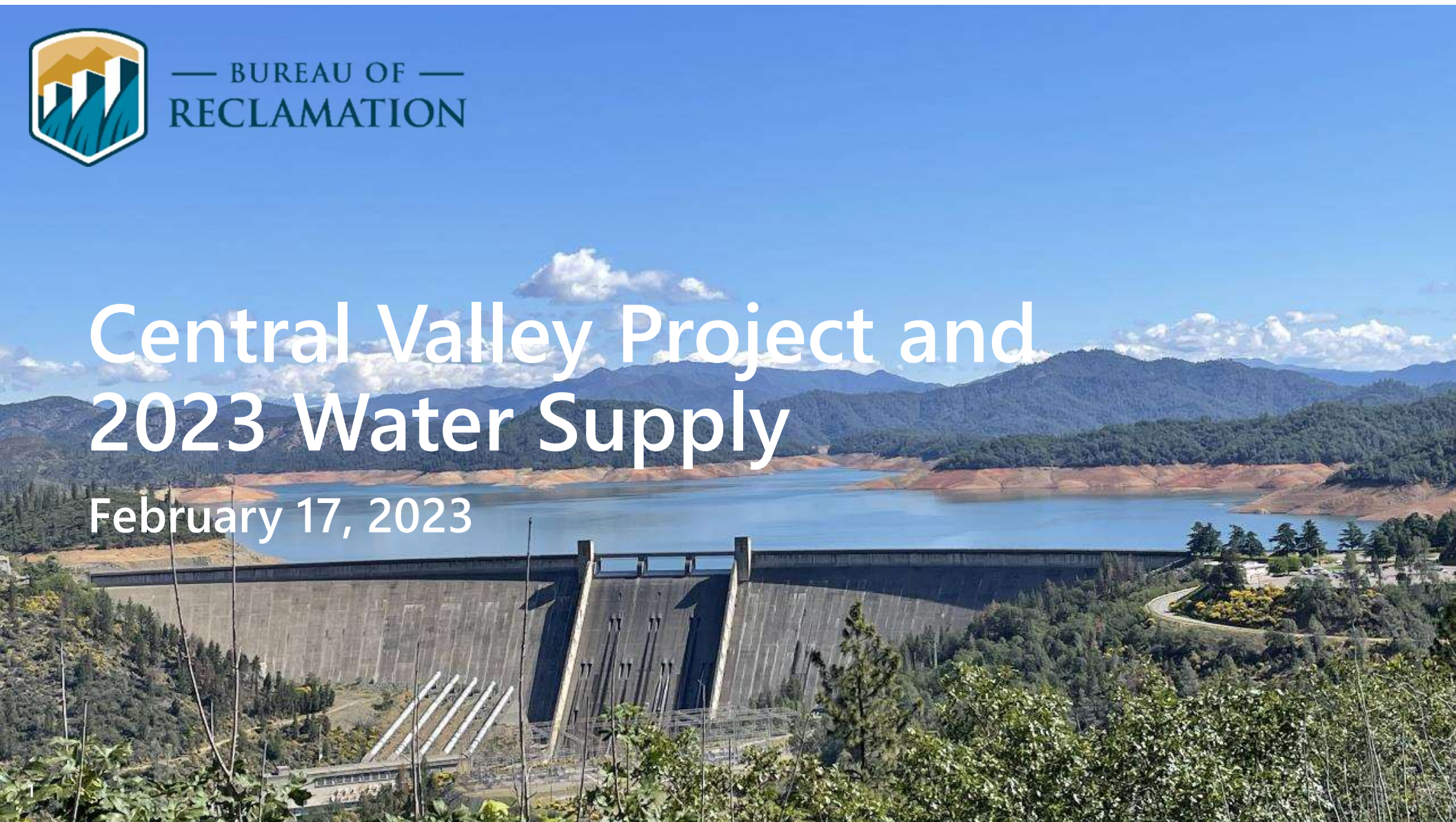




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# Central Valley Project and 2023 Water Supply

