



# Forecast Informed Reservoir Operations Update

Planning Committee

May 12, 2026

Chris Potter, Senior Civil Engineer



Pardee Dam, S. Rahimi, March 2023

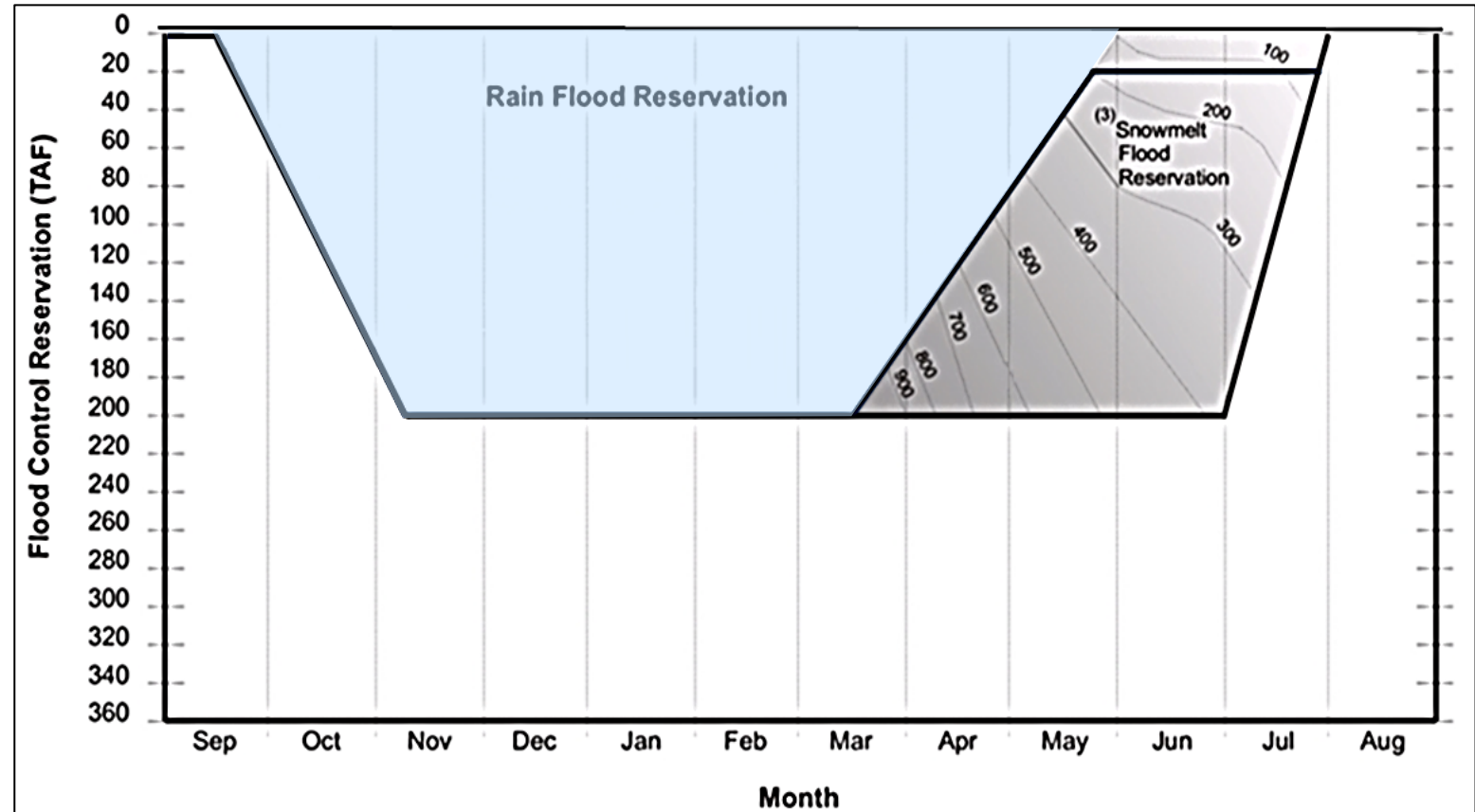
# Agenda

- Current Reservoir Operations
- Forecast Informed Reservoir Operations (FIRO)
- District Efforts with FIRO
- FIRO Project Updates
- FIRO Phase 1 Planning Assessment
- FIRO Phase 2 Preliminary Evaluation

