

Watershed Resilience Pilot Project ACWA Deliver Critical Infrastructure Working Group

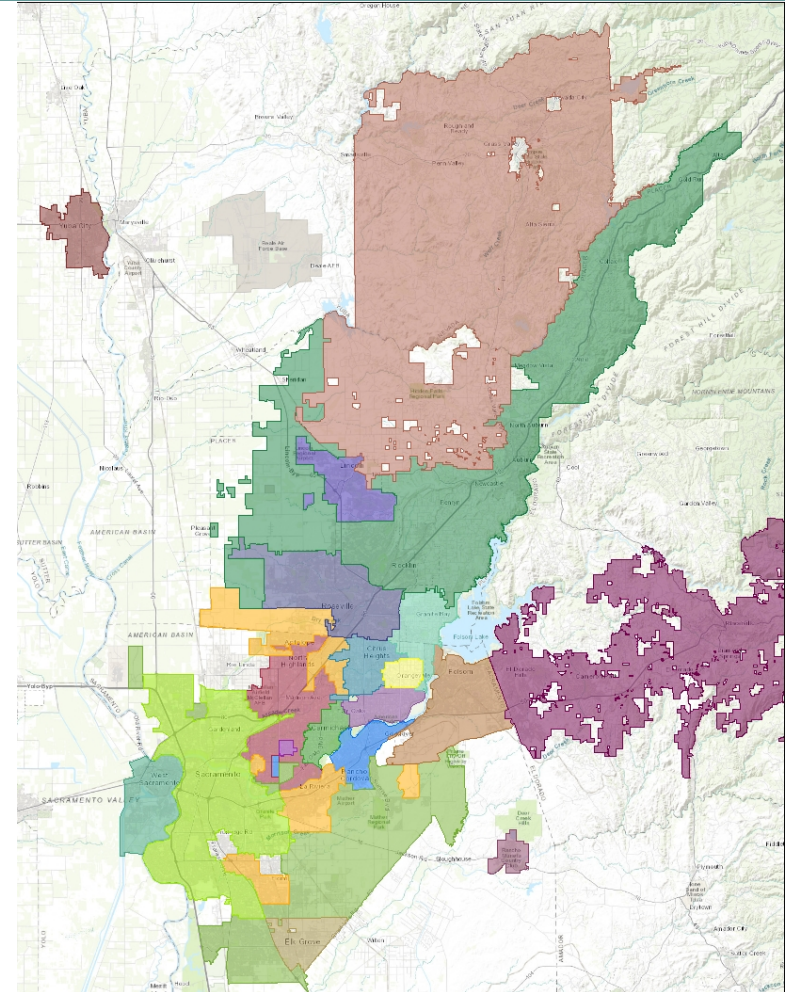


June 10, 2026

Regional Water Authority



- Mission: To serve and represent the interests of regional water providers and stakeholders for the purpose of improving water supply reliability, availability, quality and affordability.
- JPA of 20 water purveyors, serving over 2.2 million residents
- 25th Year
- What we do: Planning, Programs, Advocacy, Staff to the Sacramento Groundwater Authority



Why a Watershed Resilience Project

- Grant from California Department of Water Resources
- Envisioned in the 2023 California Water Plan
- Protect the source of water for the State

Key aspects of this approach are:

- Managing water from headwaters to outflow at a watershed scale.
- Prioritizing equity and inclusiveness.
- Analyzing climate risks and adaptations at the watershed level.
- Collaborating across water, flood, groundwater, quality, forest/fire, ecosystem, and land use sectors.
- Developing metrics to track outcomes regionally and statewide.