February 17, 2023



# Interior Region 10, California Great Basin, Bureau of Reclamation

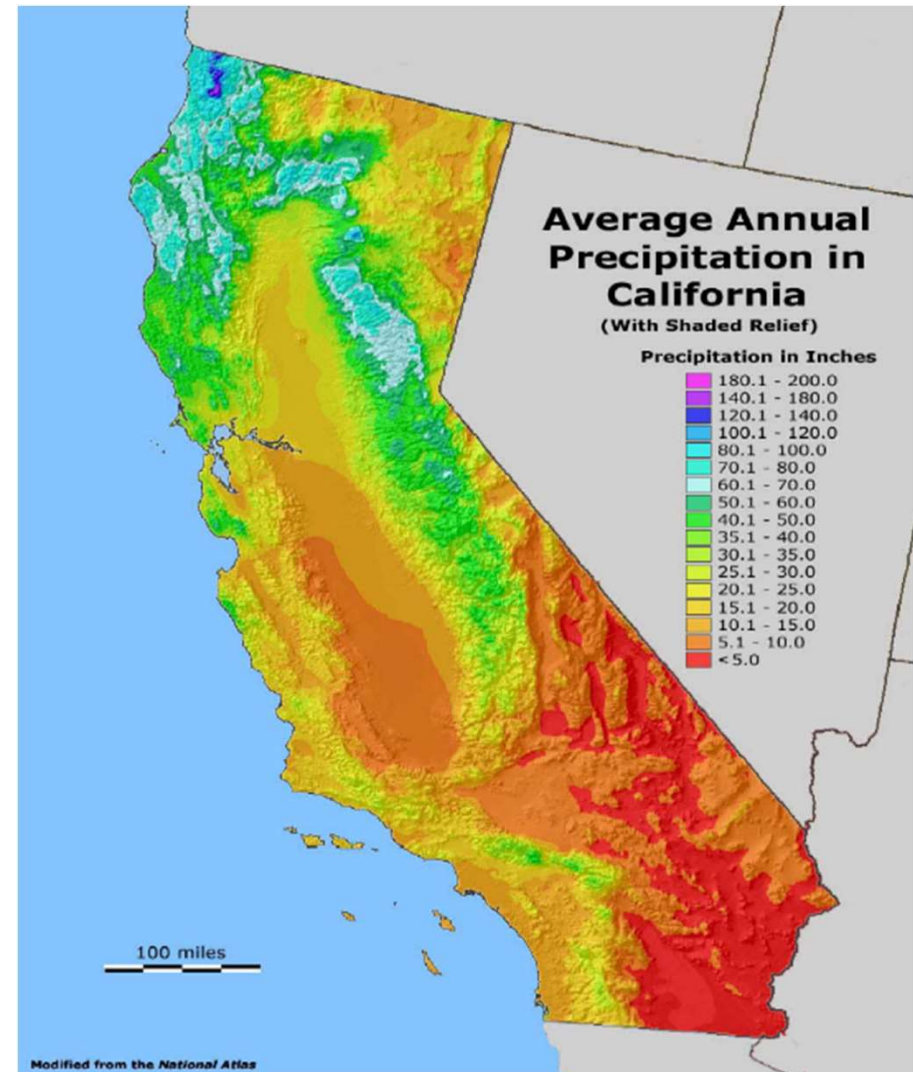
*The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.*





# California Water

- Most precipitation falls in the north; most water demand is in the south.
- The wet season is winter and spring; water is needed more in the summer.
- Precipitation varies from year to year; demands don't vary much.

