



LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Benefits Overview

August 14, 2024

The Los Vaqueros Reservoir Expansion is an **innovative** and **collaborative** solution to benefit the regional **ecosystems** and create a **climate-resilient water supply** for more than 11 million Californians.

Unprecedented Challenges Require Regional Partnerships



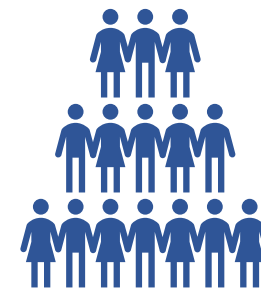
Climate
Change



Increasing
Regulatory
Constraints



Degrading
Ecosystems

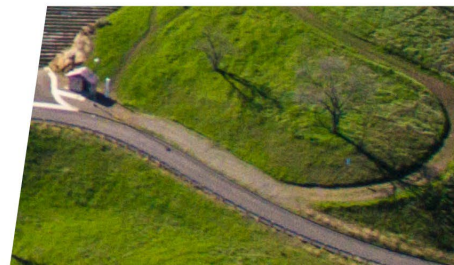
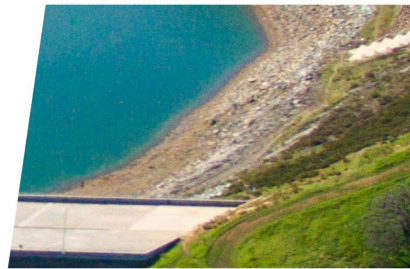
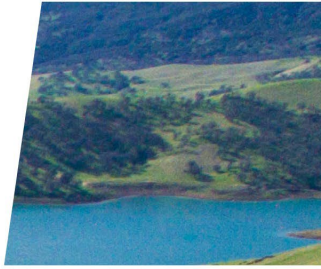


Shifting
Population and
Strained Local
Economies

Why Los Vaqueros Reservoir Expansion?

Collaborative solution to create climate-resilient water supply

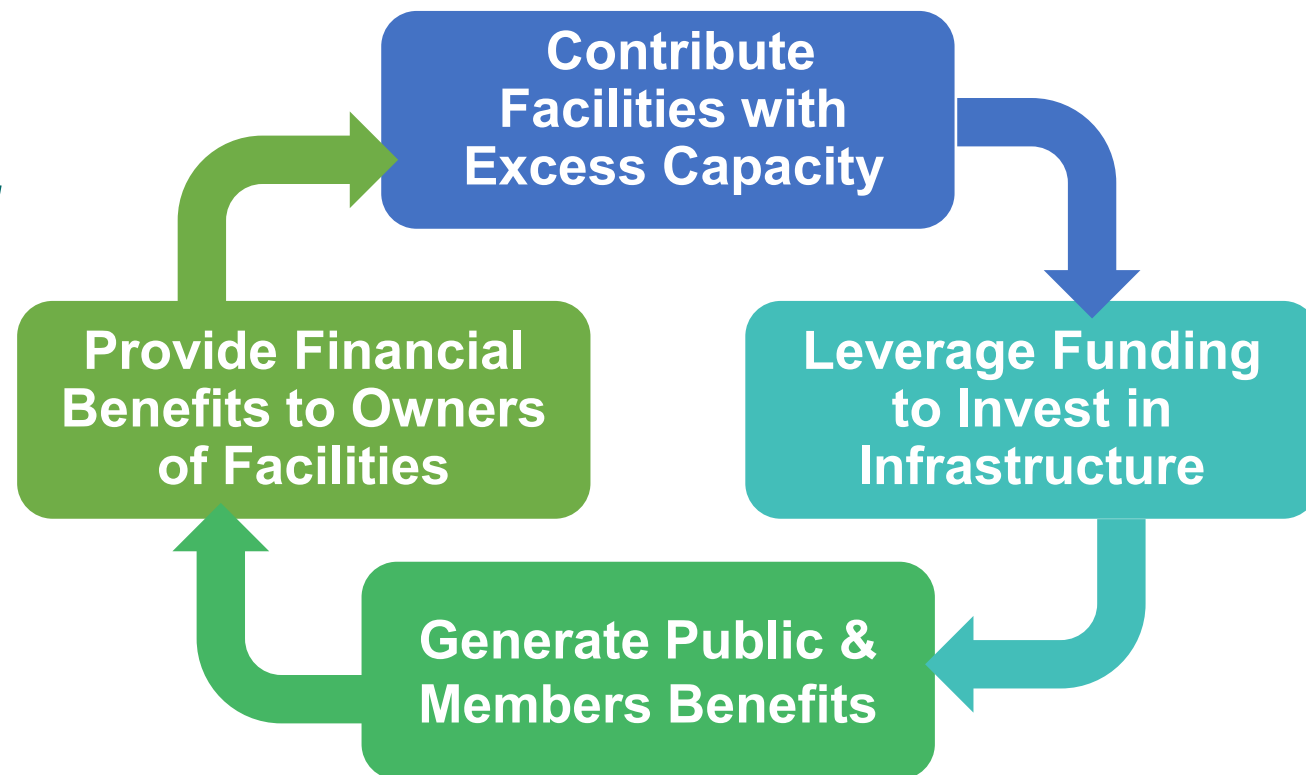
- Expand storage in strategic location
- Leverage existing facilities to create a regional connected system
- Provide access to additional intakes in the Delta and lower Sacramento River
- Broad multi-benefits and partnership



