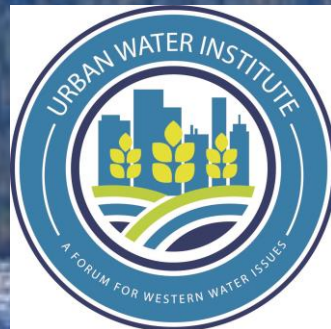


CALIFORNIA-UNITED WATER CONFERENCE



THANK YOU TO OUR SPONSORS

SILVER



GOLD



A Business Group of
Gannett Fleming



BRONZE

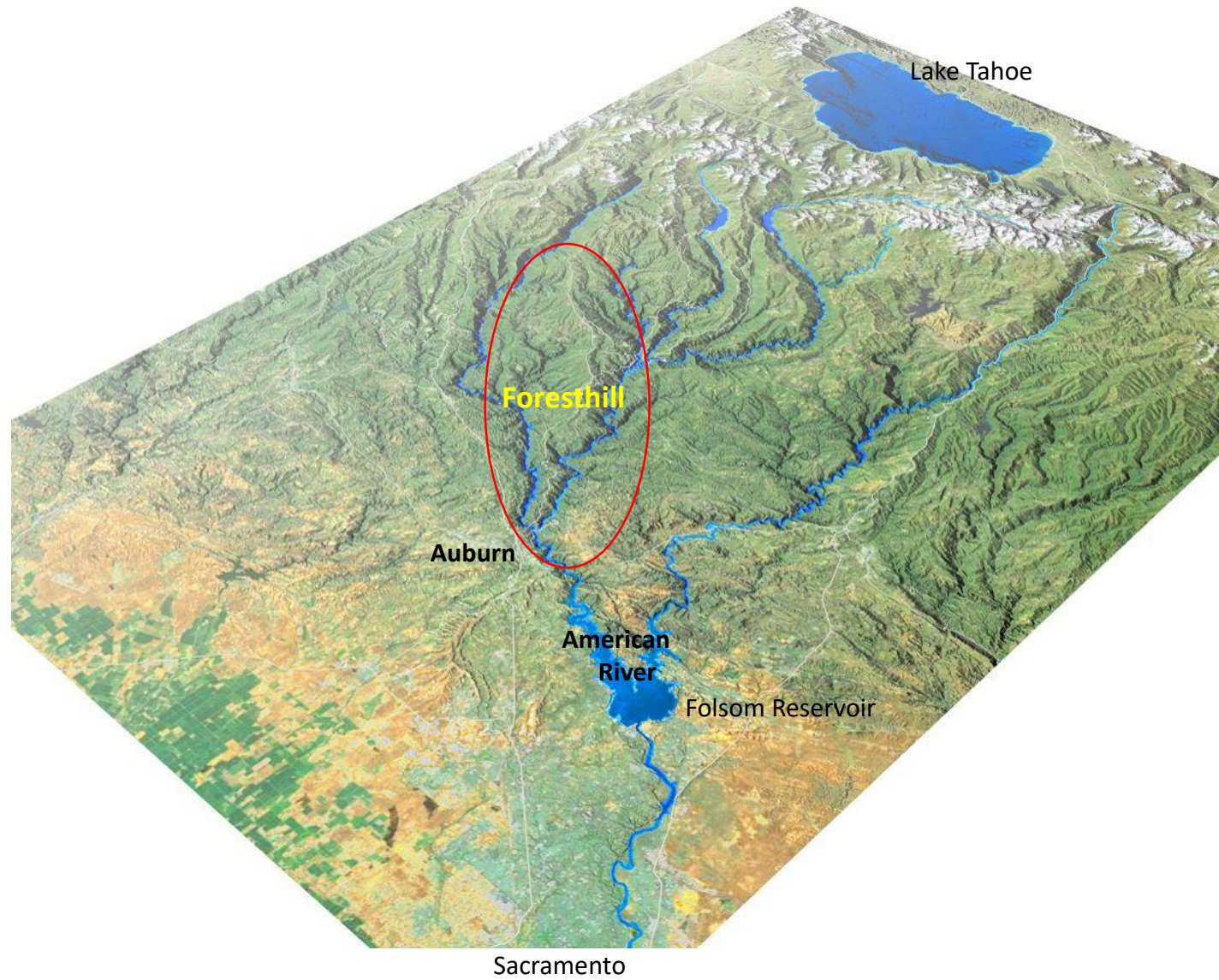


CALIFORNIA
ADVOCATES, INC.