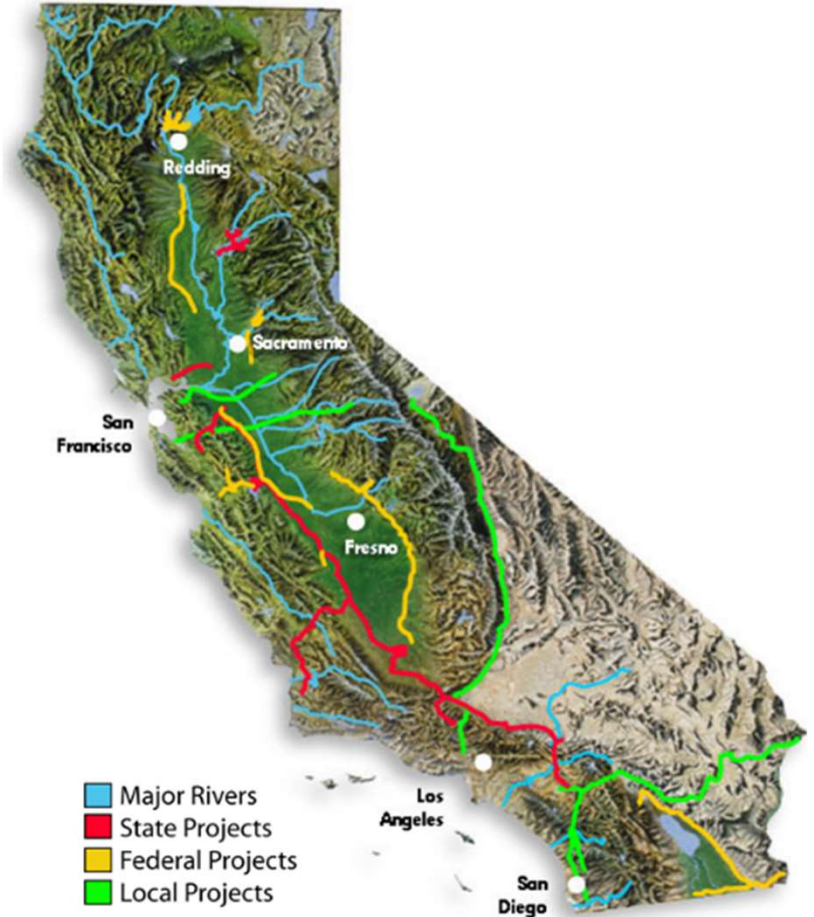


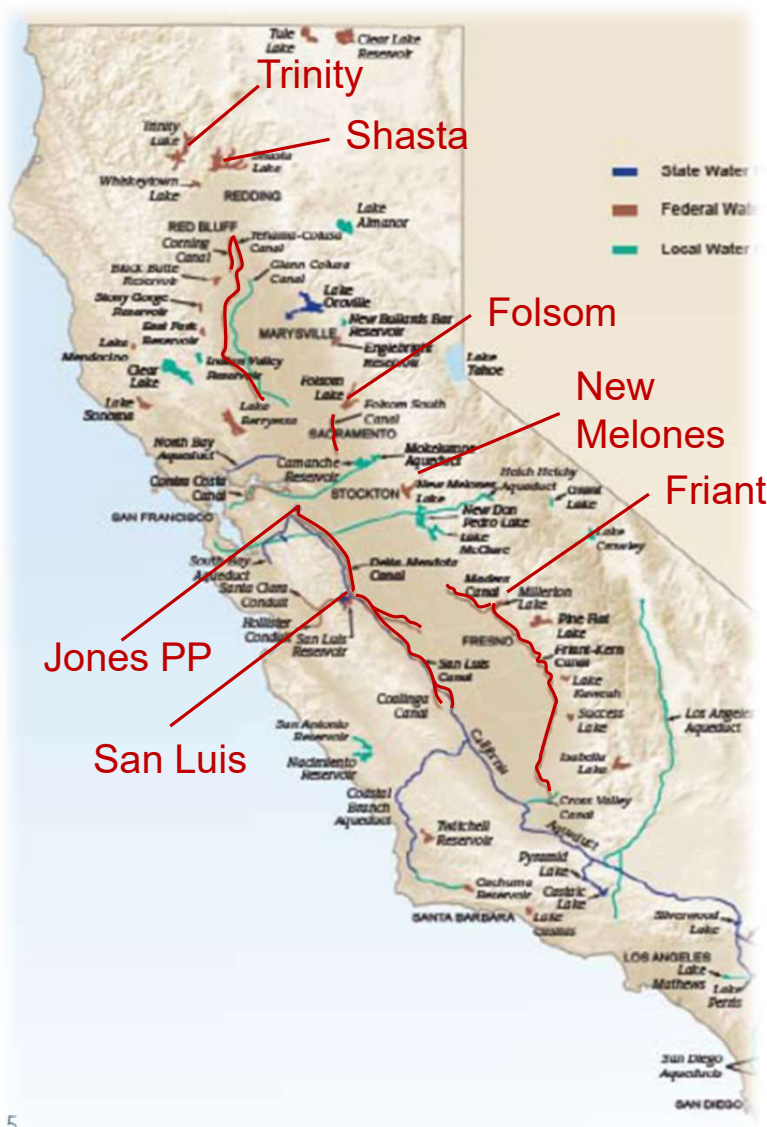
# CA Water Infrastructure

California has 1,400 dams: State, Federal, and Local Projects

**Central Valley Project (CVP):** As California's largest water supplier, the CVP delivers on average over 7 million acre-feet of water and 2.8 billion kWh of power per year. CVP water is used to irrigate 3 million acres of farmland in the San Joaquin Valley, as well as provide water for urban use in Contra Costa, Santa Clara, and Sacramento counties.

**The State Water Project (SWP):** The largest state-built water and power project in the United States, the SWP spans 600 miles from Northern California to Southern California, providing drinking water for 23 million people and irrigation water for 750,000 acres of farmland.