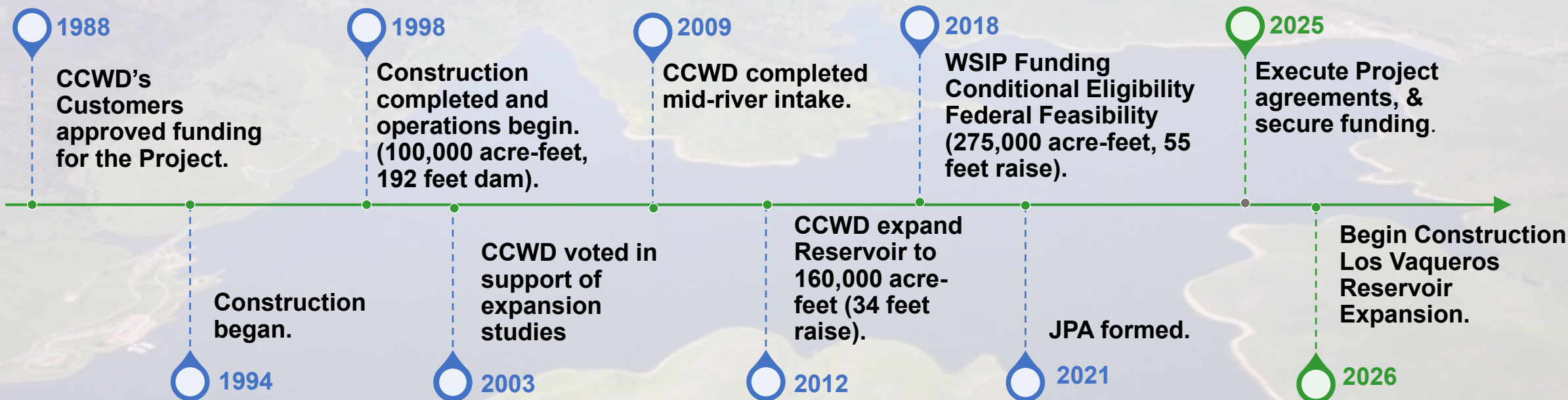
Los Vaqueros Reservoir, a Contra Costa Water District Success Story

- Watershed of 18,500 acres surrounding the 1,900-acre Reservoir for protection of water quality, sensitive species, and habitat.
- CCWD successfully financed and implemented the original 1998 dam, intake, and conveyance construction, the 2009 new intake, and the 2012 dam raise which was completed on schedule and under budget.

Benefits of Excess Capacity



A History of Los Vaqueros Reservoir



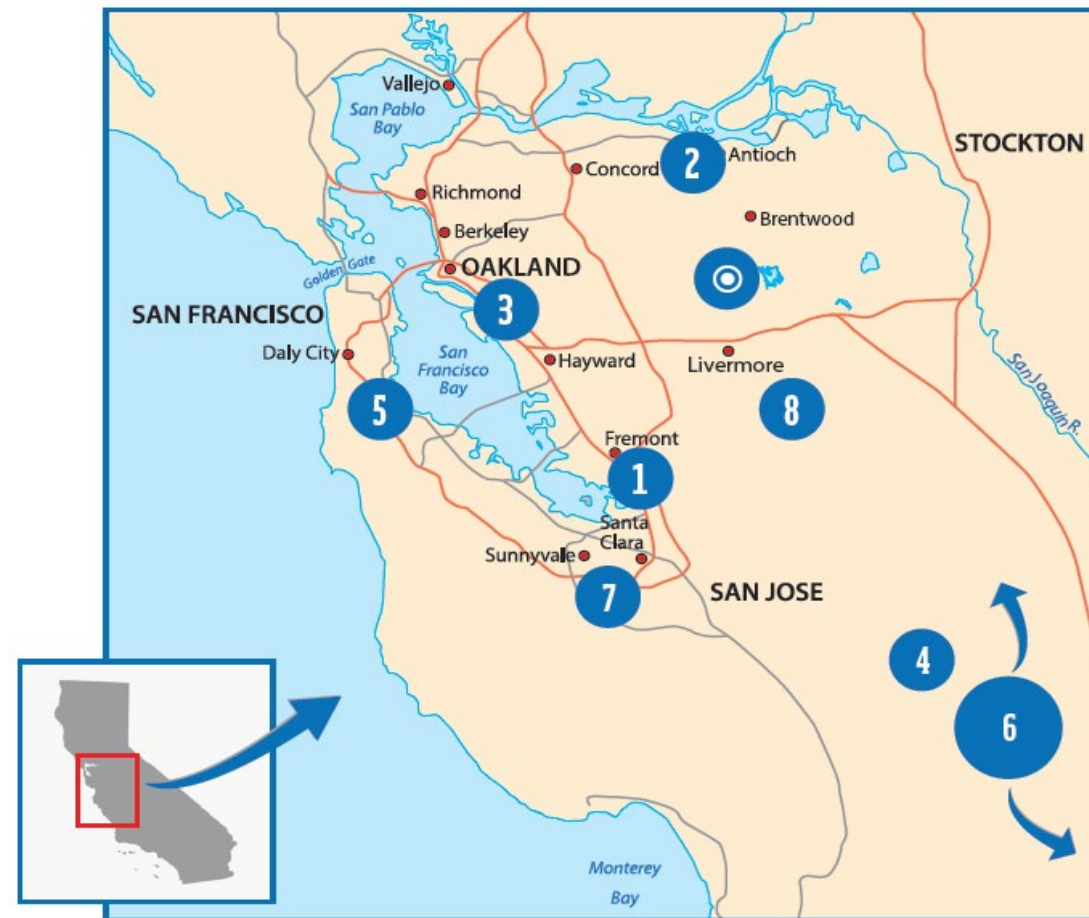
Objectives for the Los Vaqueros Reservoir Expansion

Multi-agency effort with broad state, federal, and environmental stakeholder support.

- Develop water supplies for environmental water management
- Increase municipal, industrial, and agricultural water supply reliability
- All while continuing to deliver the benefits CCWD customers invested in when building Los Vaqueros Reservoir.

