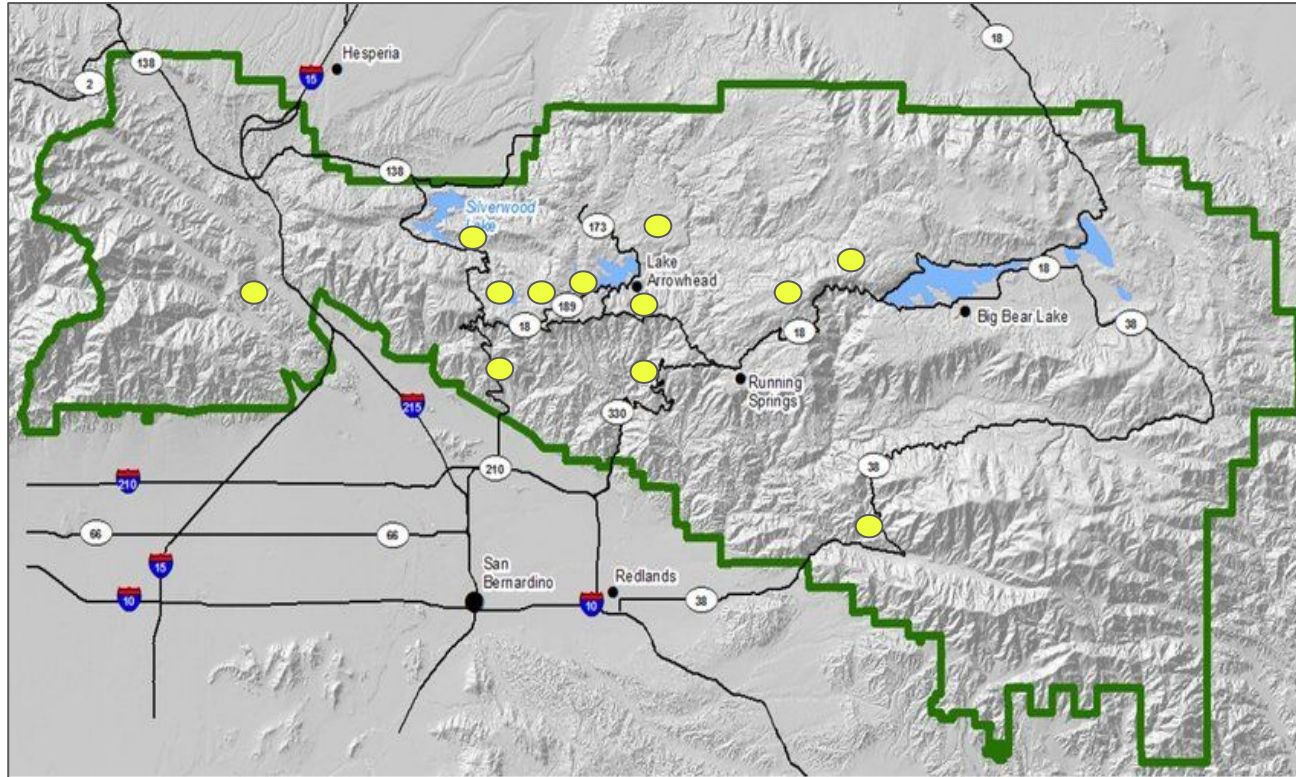
Regional Forest & Fire Capacity Program

Wildfire Resiliency & Community Engagement

- Monitoring Forest Conditions
- Community Capacity Building
- Community Engaged Research
- Outreach & Education
- Collaborative Adaptive Management Strategies (Droughts, Fires, Floods)



Headwaters Monitoring Program: Santa Ana & Mojave Basins

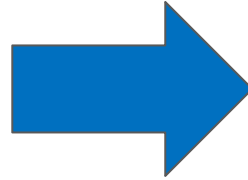


- Water Quality & Quantity (Droughts, Fires, Floods)
- Informs Water Agency & Resource Management
- Workforce Development/ Student Learning
- Data Sharing Partnership
- Public Education

Bi-weekly surface water monitoring, San Bernardino National Forest

Headwaters Resiliency Partnership: Partnership, Project & Resource Sustainability

To collaboratively implement projects across boundaries, in order to support and sustain resilient ecosystems and communities on a landscape scale in the Inland Empire mountains and foothills.

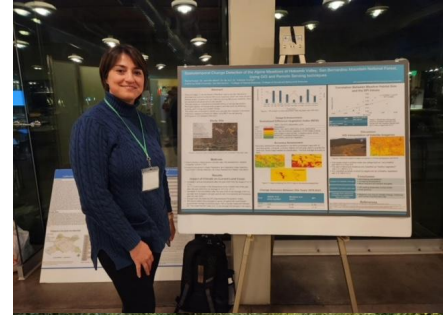


- Collaborative Monitoring & Planning
- Adaptive BMPs
- Professional Development
- Hub: Shared Resources & Expertise



CSUSB Research & Job Placement

- Giron, Kelley, 2023, Post-Wildfire Effects on Headwater Streams, San Bernardino National Forest, CA
- Ewing, Rama, 2022, Spatiotemporal change detection of the alpine meadows at Holcomb Valley, San Bernardino Mountain National Forest, using GIS and remote sensing techniques
- Darrow, Devin, 2022, The effectiveness of best management practices implemented at Lake Gregory, Crestline
- Estrada, Jovany, 2022, Using a Geospatial Analysis Tool to Visualize Water Impairments and Engage Stakeholders in the San Bernardino National Forest
- Frey, Anna, 2022, Identifying associations between human-environmental factors and water quality trends observed at perennial headwater streams of the San Bernardino National Forest, CA
- Mora, Jose A. 2019, Spatio-temporal assessment of headwater streams in the San Bernardino National Forest
- Caporuscio, Elizabeth, 2018, Evaluation of a sequential pond system for detention and treatment of runoff at Skypark, Santa's Village



Looking ahead.....

- Expanding Headwaters Monitoring Network - Ground to Surface
- Headwaters Monitoring Lab
- Field-based Learning, Outreach & Workforce Scholarship (FLOWS) Field School
- Watershed Planning & Management Certificate
 - Cyber Security, Field Monitoring, CEQA/NEPA, Cultural Resources, Public Health, Policy, Environmental Education.



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<https://www.csusb.edu/institute-watershed-resiliency>

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