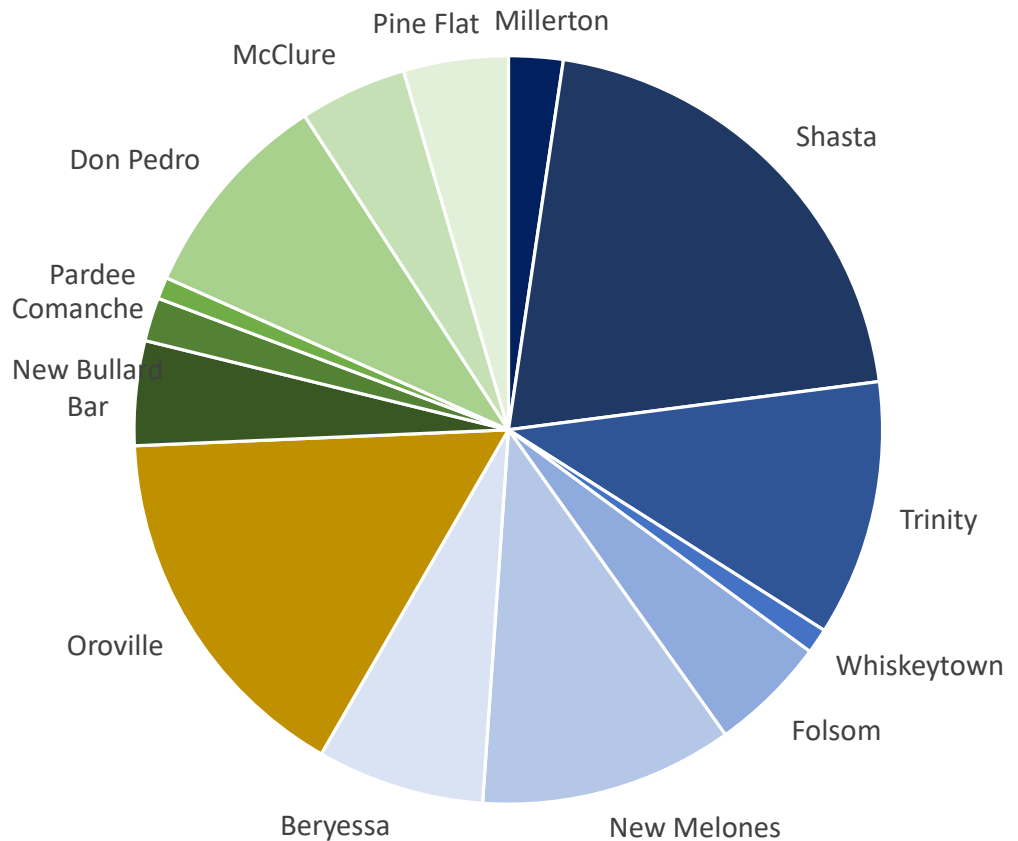


# Major CVP Facilities

- 1940s – Construction of Shasta Dam, Friant Dam, Jones Pumping Plant, and Related Canals
- 1956 – Folsom Dam constructed
- 1961 – Trinity Division added to import water into the CVP from the Klamath.
- 1967 – San Luis Unit and State Water Project
- 1968 – San Felipe Unit
- 1979 – New Melones Dam