Regional Partnerships

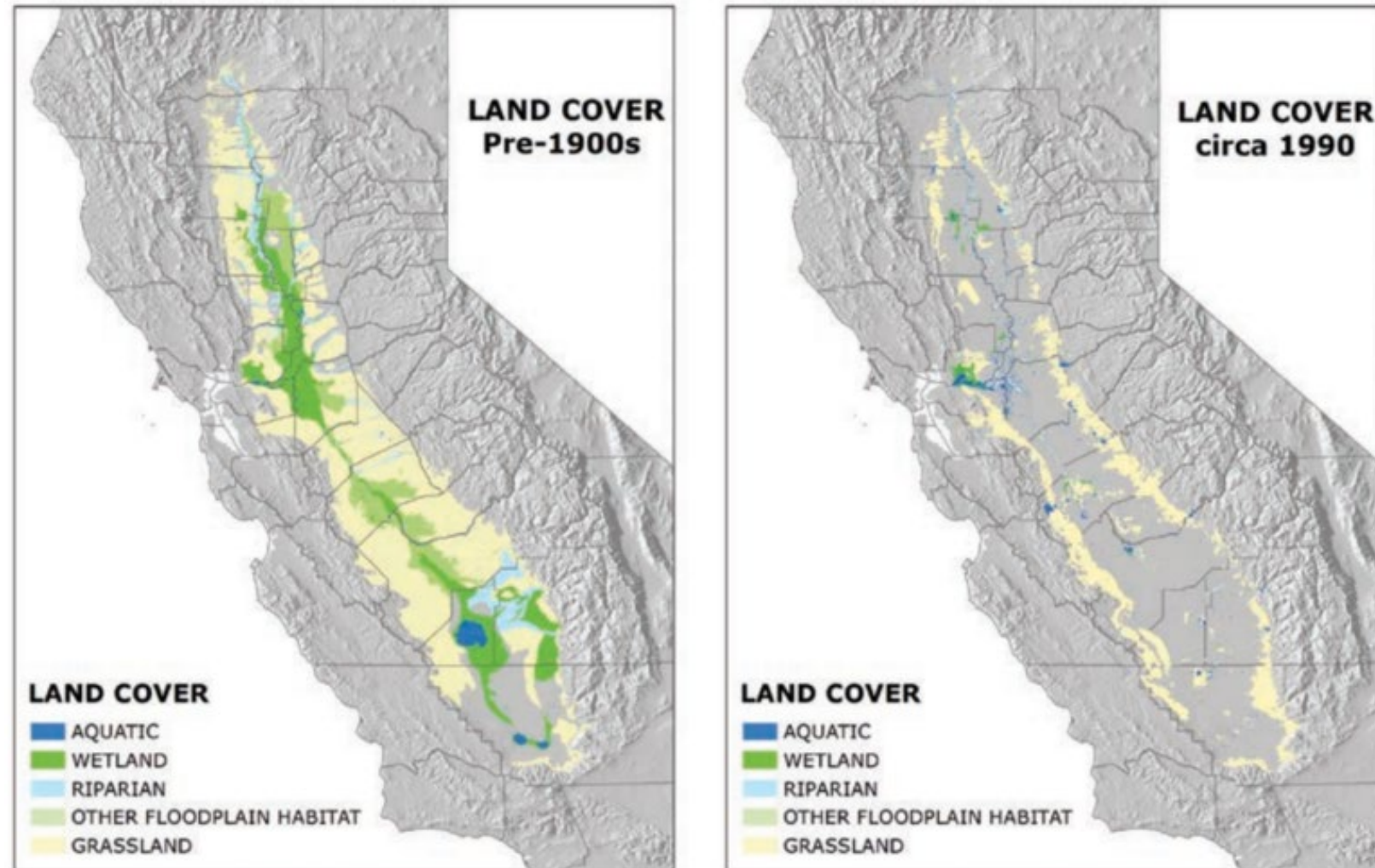
1. Alameda County Water District
2. Contra Costa Water District
City of Brentwood
3. East Bay Municipal Utility District
4. Grassland Water District
5. San Francisco Public Utilities Commission
Bay Area Water Supply & Conservation Agency
6. San Luis & Delta-Mendota Water Authority
Byron Bethany Irrigation District
City of Tracy
Del Puerto Water District
Panoche Water District
Westland Water District
7. Santa Clara Valley Water District
8. Zone 7 Water Agency