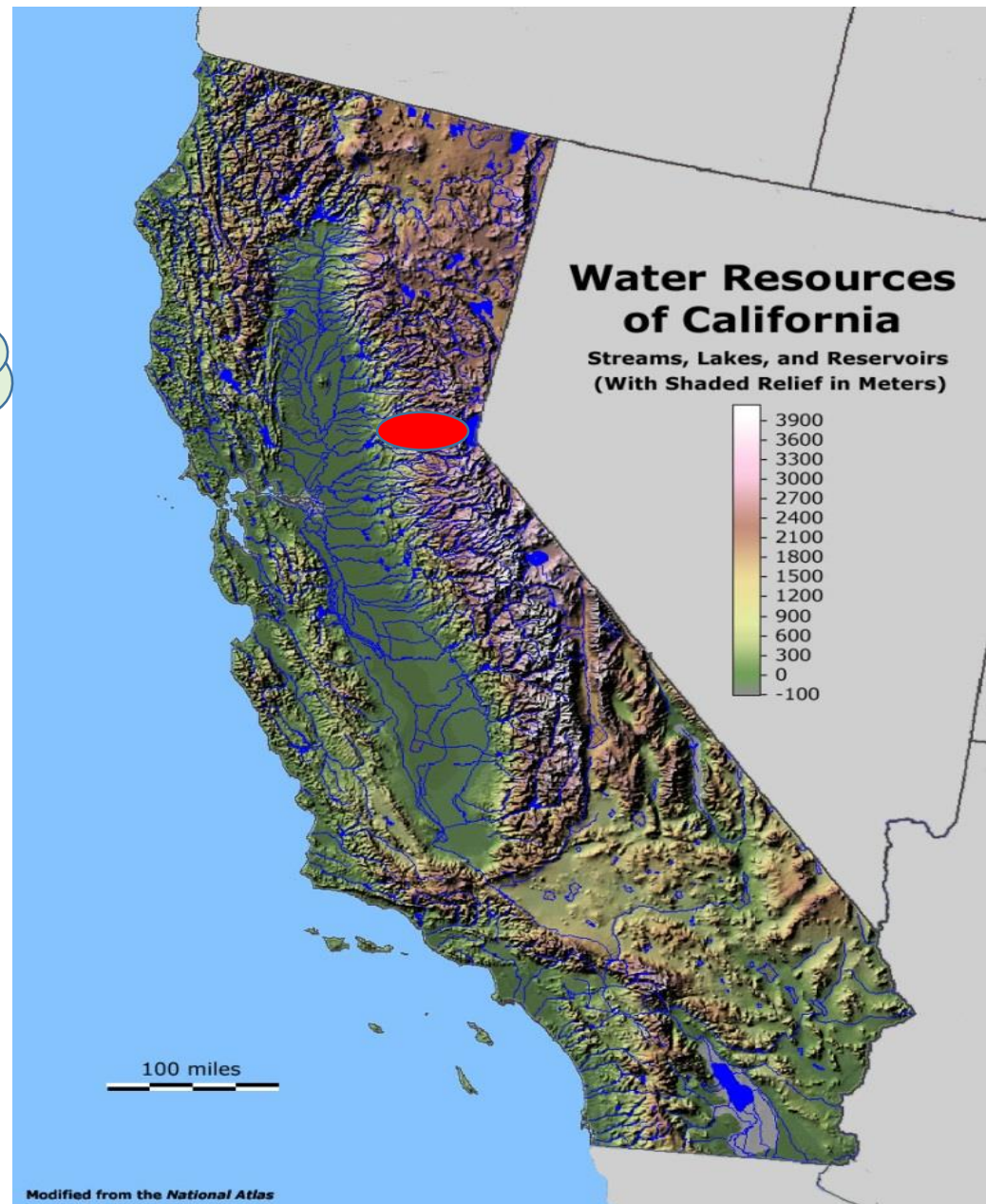
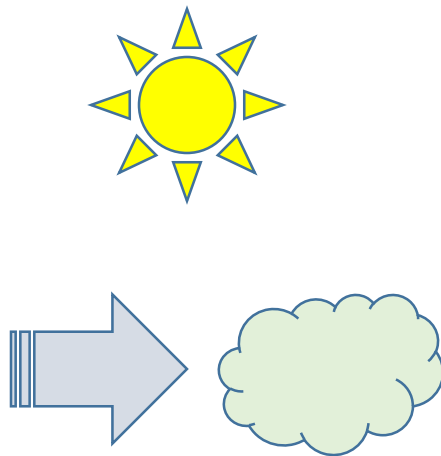