Watershed Resilience Pilot

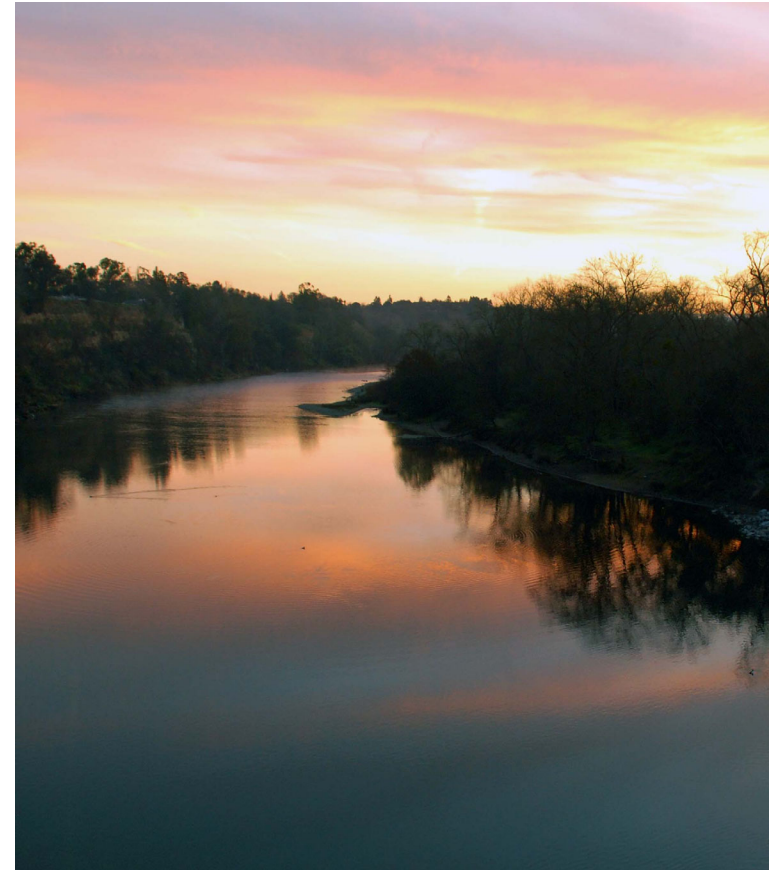
Multi-sector water management:

1. Forest and Wildfire Management
2. Hydropower
3. Ecosystems
4. Groundwater
5. Water Supply
6. Flood Management
7. Water Quality
8. Recreation



Vision Statement

Sustainably manage the American, Bear, and Cosumnes River watersheds using a science-based, collaborative, and inclusive approach that incorporates traditional knowledge and balances ecological and economic needs to sustain the long-term resilience of our local communities and ecosystems.



Greatest Challenges

- Forest Fires (Doubling of Risk)
- Loss of Snowpack (two thirds by mid century, 80% by 2085)
- Doubling of Extreme Heat Days
- Ecosystem Challenges – Warmer water and changes in hydrology
- Doubling of catastrophic flood risk
- Reduced Hydropower