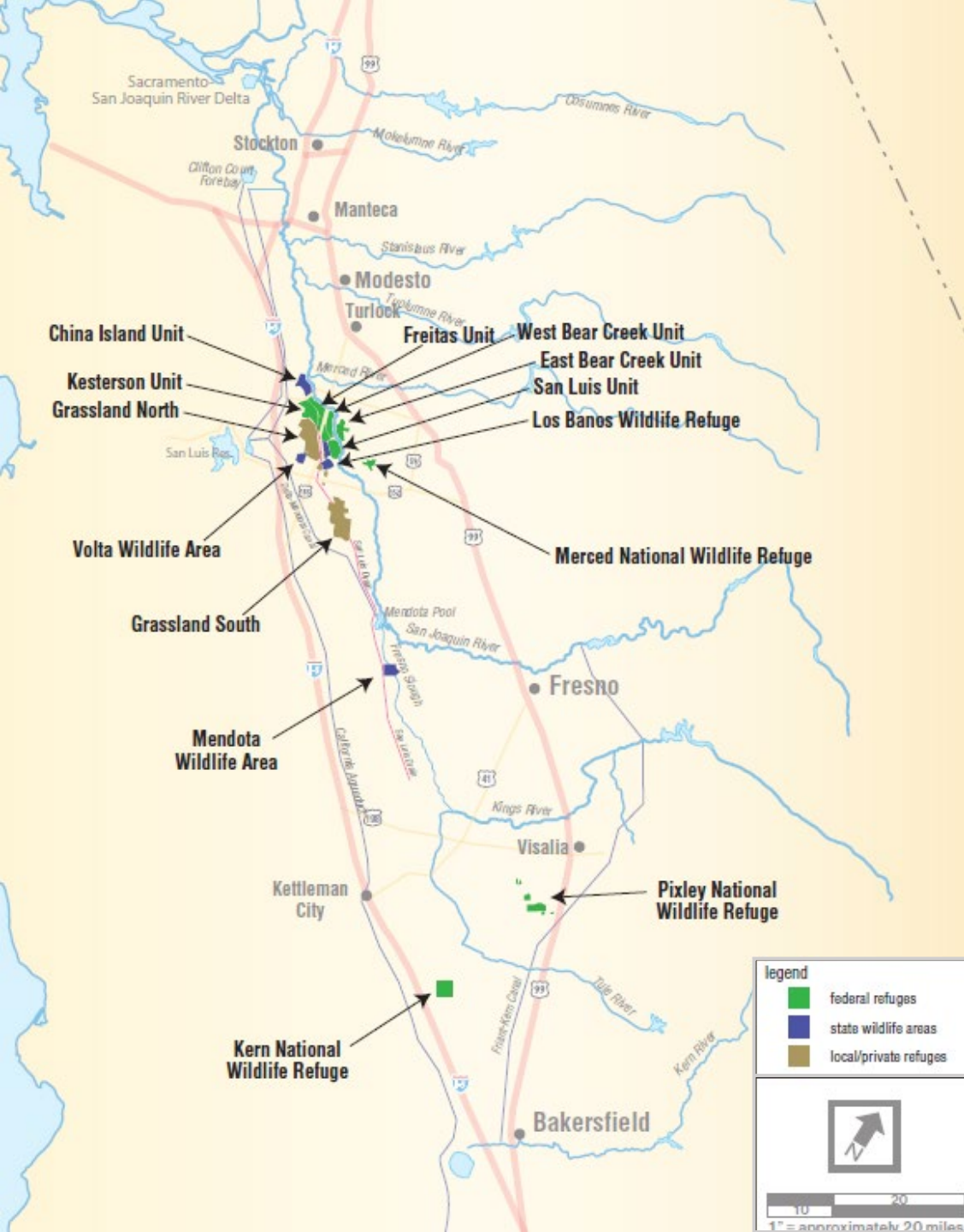
Refuges & Ecosystem Benefits



South of Delta Wildlife Habitat: 95% Loss Since 1850



Disappearance of Central Valley wetlands © Central Valley Historic Mapping Project, California State University, Chico, Geographic Information Center, 2003



