

Improving Bay Area Water Supply Reliability — A Regional Approach

PURPOSE

The Bay Area's largest water agencies are working together to develop a regional solution to improve the water supply reliability for over 6 million area residents and the thousands of businesses and industries located therein. The Contra Costa Water District, the East Bay Municipal Utility District, Marin Municipal Water District, the San Francisco Public Utilities Commission (with the Bay Area Water Supply and Conservation Agency), the Santa Clara Valley Water District, Zone 7 Water Agency, and the Alameda County Water District have joined forces to leverage existing facilities and, if needed, build new ones to bolster regional water supply reliability.

REGIONAL BENEFITS

The benefits of a regional approach include:

- Enhancing water supply reliability
- Bolstering emergency preparedness
- Addressing climate resiliency needs
- Leveraging existing infrastructure investments
- Facilitating the transfer of water supplies during critical periods of drought or following natural disasters

DESCRIPTION

Each of the Bay Area water agencies have recently completed several multi-million infrastructure projects that, when pooled together as shared resources in times of need, may significantly enhance the regional water supply reliability. These projects include, but are not limited to:

- \$920M 185 MGD Freeport Intake by EBMUD to deliver water from the Sacramento River to the Bay Area
- \$110M Los Vaqueros expansion project by CCWD providing local storage of 160 TAF
- \$100M Middle River Intake project by CCWD to deliver water from the Victoria Canal in the Central Delta
- \$20M 30 MGD Hayward Intertie that connects the service area of EBMUD and SFPUC
- \$120M investment in Semitropic Groundwater Bank in Kern County providing 565 TAF of storage for SCVWD, Zone 7 and ACWD
- \$3M Intertie in Brentwood that connects CCWD to EBMUD
- \$11M investment in Cawelo Groundwater Bank in Kern County providing 120 TAF of additional storage for Zone 7
- \$23M in Chain of Lakes area to enhance recharge and use of local groundwater storage for Zone 7
- \$35M investment in groundwater demineralization to help manage salt in the Livermore Valley Groundwater Basin and facilitate use of recycled water in the Zone 7 service area
- \$70M Silicon Valley Advanced Water Purification Center to provide 8 MGD of SCVWD drought-proof supply
- \$11M 35 MGD intertie that connects SFPUC to SCVWD

Potential New Investments:

- ACWD-SFPUC Intertie connecting ACWD's Newark Desalination Facility with SFPUC's Bay Division Pipeline to provide emergency supplies and water transfer opportunities
- EBMUD-Zone 7 intertie (\$25M, EBMUD & Zone 7) that would connect EBMUD's water delivery system to Zone 7's, providing potential water sharing and transfer opportunities
- Pre-treatment facility at the Walnut Creek Water Treatment Plant (\$100M, EBMUD) that would allow EBMUD to treat water from the Sacramento River, Los Vaqueros Reservoir, and other sources, enabling EBMUD to deliver supplies to neighboring water agencies
- West Side SFPUC/SCVWD Intertie that would provide a second connection between SFPUC and SCVWD water delivery systems and enable use of additional local/imported sources for water exchanges and transfers
- SFPUC-Zone 7 Intertie enabling the exchange of surface water, groundwater, or recycled water supplies
- Transfer-Bethany pipeline (\$200M, CCWD and regional partners) that would connect the Los Vaqueros Reservoir and CCWD's and EBMUD's intakes to the Bethany Reservoir enabling the conveyance of water to the southbay aqueduct
- Regional Desalination Plant (\$175M) to supply water to CCWD, EBMUD, SCVWD, SFPUC and Zone 7
- Expansion of the Silicon Valley Advanced Water Purification Center and additional development of SCVWD potable reuse system for regional drought-proof supply
- Construction of several new well fields in the Livermore Valley Groundwater Basin to increase total production capacity to 34 TAF in one year or 108 TAF over a six year period for Zone 7, while also increase exchange opportunities with other agencies
- EBMUD-MMWD intertie (\$45M, EBMUD & MMWD) that would connect EBMUD's water delivery system to MMWD's providing potential water sharing and transfer opportunities

COSTS

A Feasibility Study could be performed using a portion of the \$4M authorized for regional desalination.



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POTENTIAL NEW CONNECTIONS

POTENTIAL FACILITIES

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