California's Water Reliability Begins with Resilient Headwaters









8

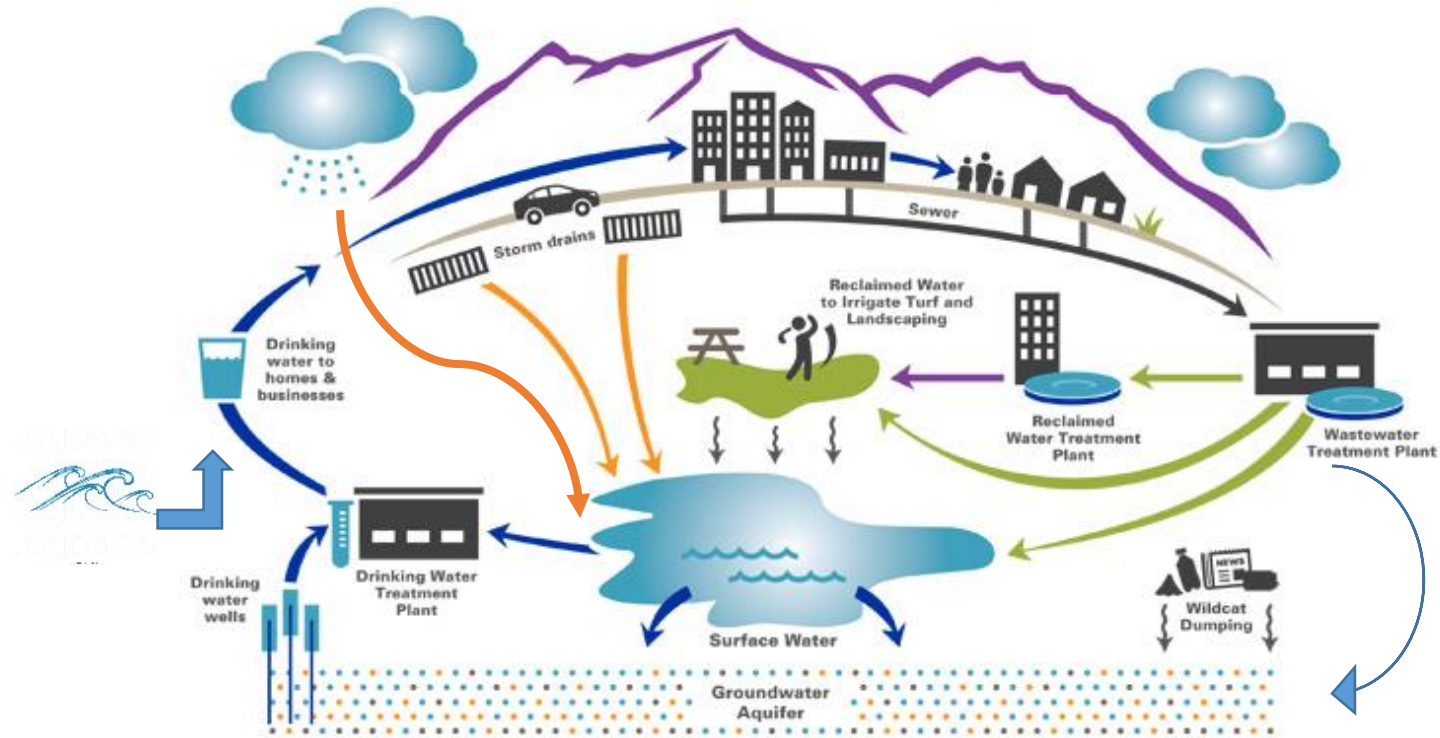




The Headwaters Storage Portfolio: Snow, Soil, Lakes



Urban Water Cycle



Rev 04/17/2014

California's Water Reliability Begins with Resilient Headwaters