# Current Reservoir Operations

- Camanche Reservoir operated to meet multiple objectives including flood control
- Operated in tandem with Pardee Reservoir
- 1962 Agreement with the United States Army Corps of Engineers (USACE) set operating criteria
- Must comply with flood control curve
- Storage reserved in winter and allowed to fill in spring

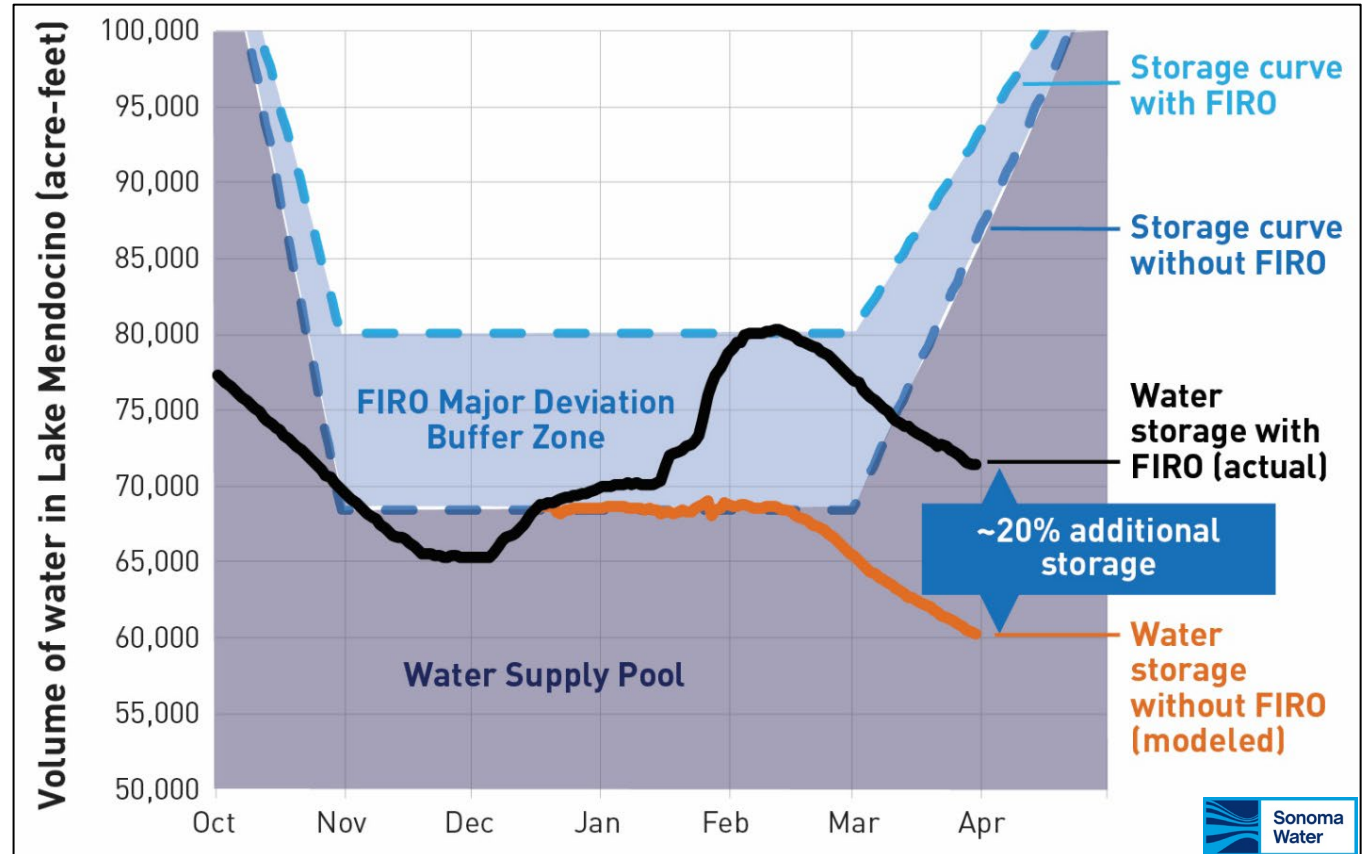
Camanche Reservoir Flood Control Curve



# FIRO

- Innovative reservoir operation strategy
- Utilizes improved weather monitoring and forecasts
- Allows agencies to make better informed decisions for storage and releases
- Goals
  - Improve water supply reliability
  - Incorporate flexibility in flood control curve