South of Delta Wildlife Refuges



Wetlands of
International
Importance

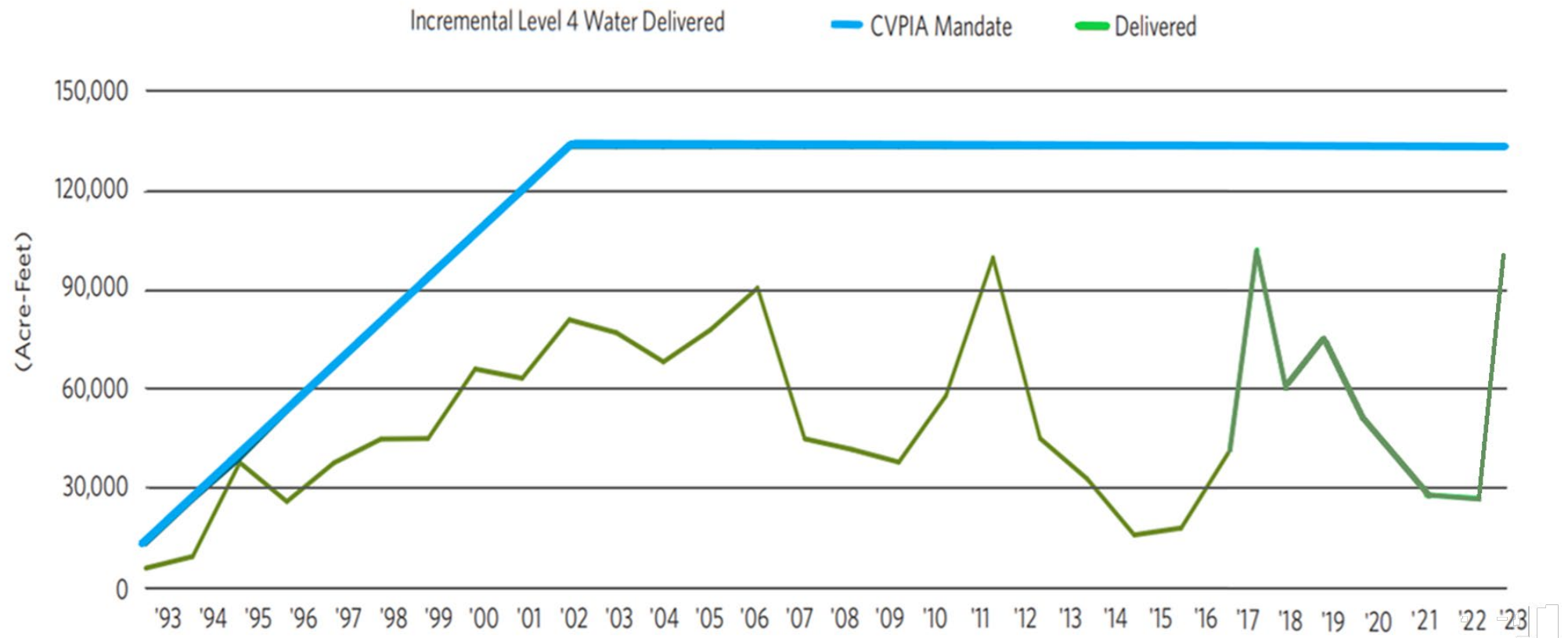


Western
Hemispheric
Shorebird Reserve

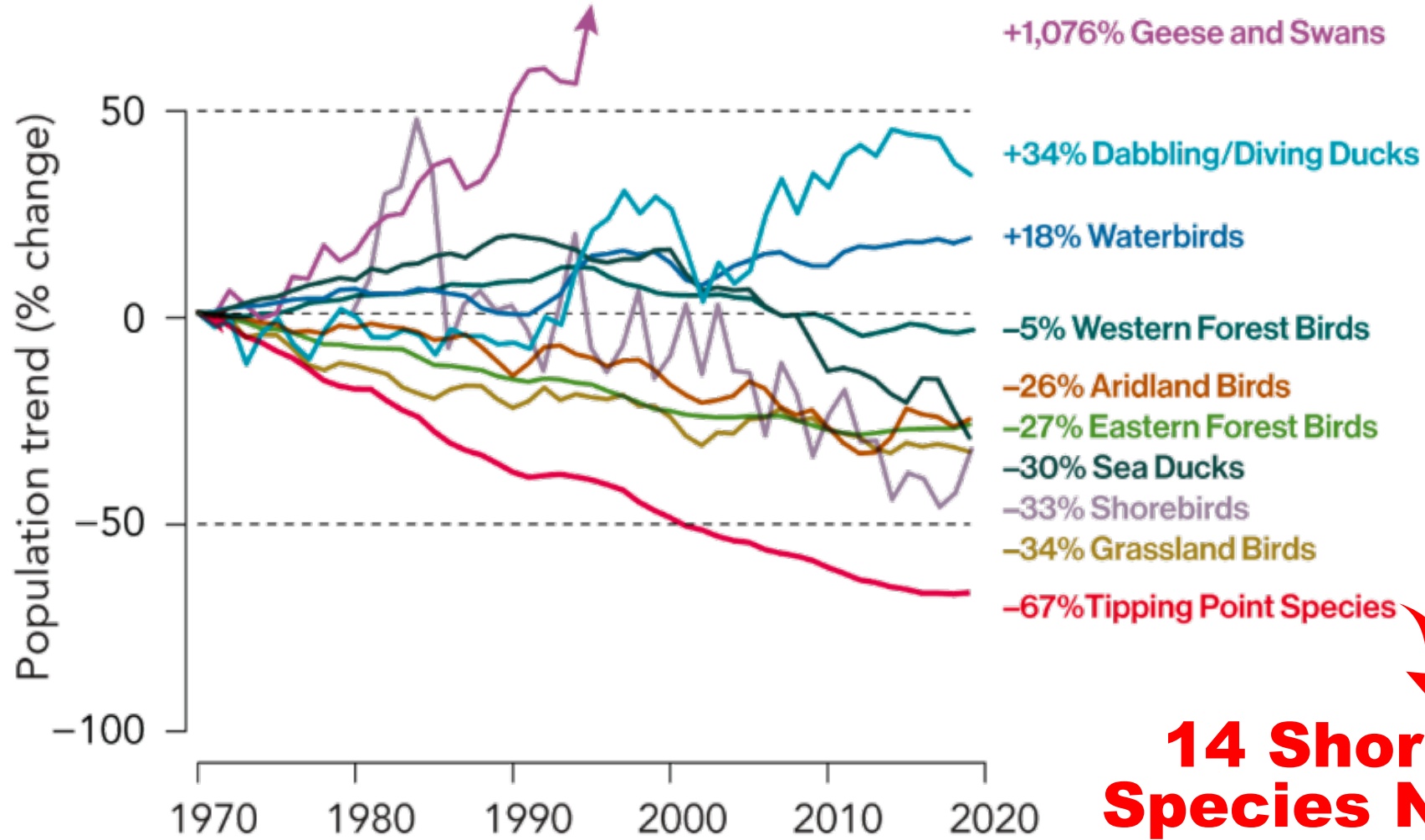


Water Supply Challenges for South of Delta Refuges

Wildlife Refuge Water Supply 1992-2022



State of the Birds Report 2022



**14 Shorebird
Species Nearing
Extinction**

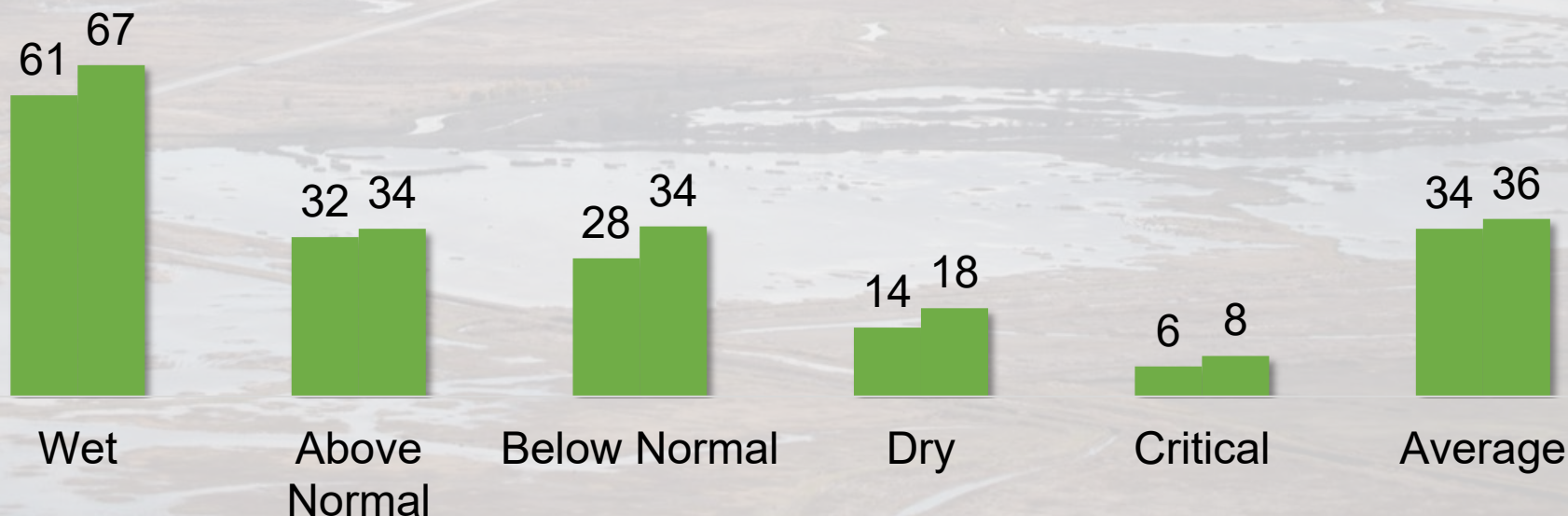


South of Delta Wildlife Refuge Benefits from the Los Vaqueros Reservoir Expansion

LVE Supported Wetlands (acres)



Range of LVE Provided Water (1,000 acre-feet/ year)



State & Federal Benefits

Access to Funding

The multi-agency **partnerships** and **broad range of benefits** developed because of the Los Vaqueros Reservoir Expansion project have allowed the program to **secure, otherwise inaccessible, public investments.**



Osprey at Los Vaqueros Watershed



Bobcats at Los Vaqueros Watershed

Federal Benefits

Ecosystem

- Improves water supply for south of Delta wildlife refuges and access to storage to optimize delivery of water supplies.
- Addresses long-standing unmet CVPIA mandate for Refuge water supplies.

Water Supply Reliability

- Potential to enhance south of Delta Central Valley Project deliveries.



State Public Benefits

Ecosystem