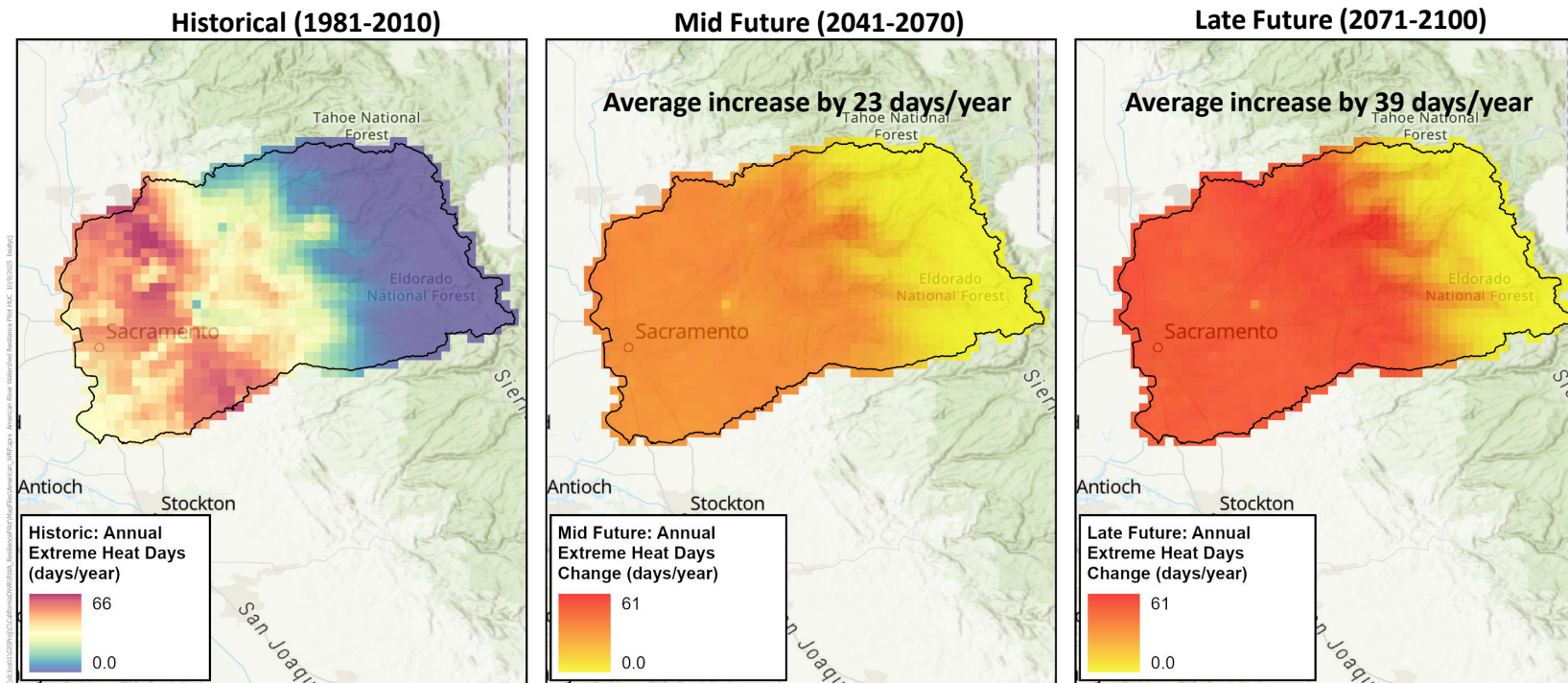


Folsom Dam and Lake on November 17, 1977
Vince Arrant/California Department of Water Resources

Extreme Heat

Change in Extreme Heat Days (days > 95F) for the American River Region

- Warmer regions of Valley Floor are more prone to extreme heat days
- Number of extreme heat days will increase by 20 to 40 days across region
- Extreme heat will increase irrigation demands, increase water temperature, and impact recreation activities.