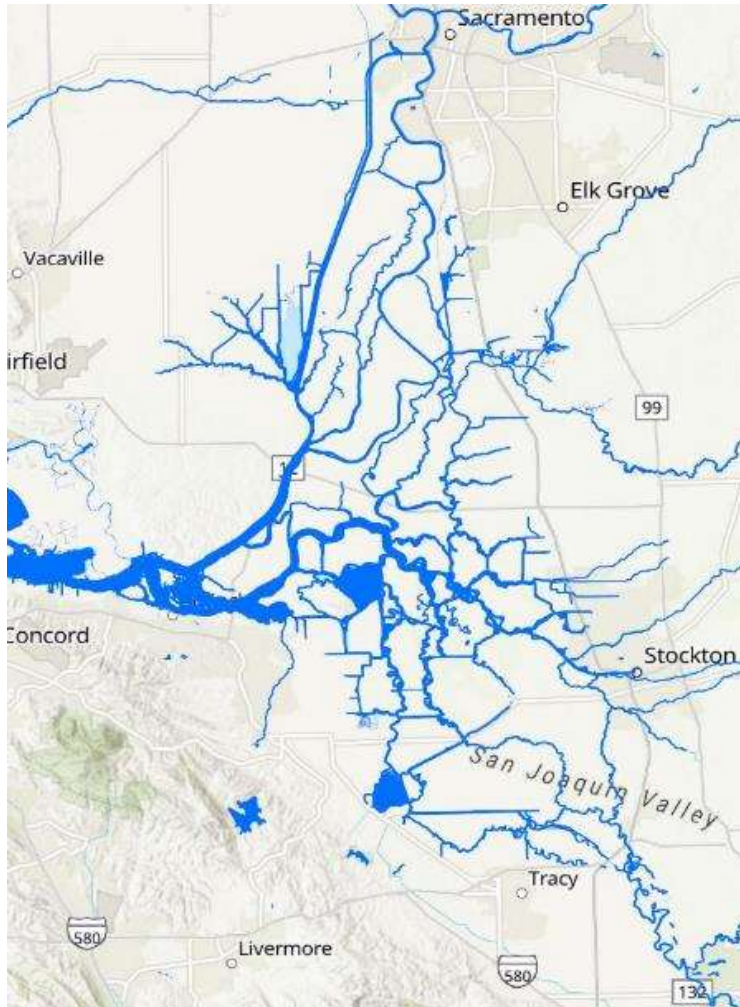
# CVP Complexity

- Unique in the coordination with pre-existing local and state water resources development
- Unique in the financial and operational integration across multiple watersheds
- Unique in the flexibility to adapt and accomplish controversial and high dollar priorities while managing cost recovery



Relative capacity of major reservoirs in the Central Valley, CA, with Reclamation operated reservoirs in blue.





# Sacramento-San Joaquin Delta

- Largest fresh-water estuary on the West Coast of the Americas
- 700 miles of sloughs and waterways
- Hub of California water
  - 40% of the State's runoff
  - 2/3 of the State's drinking water
  - Irrigation of 4 million acres of farmland
- Numerous non-native and endemic native species

# Regulations

- Upstream Control

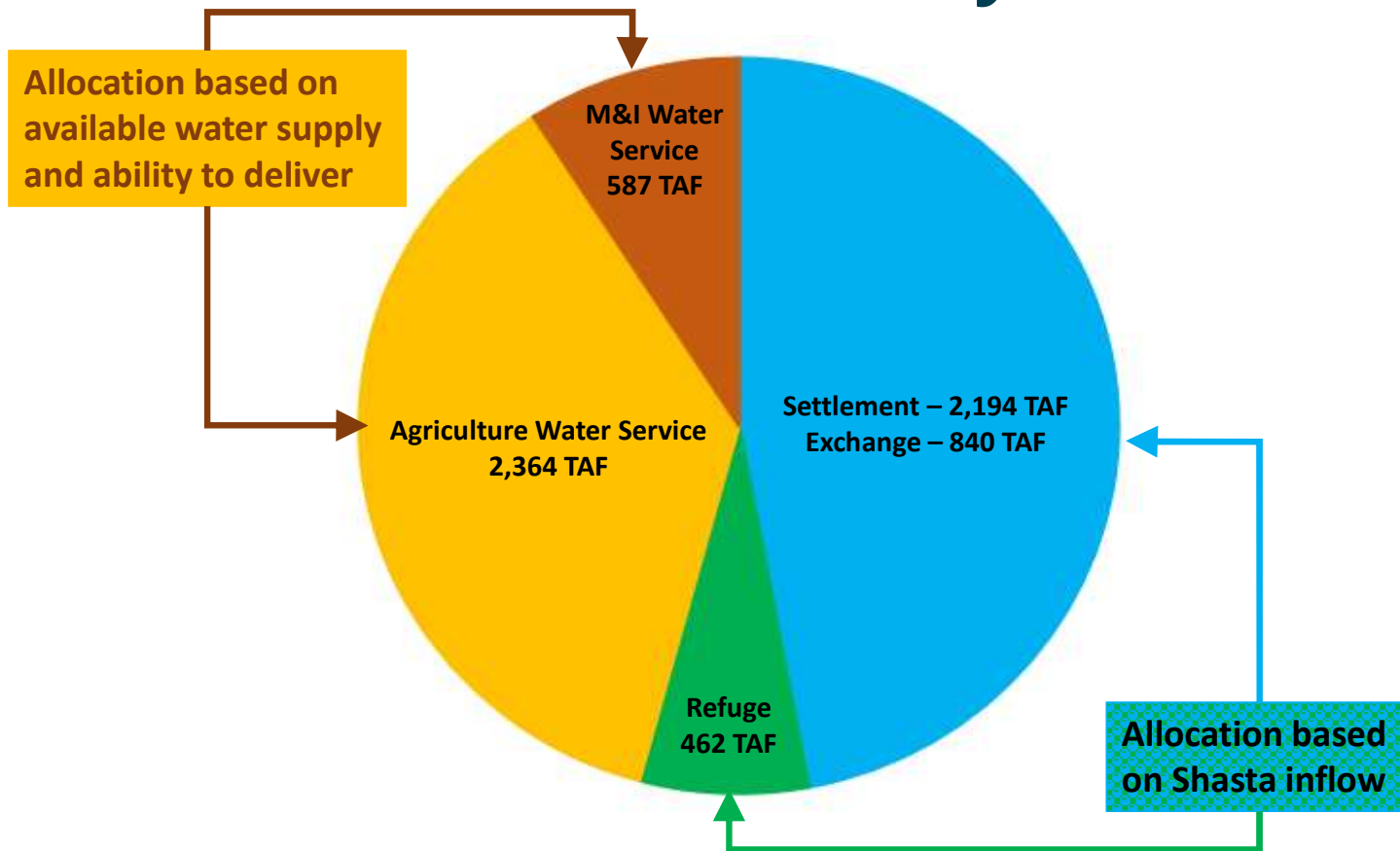
- Flow requirements
- Pulse flows
- Temperature requirements
- Delta outflow
  - NDO (D1641)
  - X2 position