- Water supply for south of Delta wildlife refuges and access to storage to optimize delivery of water supplies.
- Improved survival of salmonids migrating through Delta by reducing entrainment at Rock Slough intake.

Emergency Response

- Improves drought preparedness and resilience.
- Non-drought emergency access to storage and conveyance during Delta outage emergencies due to natural disasters or infrastructure failures.

Recreation

- Enhance recreation at reservoir & Watershed
- Helps implement State's resiliency portfolio



Ducks at Wildlife Refuge



Fish Screen at Rock Slough Intake



Fishing at Los Vaqueros Reservoir

Regional Economic Benefits

- Creates up to 13,000 construction and suppliers related jobs.
- Boosts local tax revenues during project construction.
- Supports long-term economic stability by ensuring a reliable water supply, crucial for region's agricultural and industrial sectors.



Operational & Water Supply Benefits

Member Benefits

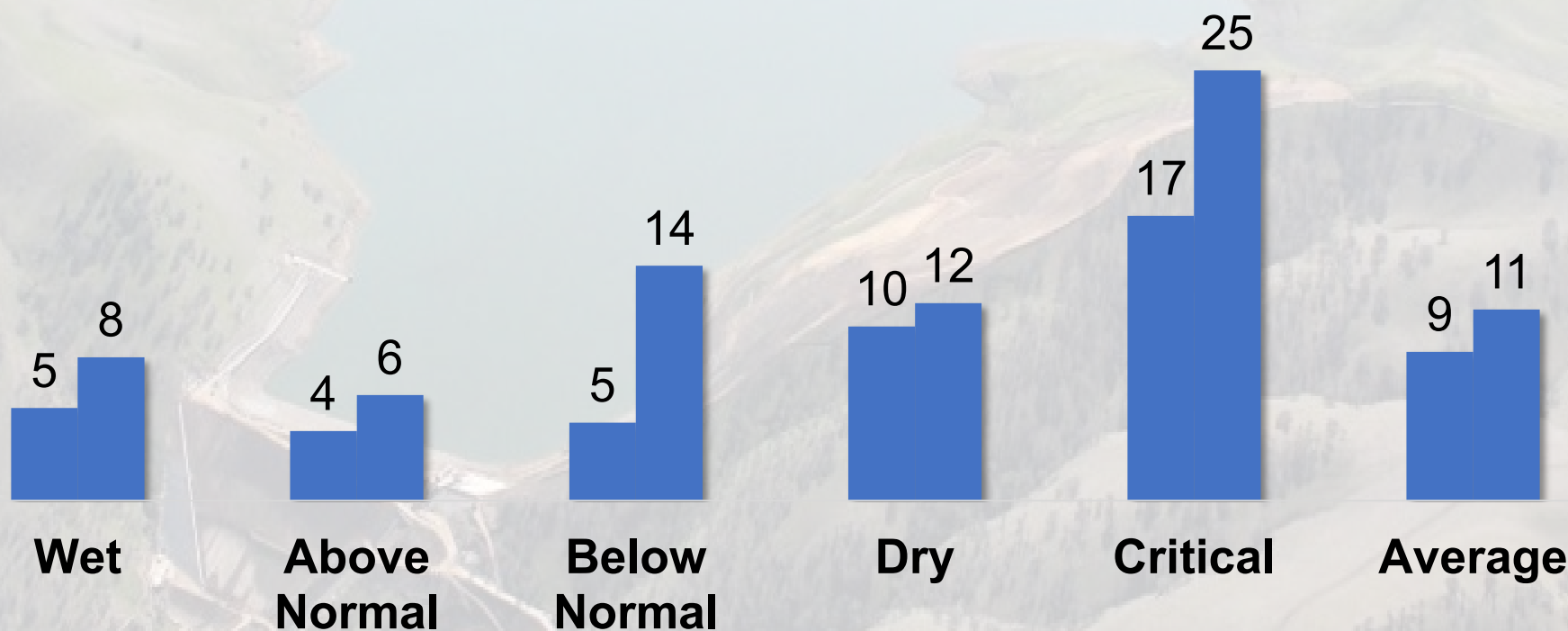
Increased Water Supply Reliability

- Drought preparedness and resilience.
- Emergency storage during natural disasters or infrastructure failure.
- Diversify members water supplies.
- Facilitate transfers and exchanges.
- Improve climate change resiliency.