Impacted Sectors

Agriculture

Ecosystem

Recreation

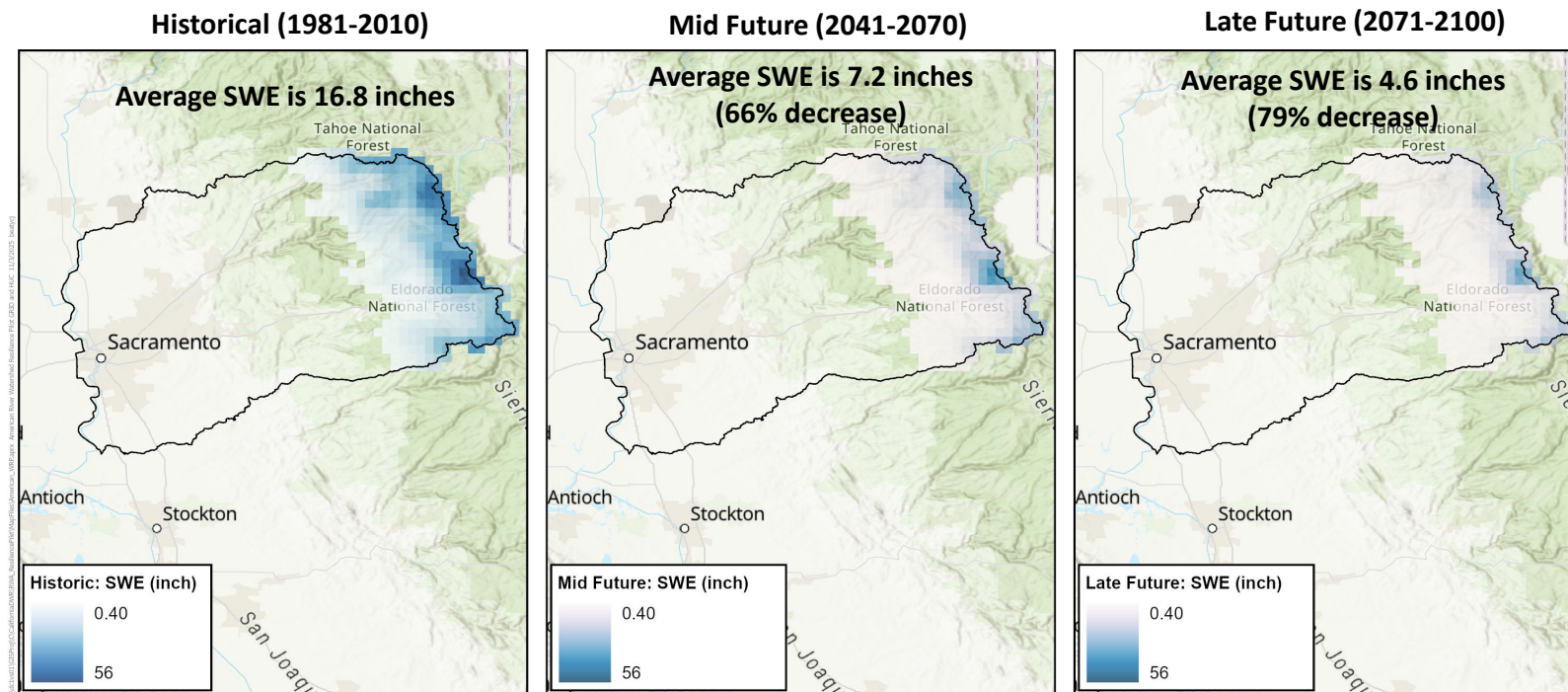
Surface Water Supply

Hydropower

Snow

Change in April 1 Snow (measured as snow water equivalent, or SWE)

- Significant reduction in snow under both future periods as early snow melt and more precipitation will fall as rain instead of snow.
- Accelerated snowmelt cause early runoff, lower spring runoff, increases flood risks, impacts reservoir operations.