Lake Mendocino Storage; October 2019 – April 2020



# District Efforts with FIRO

## Focused on improving existing monitoring sites:

- Deployed soil moisture sensors in watershed to improve runoff predictions (Big Trees, South Fork, Pardee and Camanche reservoirs)
- Relocated Big Trees weather station

## Collaborated on research projects

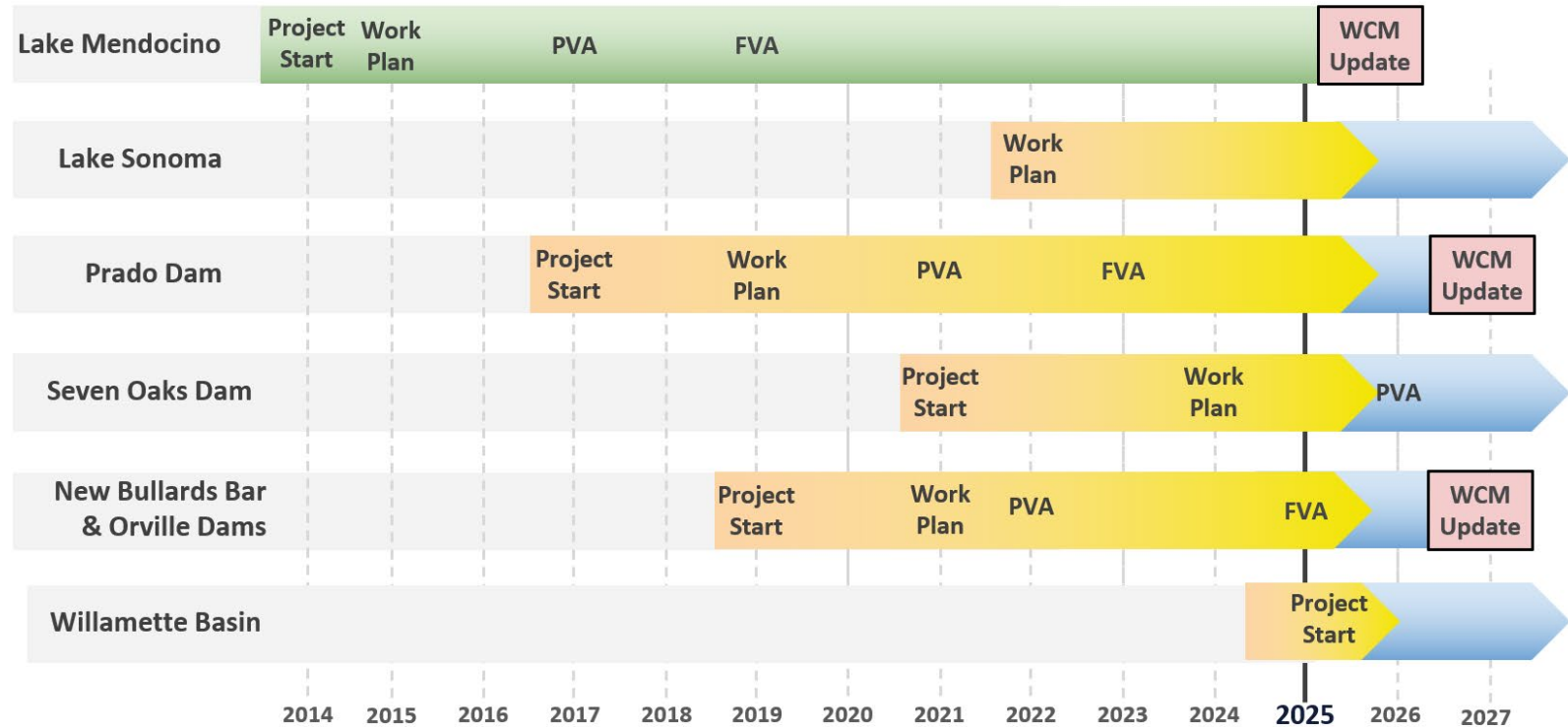
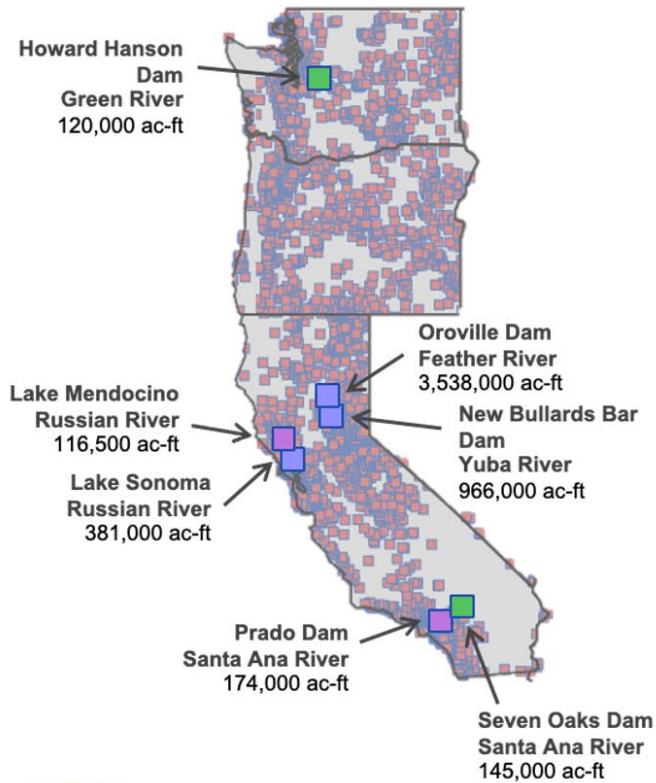
- Completed the Phase 1 FIRO planning assessment with Scripps Institution of Oceanography's Center for Western Weather and Water Extremes (CW3E)