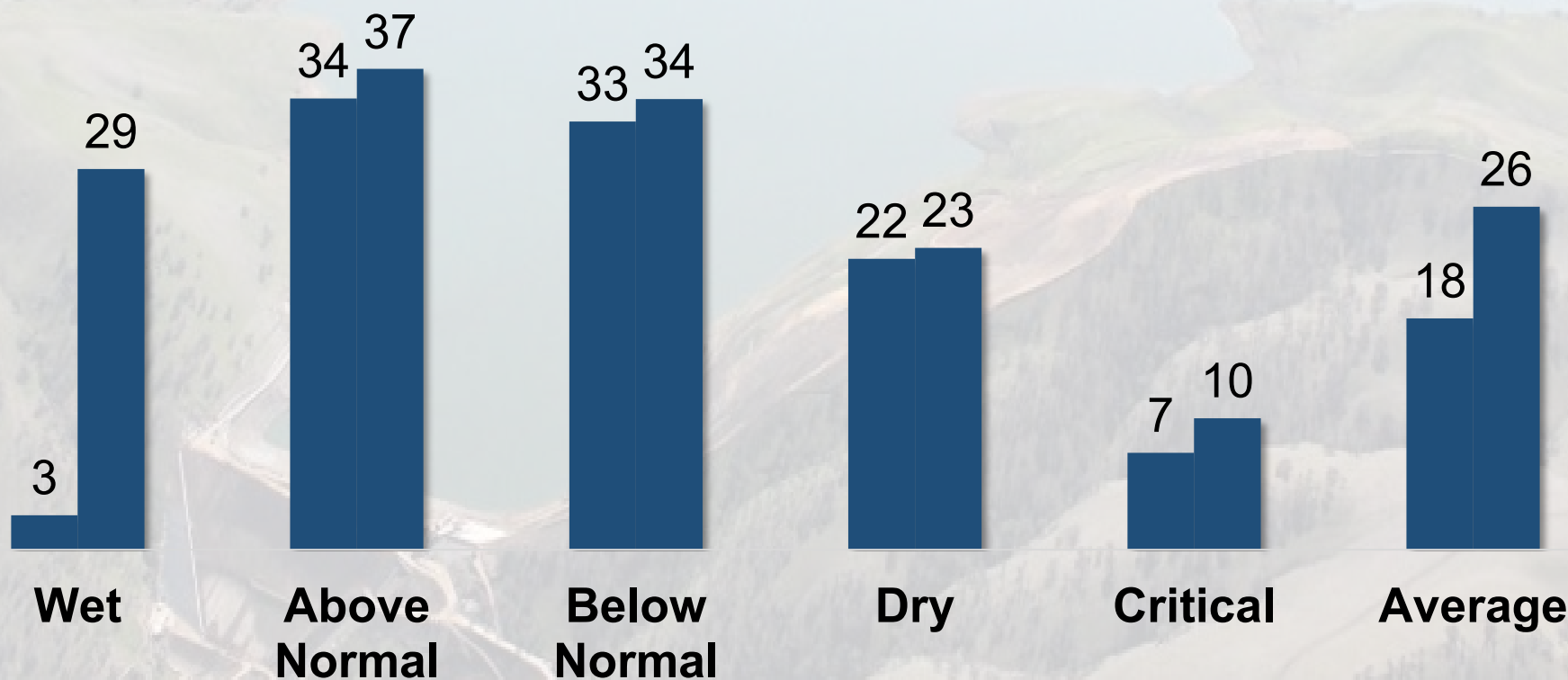
Range of M&I Water Reliability Benefits

- The expanded storage will allow Members to optimize use of existing and new sources of supplies, enhance supply reliability, and increase drought protection.



Range of Agricultural Water Supply Benefits

- Members will use CCWD's excess intake capacity to access North of Delta water supplies when Delta conveyance constraints make them otherwise inaccessible.



A Systemwide and Regional Win-Win

Systemwide and Regional Operational Benefits

Improves operational flexibility of the statewide water system:

- Additional system storage at key location.
- Ability to move water around south of Delta State & Federal pumps.

Systemwide and Regional Connectivity Benefits

Leverages existing facilities to create a regional connected system:

- Physical interties between multiple agencies
- Maximizes use of existing regional facilities
- Local storage to leverage uses of other supply sources
- Part of Bay Area Regional Reliability Program
- Improves operational flexibility of the statewide water system