Impacted Sectors

Surface Water Supply

Flood Management

Hydropower

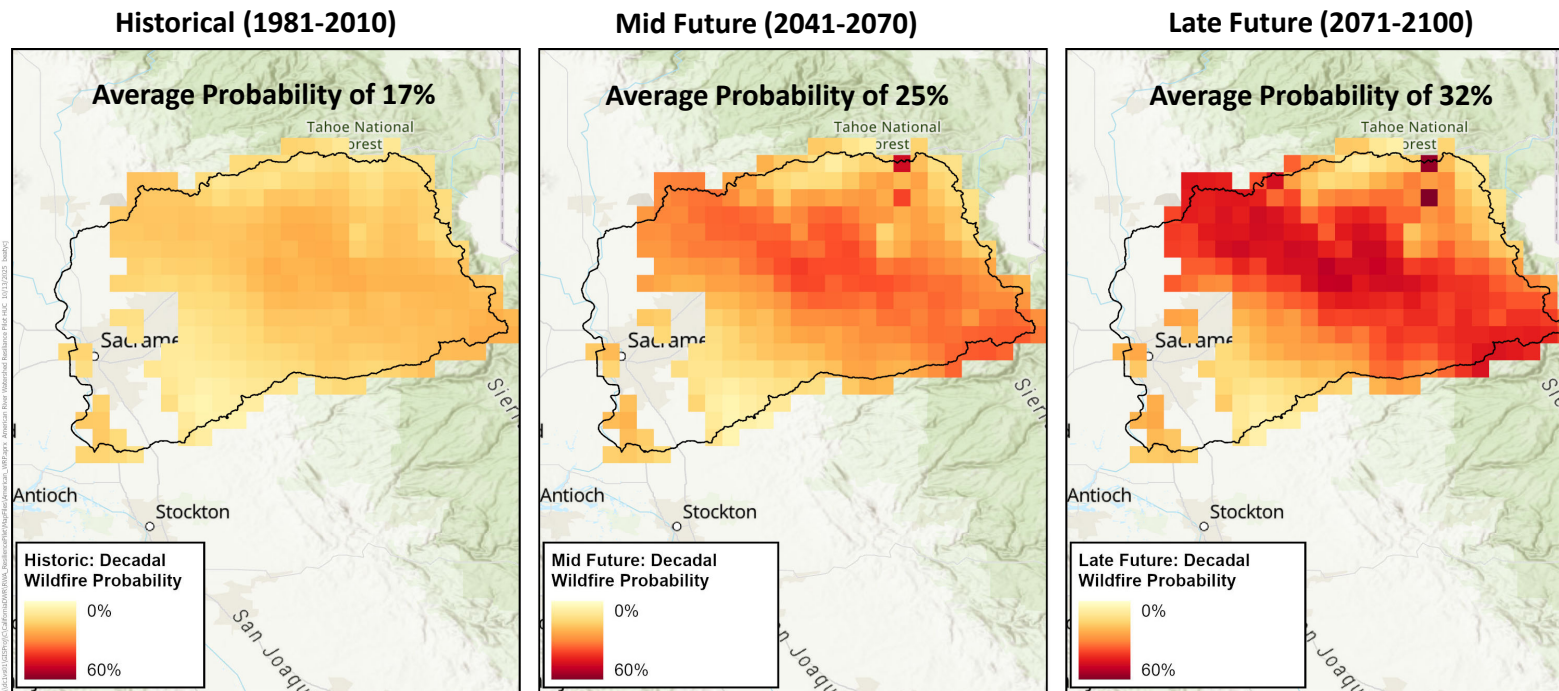
Recreation

Ecosystem

Wildfire Probability

Wildfire Probability (%) for the American River Region

- Upper watersheds are more susceptible to wildfires.
- Increase in drought will make the region more vulnerable to wildfires in future.
- Wildfire causes water quality issues, loss of vegetation and biodiversity.