The Headwaters' Most Pressing Management Challenge









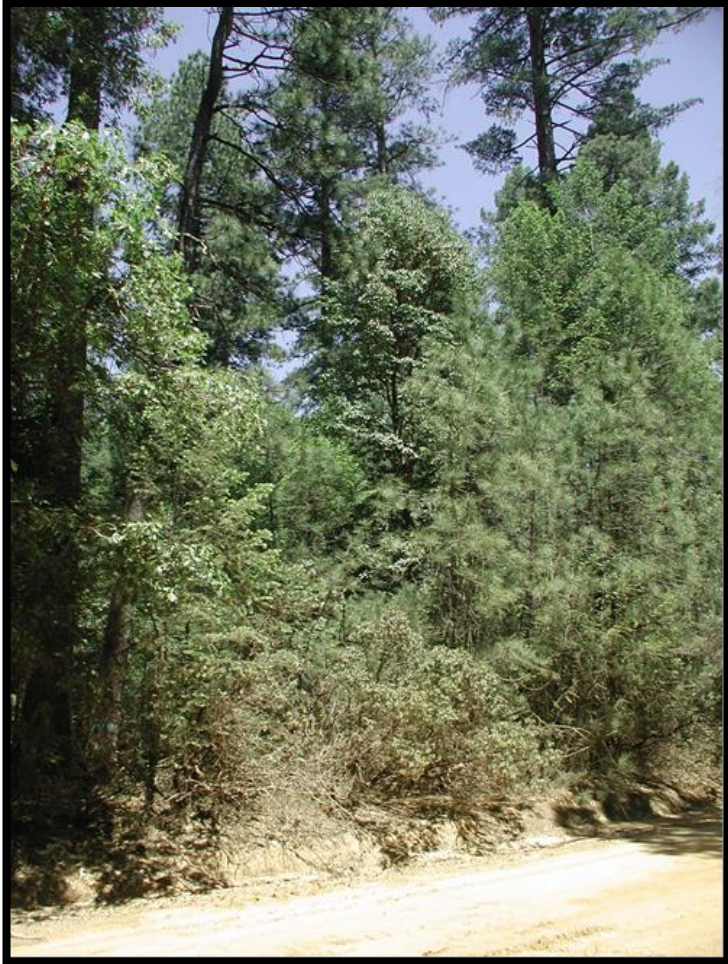








What We Can Do: **Watershed Vegetation Management**

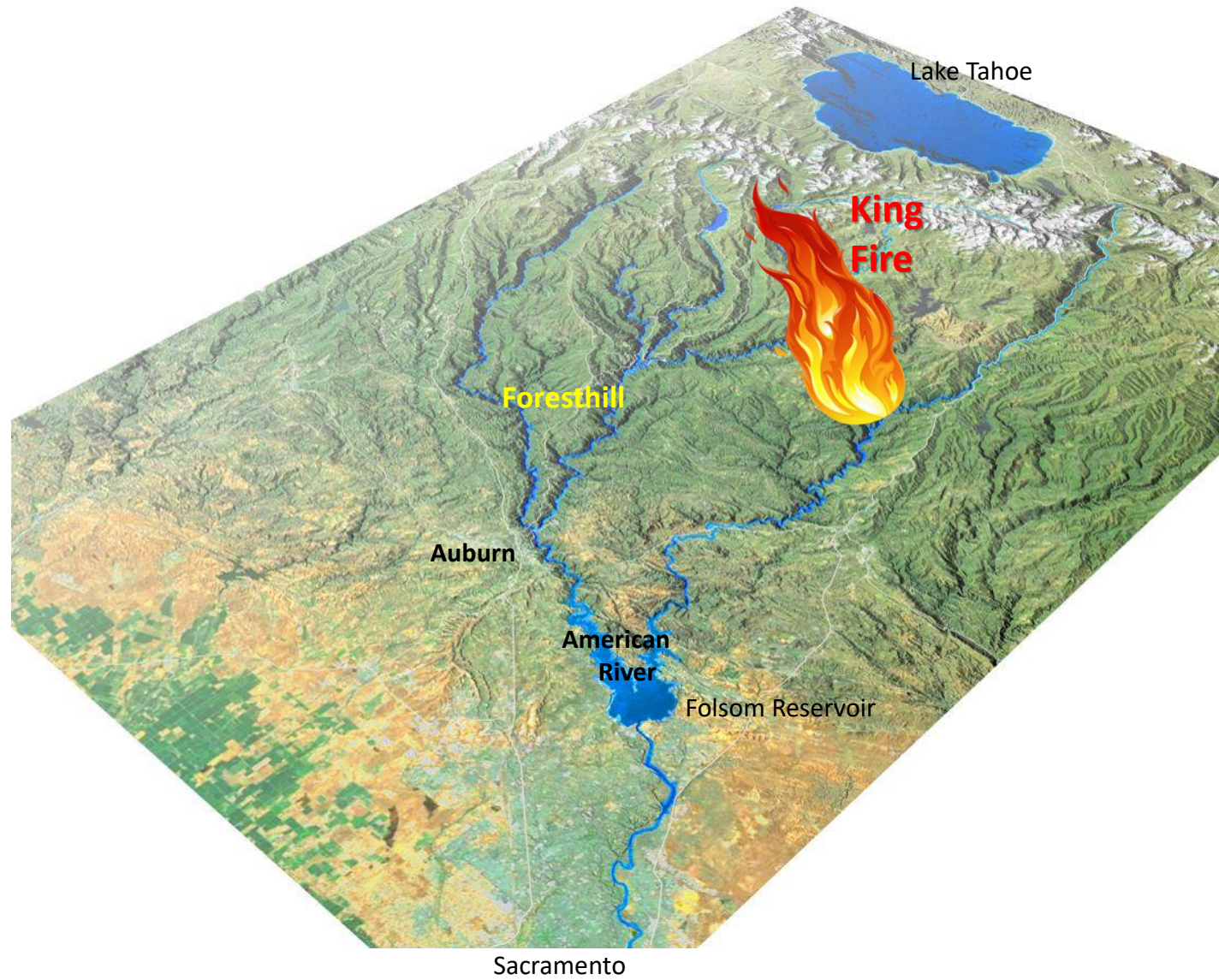


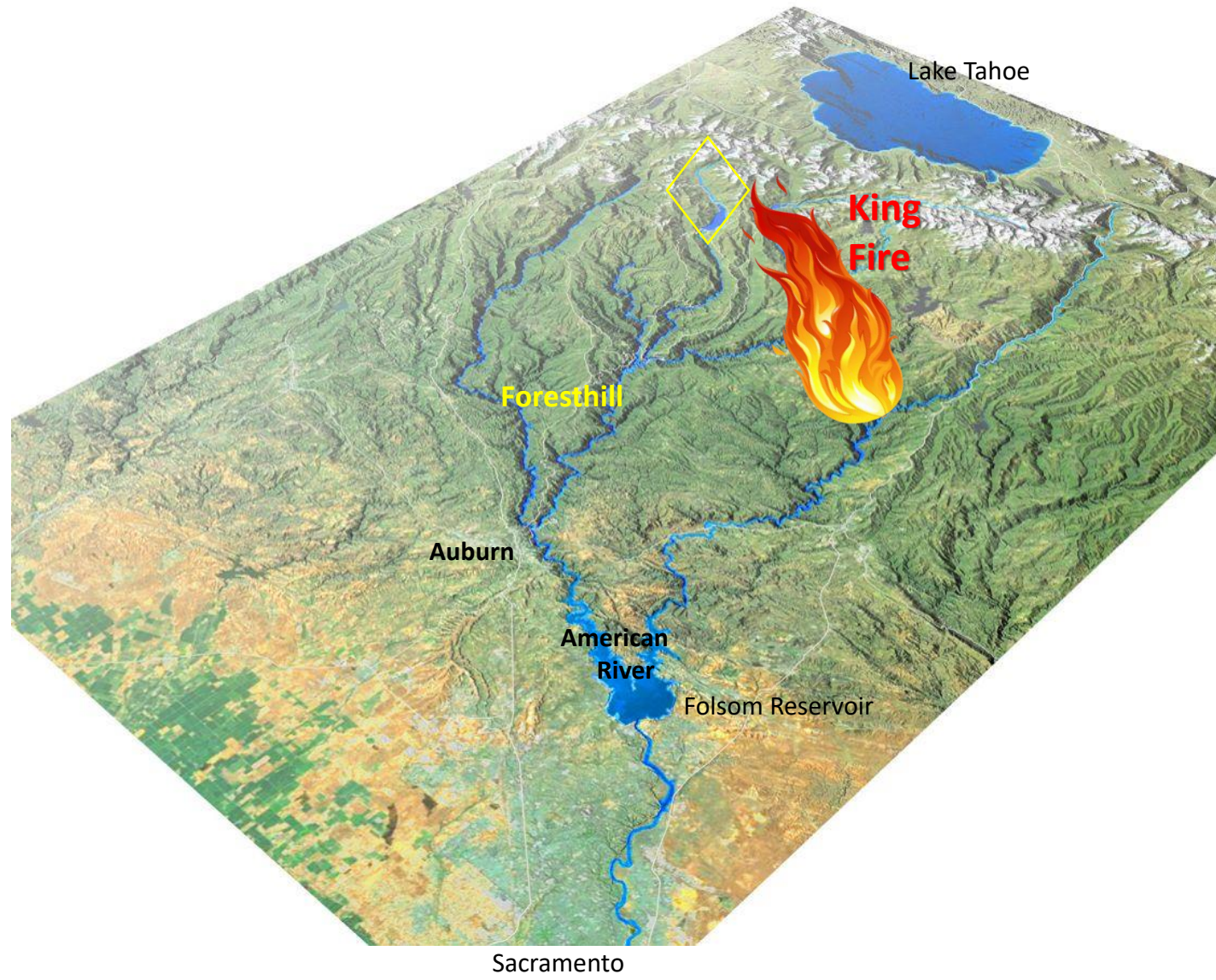
What We Can Do: **Scientifically Optimize Management**