- Export Control

- Limit negative flows in Old and Middle River
- Cross channel gate closure criteria
- Export/Inflow Ratio
- Vernalis based export limits (D1641)



# CVP Contract Summary



Settlement/Exchange Contracts do not include Schedule II water rights or Tri-Dams  
Includes assumptions on split between agricultural and M&I amounts for mixed use contractors  
M&I does not include dry year contract for up to 133,000 acre-feet with EBMUD  
Graphic Design courtesy of MBK Engineers

# CVP Reservoir Storage

**Storage in Major Reservoirs in Thousands of Acre-Feet**

<b>Reservoir</b>	<b>Capacity</b>	<b>15 Yr Avg</b>	<b>WY 2022</b>	<b>WY 2023</b>	<b>% of 15 Yr Avg</b>
<b>Trinity</b>	2,448	1,390	774	784	56
<b>Shasta</b>	4,552	2,815	1,657	2,647	94
<b>Folsom</b>	977	478	531	516	108
<b>New Melones</b>	2,420	1,364	984	1,039	76
<b>Fed. San Luis</b>	966	603	332	584	97
<b>Total North CVP</b>	11,363	6,650	4,278	5,570	84
<b>Millerton</b>	521	289	269	292	101
<b>Oroville (SWP)</b>	3,538	1,935	1,643	2,424	125

February 13, 2023

<https://www.usbr.gov/mp/cvo/vungvari/dayrpt.pdf>



Questions/Follow-up  
Levi Johnson, Central Valley  
Operations Office Deputy Manager  
[www.usbr.gov/mp/cvo](http://www.usbr.gov/mp/cvo)



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# WaterSMART Program

Regional Resources and Planning Office

Adam Nickels – Regional Resources and Planning Manager

[anickels@usbr.gov](mailto:anickels@usbr.gov)

Water Reuse Northern California

February 16, 2023



# WaterSMART Program Overview

- Increases water supply sustainability through investments and attention to local water conflicts
- Supports water conservation and water management improvements to help meet competing demands for water
- Leverages Federal and non-Federal funding
- Relies on collaboration with stakeholders to develop local solutions to water supply issues



**Growing Populations**



**Restoration Needs**



**Drought**



# WaterSMART Program Overview



Provides a framework for Interior to support water supply sustainability for multiple water users.





# WaterSMART Program Basics



**Most WaterSMART activities are grant programs**



**Generally a 50% non-Federal cost share is required for grants under WaterSMART**



**Applicants include entities such as states, tribes, cities, water districts, irrigation districts, watershed groups, non-profits, and flood control districts within the 17 Western United States and Territories, AK, HI, and Puerto Rico**