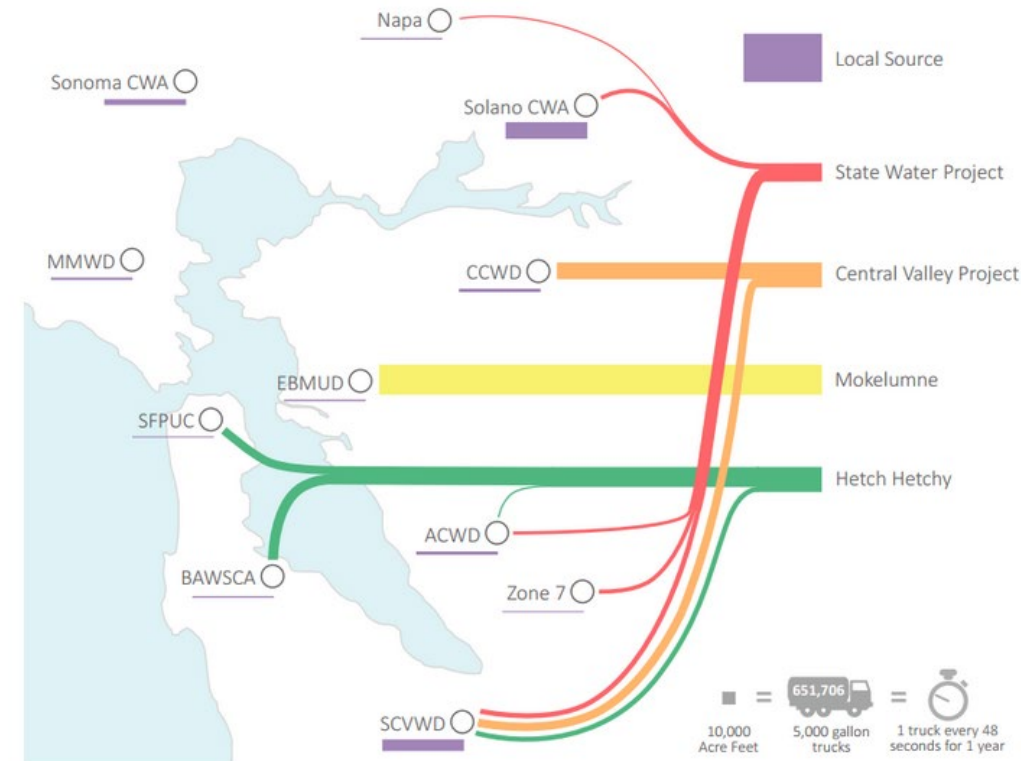


Figure Source: ABAG Infrastructure Vulnerability & Interdependency Study (2014)

Win-Win Project for Members

- ✓ Members benefit from access to excess capacity at CCWD's and EBMUD's facilities.
- ✓ Opportunities to modernize and enhance CCWD's and EBMUD's existing facilities.
- ✓ Support recovery of some of CCWD's and EBMUD's investments in the constructed facilities.
- ✓ Members will share the O&M expenses for some of CCWD and EBMUD facilities.



Collaborating Agencies



CONTRA COSTA
WATER DISTRICT



WATER
AGENCY



San Francisco
Public Utilities
Commission



Valley Water



California
WATER
COMMISSION



EBMUD

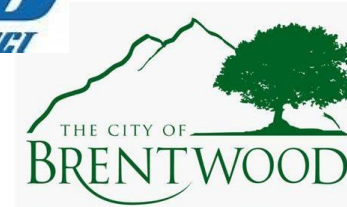


Del Puerto
WATER
District

ACWD
AMERICA COUNTY WATER DISTRICT

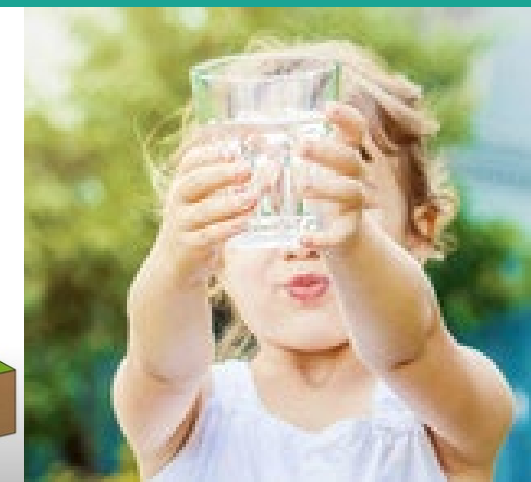
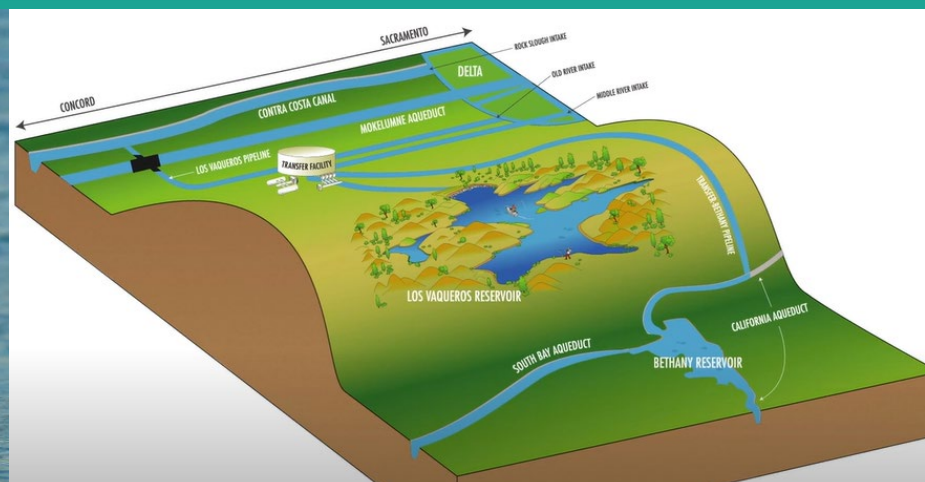


Westlands
Water District



Panoche Water District

A rare opportunity.



Additional Resources

Proposed Facilities

- Expand Los Vaqueros Reservoir from 160 to 275 TAF
- Add pipeline, connecting to the California Aqueduct
- Add/upgrade pumping facilities
- Implement EBMUD system improvements to support deliveries to Project Partners
- Reoperate existing CCWD and EBMUD facilities