What We Can Do: **Educate**

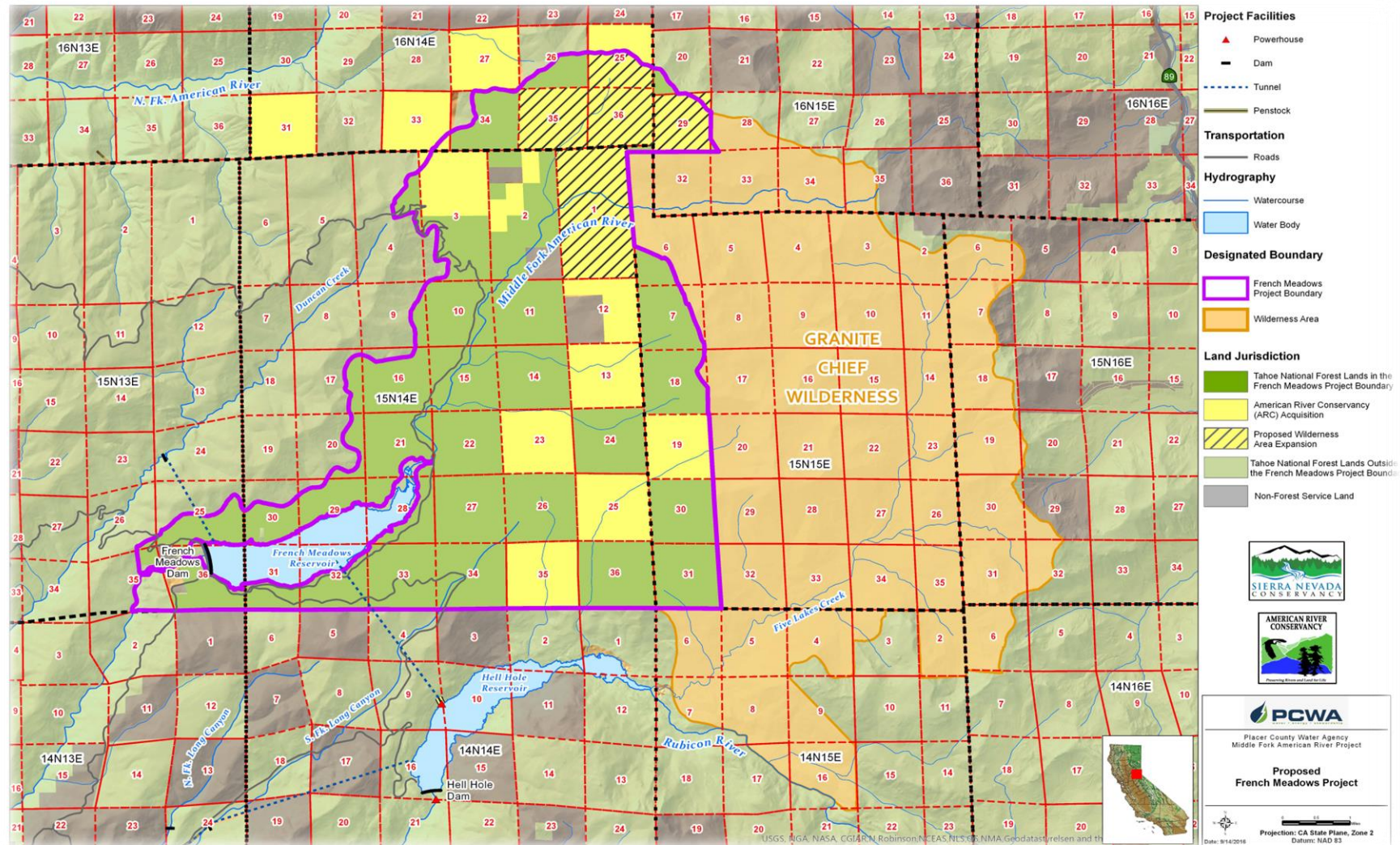






What We Can Do:

Partner and Invest



What Can We Do?

Manage California's Headwaters for the Long Haul & Big Picture



Stewardship at the Source

EBMUD's Approach to Watershed Management in the Sierra

Mike Tognolini
Director of Water and Natural Resources
East Bay Municipal Utility District