**Funding is allocated through annual competitive processes**



# Title XVI

## *Water Reclamation and Reuse Projects*

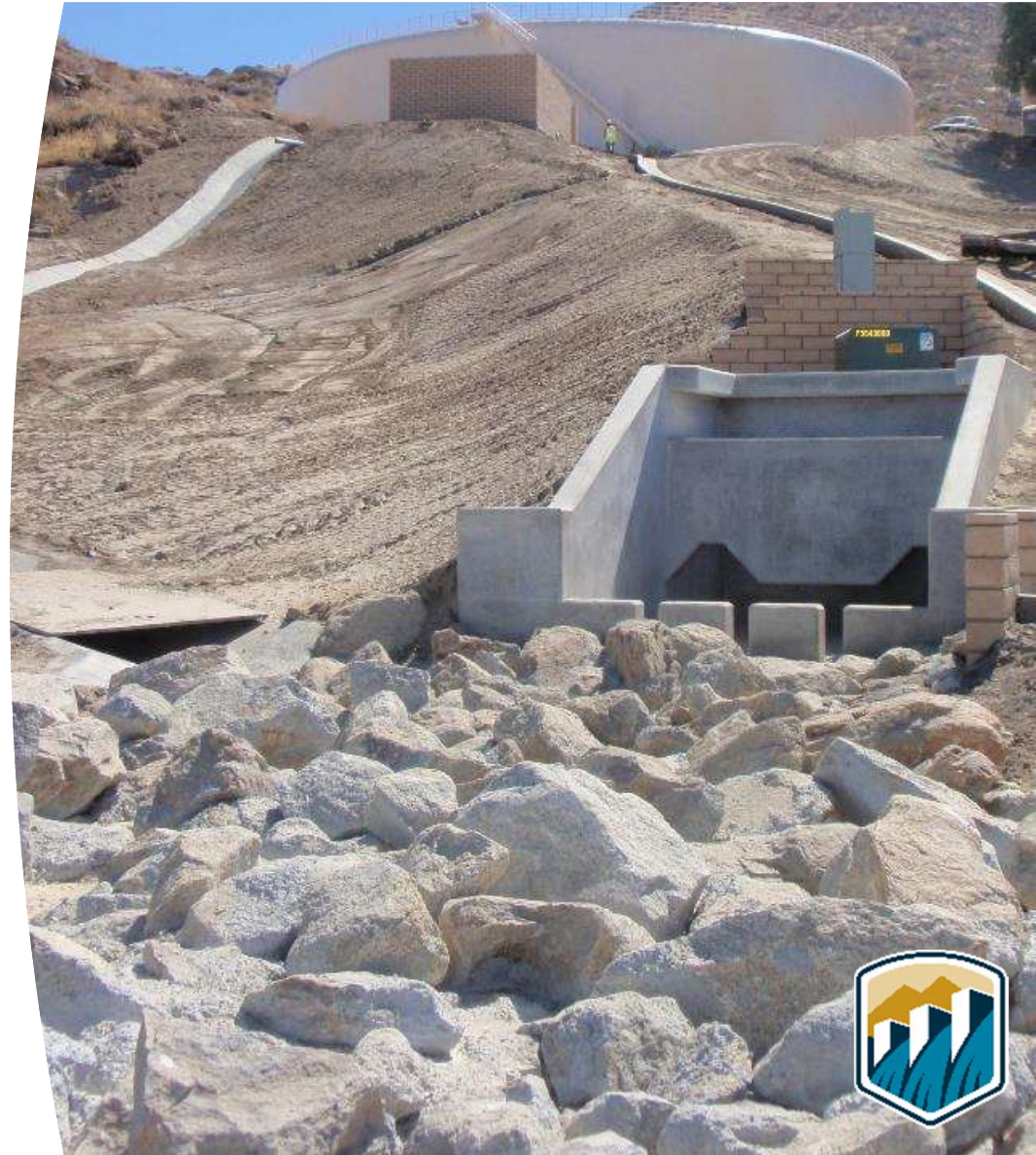
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### Eligible Project Types

- Projects that reclaim and reuse municipal, industrial, and agricultural wastewater; or impaired ground and surface waters
- Projects must either have a specific congressional authorization or be eligible under section 4009(c) of the Water Infrastructure Improvements for the Nation (WIIN) Act amendments

### Funding

- 75% non-Federal cost share required
- Up to \$30 million in Federal funding per project.