Big Trees, J. Toone, March 2024



# FIRO Project Updates



PVA = Pre Viability Assessment  
 FVA = Full Viability Assessment  
 WCM = Water Control Manual

# FIRO Phase 1 Planning Assessment

- Phase 1 completed in January 2026
  - Reviewed existing precipitation and runoff forecasts
  - Identified data gaps
  - Developed outreach strategies with interested parties
- Key findings
  - Camanche Reservoir is a good candidate for FIRO based on USACE screening process
    - operational efficiencies are possible
  - To formally evaluate and negotiate new regulatory parameters with USACE, additional instrumentation is needed (snow water equivalent and soil moisture monitoring stations, additional snow level radar)

# FIRO Phase 2 Preliminary Evaluation

- Phase 2 will be completed in 2028, and will include:
  - Modeling of system and hydrological conditions
  - Quantifying potential benefits of FIRO
  - Development of outreach material to support stakeholder engagement

# Next Steps

- Based on results, District will decide whether to proceed with a full FIRO project
- Expected to begin in 2026, take two years to complete and cost \$630,000



# Questions





# Purified Water Outreach & Education Plan

Planning Committee

May 12, 2026

Florence Wedington, Senior Civil Engineer

Reena Thomas, Associate Civil Engineer

# Agenda

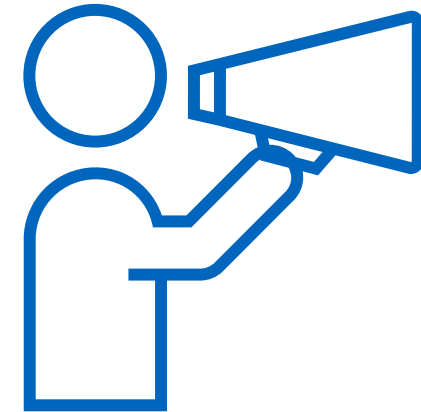
- Outreach Need and Goals
- Lessons Learned from Others
- Internal and External Outreach Program
- Next Steps



A Glass of Drinking Water

# Need for Purified Water Outreach & Education

- District Recycled Water Goal of 20 mgd by 2050
  - Non-potable reuse target of 13 mgd
- While purified water is not needed today, it could be a potential supply in the future when there is a need
- Implement outreach and education *in advance* to build trust and gain support for successful project implementation in the future



Icon of a person holding a megaphone

mgd – million gallons per day

# Outreach Goals

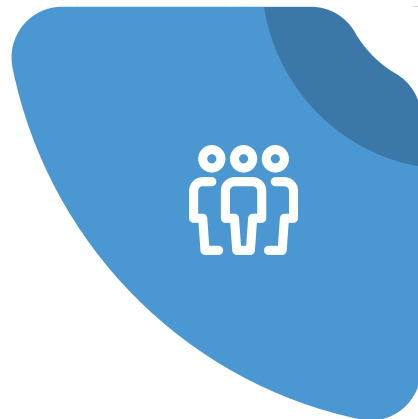
Establish the benefits of purified water