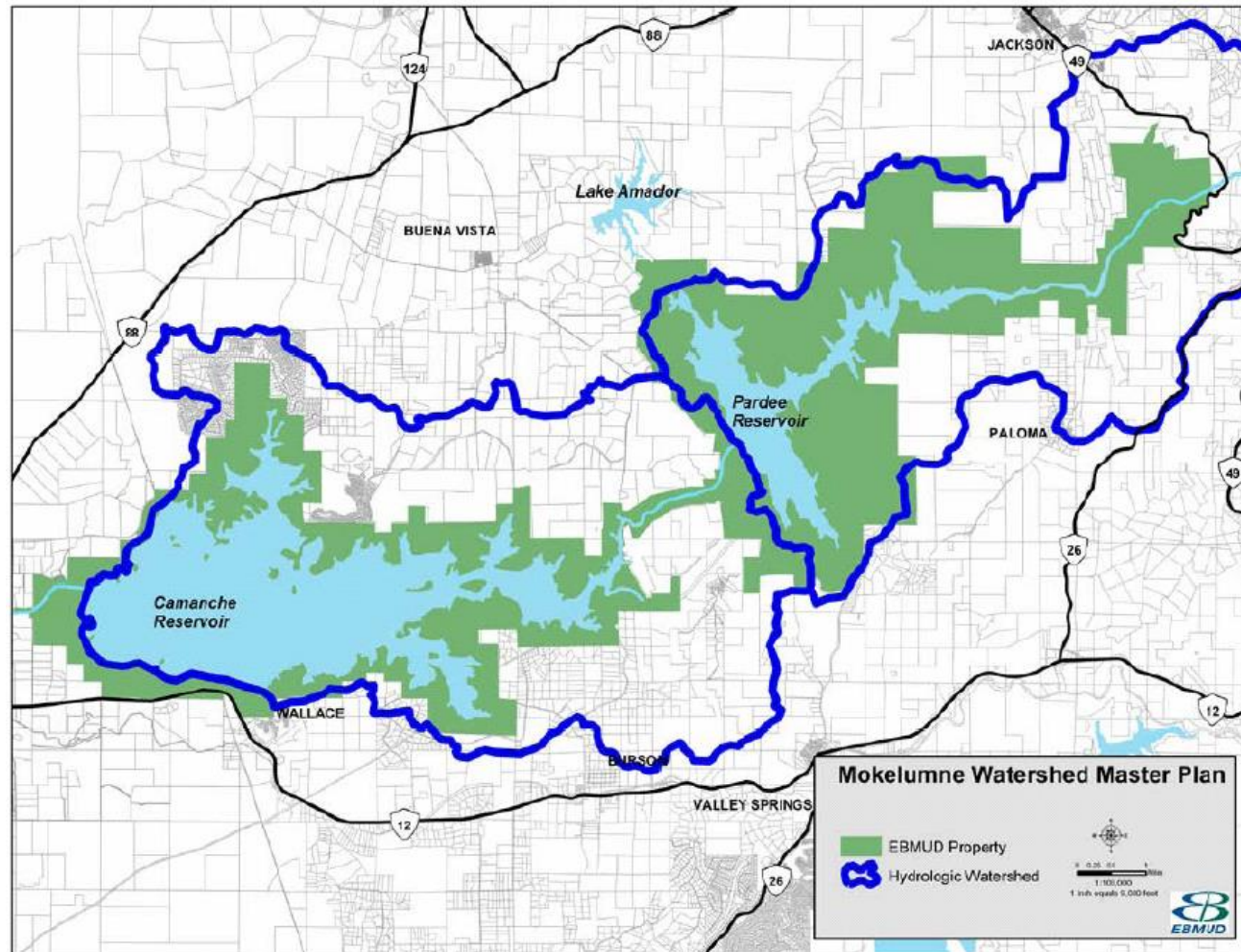
The Mokelumne River Watershed



EBMUD Watershed Lands



- EBMUD owns ~28,000 acres (19,000 upland and 9,000 surface water)



Our Mission



To manage the natural resources with which the District is entrusted; to provide reliable, high quality water and wastewater services at fair and reasonable rates for the people of the East Bay; and to preserve and protect the environment for future generations.



Goals of our Programs



- Protect water quality
- Preserve and protect habitat and native species
- Preserve open space
- Provide opportunities for recreation and safe public access



Protecting Water Quality: Fire Prevention



- Reduce fire hazard
 - Brushing
 - Grazing
 - Mowing
 - Prescribed Fire



Pre brushing



Mosaic pattern after brushing



A track skid steer with brush grapple was used to remove and pile brush (for burning). Stubs were manually removed. Area was seeded with Dryland pas mix. Cattle kept off for 3 months. Spray for Tecolote thistle in '15 and '16.

Range Management/Grazing



- 13,075 acres grazed
- Reduce risk of fire
- Enhance native grasses and control noxious weeds
- Targeted grazing can benefit sensitive species habitat



Federally Listed Species



Recreation



- Over 600,000 visitor days per year
- Mokelumne River Day Use Area
- Camanche Hills Hunting Preserve
- Camanche North and South Shore
- Pardee Reservoir
- Trail System