# Desalination Construction Projects

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## Eligible Projects

- Ocean or brackish water desalination projects that meet the requirements of Section 4009(a) of the WIIN Act amendments to the Desalination Act
- A completed feasibility study must be submitted and found to meet requirements of Reclamation's Directives and Standards WTR 11-01

## Funding

- Maximum Federal cost share is 25% of the total project cost, up to \$30 million
- 75% non-Federal cost share required





NEW

# Large-Scale Water Recycling

## Eligible Entities

States, Indian Tribes, municipalities, irrigation districts, wastewater districts, or other organizations with water or power delivery authority

## Eligible Projects

- Reclaim and reuse municipal, industrial, domestic, or agricultural wastewater; or impaired groundwater or surface water
- Total project cost of \$500 million or more
- Located in a Reclamation state

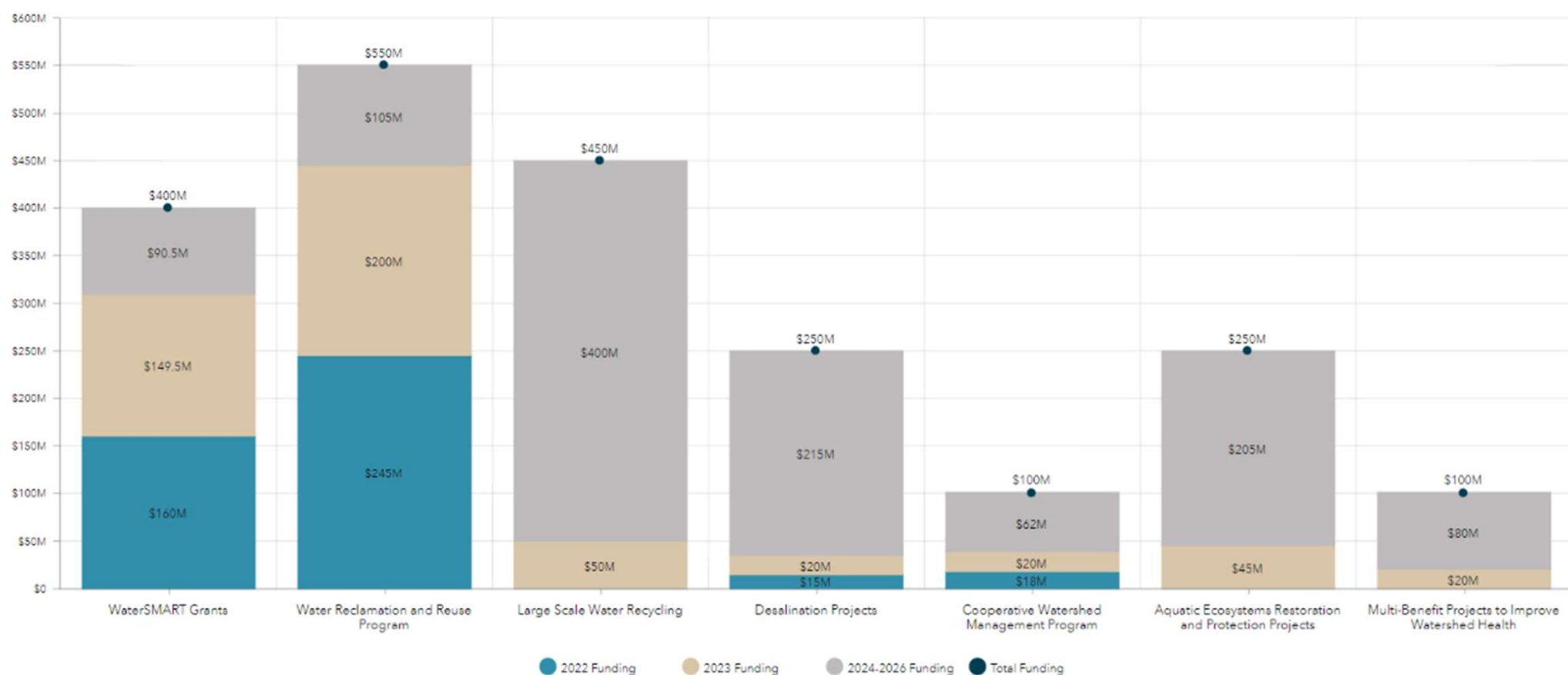
## Funding

- 75% non-Federal cost share required



# WaterSMART and Aquatic Ecosystems Infrastructure Funding

## \$2.1B over 5 years (2022-2026)



# WaterSMART Program Resources

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- WaterSMART Program Website:  
<https://www.usbr.gov/watersmart/index.html>
  - Note: Successful proposals are available on the website for each program
- For information about upcoming WaterSMART Funding Opportunities, send an email to [watersmart@usbr.gov](mailto:watersmart@usbr.gov) with your name and email address
- Funding Opportunities can be found at: [www.grants.gov](http://www.grants.gov)
- Help with using grants.gov can be found at <https://www.usbr.gov/watersmart>







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Questions?

**WaterSMART Grants**

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