Provide education & engagement



Show community & industry support



Encourage collaboration across the District



# Lessons Learned - San Diego Purified Water Project

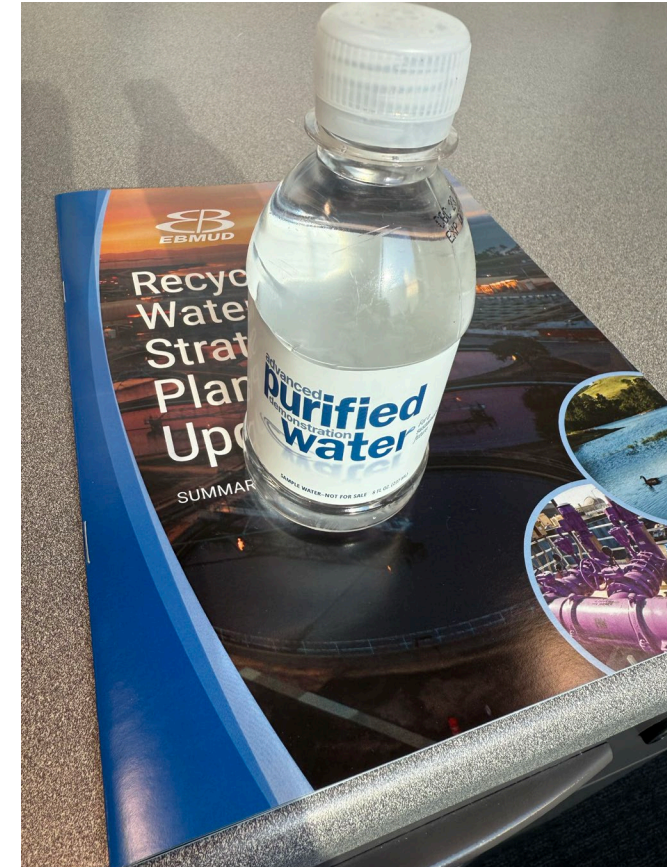
- 1993 – Initial proposal of potable reuse project
- 1994 – Conditional approvals granted; Regulatory and Non-Governmental Organization support
- 1995 to 1998 – Public and media raised concerns
- 1999 – Project cancelled by the Council
- 2015 – City restarted the project planning and updated the public outreach program
  - Explained the need for resilient local supply that is safe for drinking
  - Plan to first introduce purified water to affluent community
- 2024 – Constructing a 30-mgd reservoir augmentation project



Pure Water San Diego construction site  
Photo courtesy of F. Wedington

# Internal Outreach and Key Messages

- Begin with internal outreach – first priority
  - EBMUD staff are our biggest ambassadors
  - Staff will be equipped with consistent and accurate information
- Key messages
  - Water is too valuable to use just once
  - Purified water is safe and reliable
  - Purified water can benefit EBMUD and its customers in the future



Silicon Valley Advanced Water Purification Center  
Sample Water, EBMUD Recycled Water Strategic Plan  
Photo from Reena Thomas

# Internal Education Presentation Outline

- What is purified water?
- Regulations and Safety
- Purified water projects in California
- Explain why purified water is important to EBMUD as a potential future supply
- Describe what a purified water project would look like
- Address the potential concerns
- Discuss department specific issues



September 2025 Administration Building Purified Water Tasting

# Planned Internal Purified Water Outreach & Education Opportunities

- Purified Water Presentations and Tastings
  - Board updates
  - Management team meetings
  - Department/Division/Section staff meetings
  - Brown Bags
  - Internal events
- Fact Sheet
- Internal Communications
  - Splashes
  - Splashpad



# Planned External Purified Water Outreach & Education Opportunities

- Customer surveys
  - Recent survey indicate 70% of customers have no concerns
  - Main concerns related to not trusting the treatment process
- Develop external outreach plan
- Facility Tours
  - Silicon Valley Advanced Water Purification Center
- Community Events



People in a classroom setting

# Previous and Ongoing Purified Water Outreach

- 2024 Recycled Water Strategic Plan Update Board Presentations (March 2024, November 2024)
- February 2026 Water Wednesday
- 2025 Urban Water Management Plan – Purified Water Inset
- District Purified Water Tastings (2025, 2026)
- Earth Day Survey (2025, 2026)

# Next Steps

- Finalize purified water fact sheet and provide to the Board
- Finalize internal purified water education presentation
- Develop public engagement plan
  - Coordinate with other Bay Area agencies to develop regional messaging
  - Work with policy makers, interest groups, schools, community leaders, and other stakeholders



Two location pins connected by a dotted path

# Questions?



Flowing  
into the  
Future