Opportunities on our Trails



- Walking, Equestrian, Dogs
- Special Events (permits required)
- School Events



Upper Mokelumne River Watershed Authority

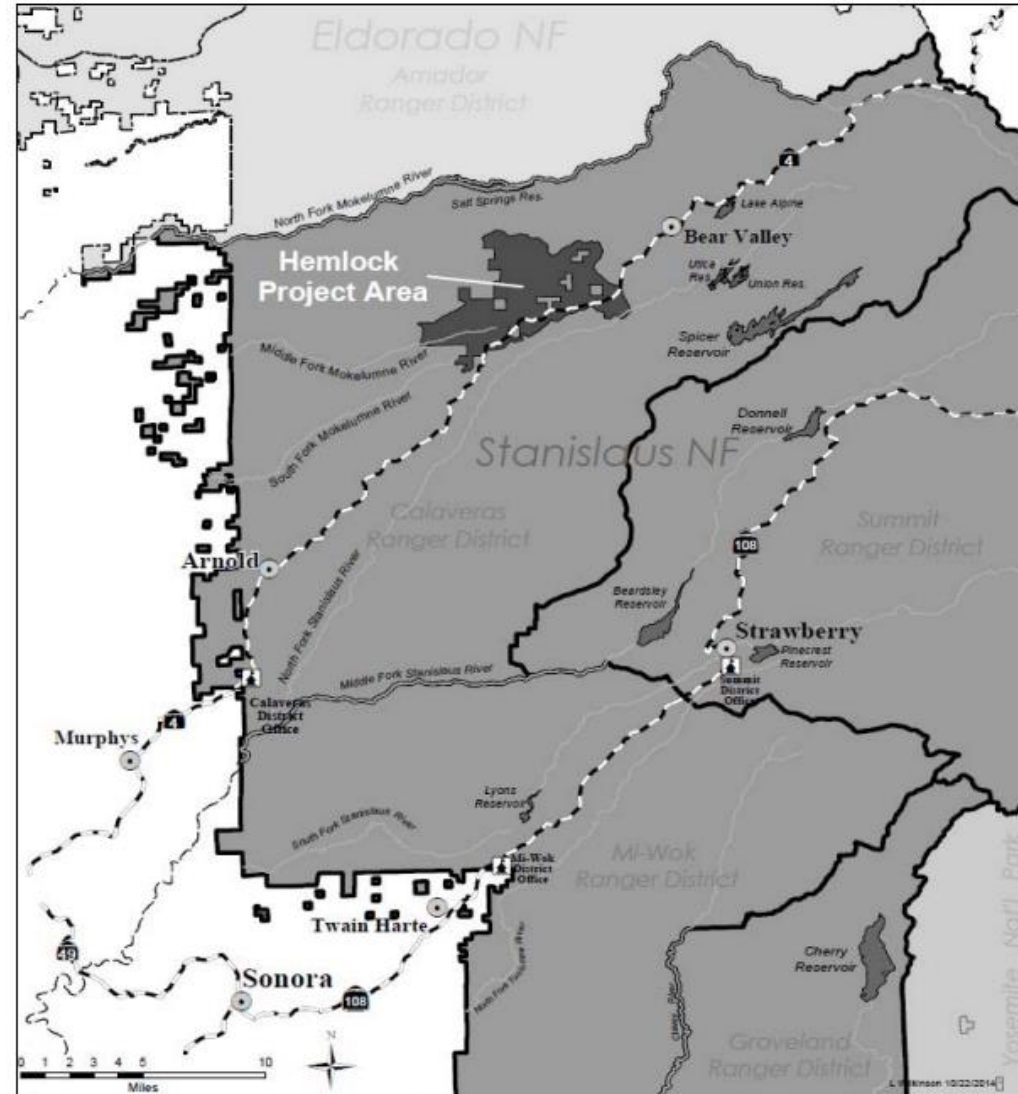


- UMRWA is a Joint Powers Authority comprised of
 - 6 water agencies,
 - 3 counties,
 - stakeholder groups (NGOs and the public)
- UMRWA tracks grant opportunities targeting forest and watershed health
 - Working with US Forest Service and Sierra Nevada Conservancy, identified over 14,000 acres of forest that need rehabilitation

UMRWA 14,000 acre fuel management area



- 2,000 acres treated
- 1,825 acres approved
- Grant - funded



2015 Butte Fire Recovery



- 71,000 acres (12,000 in Mokelumne Watershed)
 - Erosion Control Measures
 - Mulching and Seeding



Burn Scar



Mulch/Seed



Re-Growth

Partnerships and Collaboration



Mokelumne River Wild and Scenic Designation



- Signed into law
June 27, 2018
- State Wild and Scenic
Designation
- Protects 37 miles
upstream of Pardee
Reservoir
- Preserves the wild and
scenic values of the Upper
Mokelumne River
- Supported by broad group
of environmental and
water agency stakeholders



Looking to the Future



- Climate Change
 - Addressing shifting snow to rain events and the impacts to water quality and water supply
 - Changing fire regimes
 - Ecosystem changes
- Forest Management
 - Continuing to manage EBMUD lands to protect water quality, habitat, open space, and safe public access
 - Partnering with local agencies and landowners



**The Sierra Nevada Watershed Improvement Program:
a tool to protect California's
Critical Ecosystems and Sustainability**

**Presented by
Angela Avery**

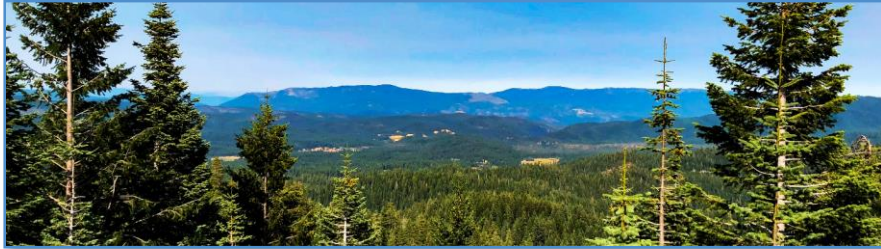
THE SIERRA NEVADA CONSERVANCY

Initiates, encourages, and supports efforts that improve the **environmental**, **economic**, and **social** well-being of the Sierra Nevada region, its communities, and the citizens of California.