Impacted Sectors

Surface Water Supply

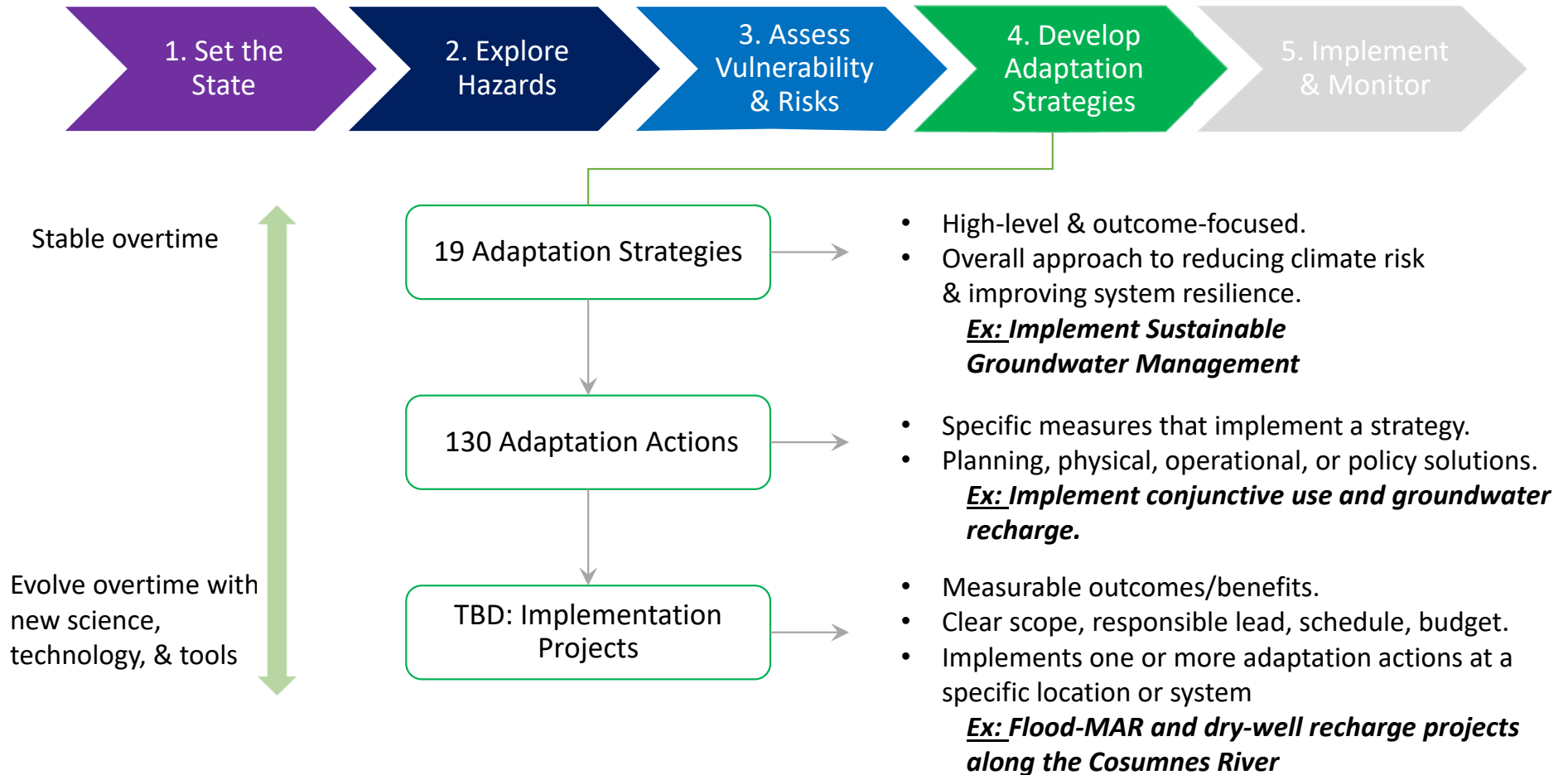
Water Quality

Agriculture

Ecosystem

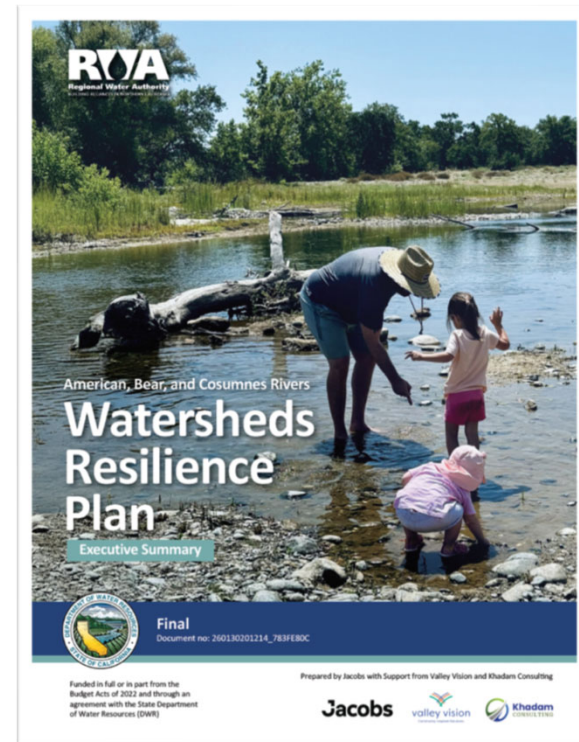
Flood Management

Strategies, Adaptations and Projects



Implementation

- Adaptive decision framework
 - Establishes criteria for project prioritization that can be refined using new data, monitoring results, and lessons learned
 - Supports phased implementation decisions when specific projects are proposed
- Equity as an implementation lens
 - Guides where and how projects are phased and delivered
 - Informs funding competitiveness
- Funding alignment
 - Projects are structured to align with state and federal funding priorities for climate-equity and resilience
 - Allows projects to advance as opportunities emerge



Thank you!

<https://rwawatershedsresilience.com/>