THE SIERRA NEVADA

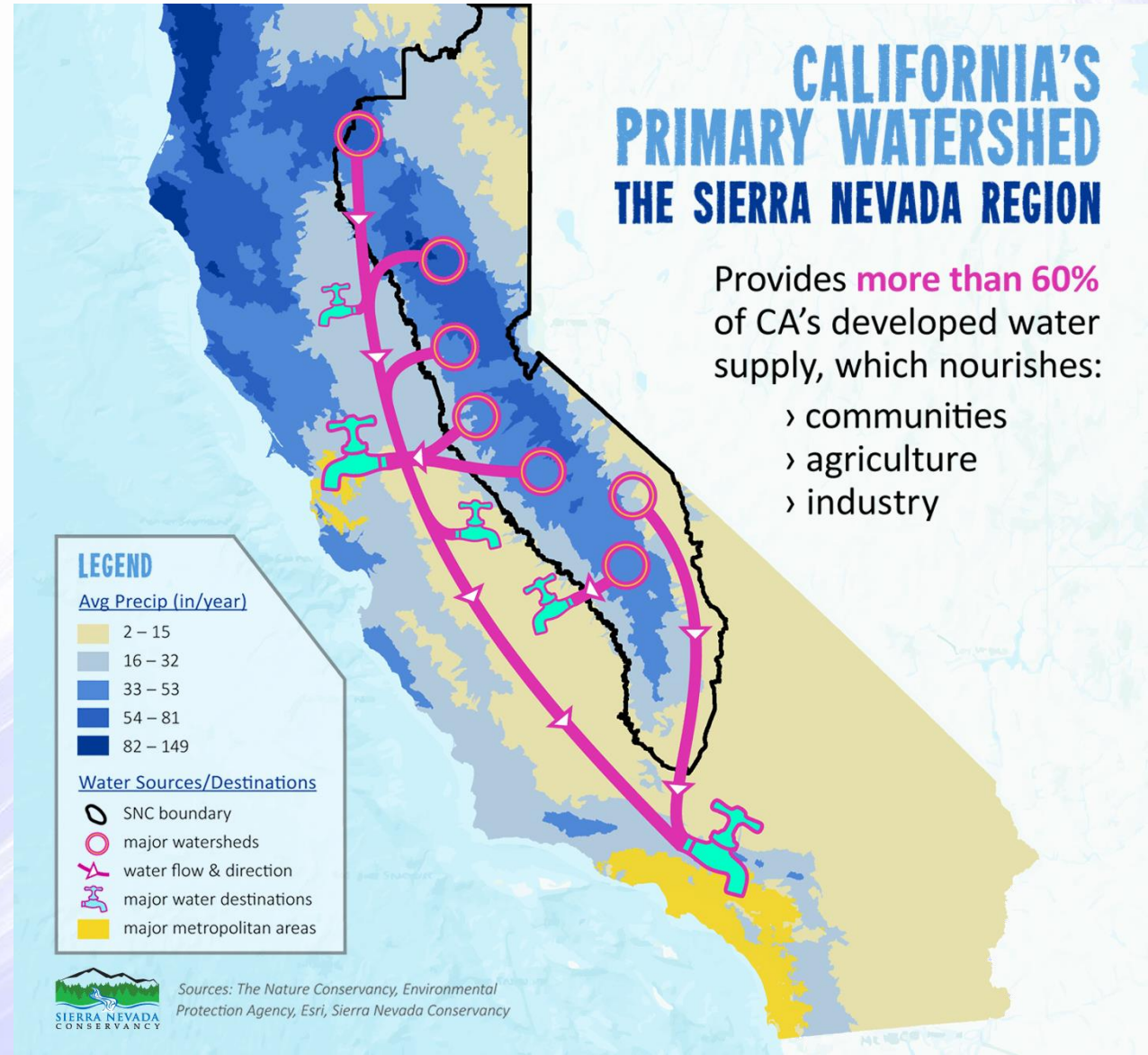
A Region Vital to California



- ❖ 25% of CA's land area
- ❖ 60+% of CA's developed water supply
- ❖ 60% of CA's animal species
- ❖ 50% of CA's forest carbon
- ❖ 600,000+ of CA's residents
- ❖ 50 Million+ recreation visit days per year

THE SIERRA NEVADA

A Region Vital to California



THE SIERRA NEVADA

A Critical Region at Risk



- ❖ More frequent wildfires
- ❖ Large, high-severity wildfires
- ❖ Declining forest & watershed health
- ❖ Unprecedented tree mortality
- ❖ Communities at risk
- ❖ Changing climate

THE SIERRA NEVADA

Watershed Improvement Program (WIP)



- ❖ Launched in 2015, signed into California state law in 2018
- ❖ Focal point of SNC's five-year Strategic Plan (2019-2024)
- ❖ Large-scale program to restore health of Sierra forests & create resilient communities
- ❖ Cooperation & coordination with a variety of state, federal, & NGO partners

WATERSHED IMPROVEMENT PROGRAM

Five Strategic Goals of the WIP



- ❖ Healthy Watersheds & Forests
- ❖ Resilient Communities
- ❖ Vibrant Recreation & Tourism
- ❖ Strategic Lands Conserved
- ❖ Impactful Regional Identity

WATERSHED IMPROVEMENT PROGRAM

A Holistic Approach & Focus

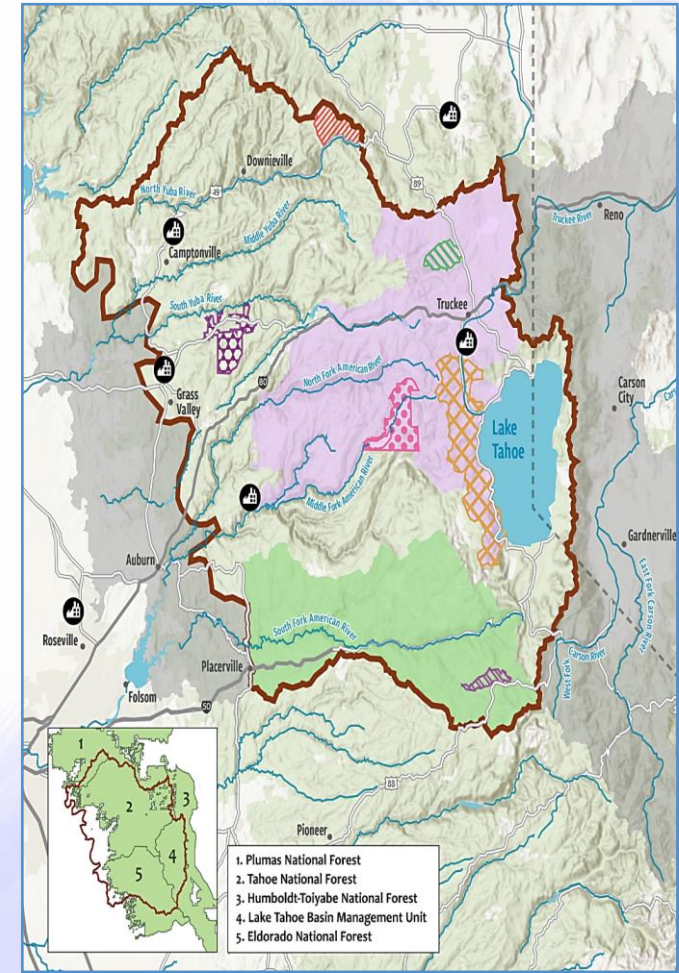
- ❖ Increase investment in restoration
- ❖ Address key policy issues affecting restoration
- ❖ Increase infrastructure needed for restoration



TAHOE-CENTRAL SIERRA INITIATIVE (TCSI)

First Pilot Project of the WIP

- ❖ Launched in 2016
- ❖ Innovative approaches to increase pace & scale of restoration across Tahoe & Central Sierra Nevada
- ❖ Unique partnership between SNC, CTC, USFS, CAL FIRE, TNC, CFA, NFF, & UC
- ❖ Initial projects underway in Lake Tahoe, North Yuba, Sagehen, & French Meadows





www.RESTORETHESIERRA.org