

Groundwater Banking Opportunities in Sacramento County

EBMUD's Perspective

November 14, 2012

Presentation Topics



- Who is EBMUD?
- SCWA & EBMUD Develop Freeport
- EBMUD's Water Needs (WSMP 2040)
- Potential Groundwater Banking/Source Water
- Partnership Opportunities
- Next Steps/Closing Remarks

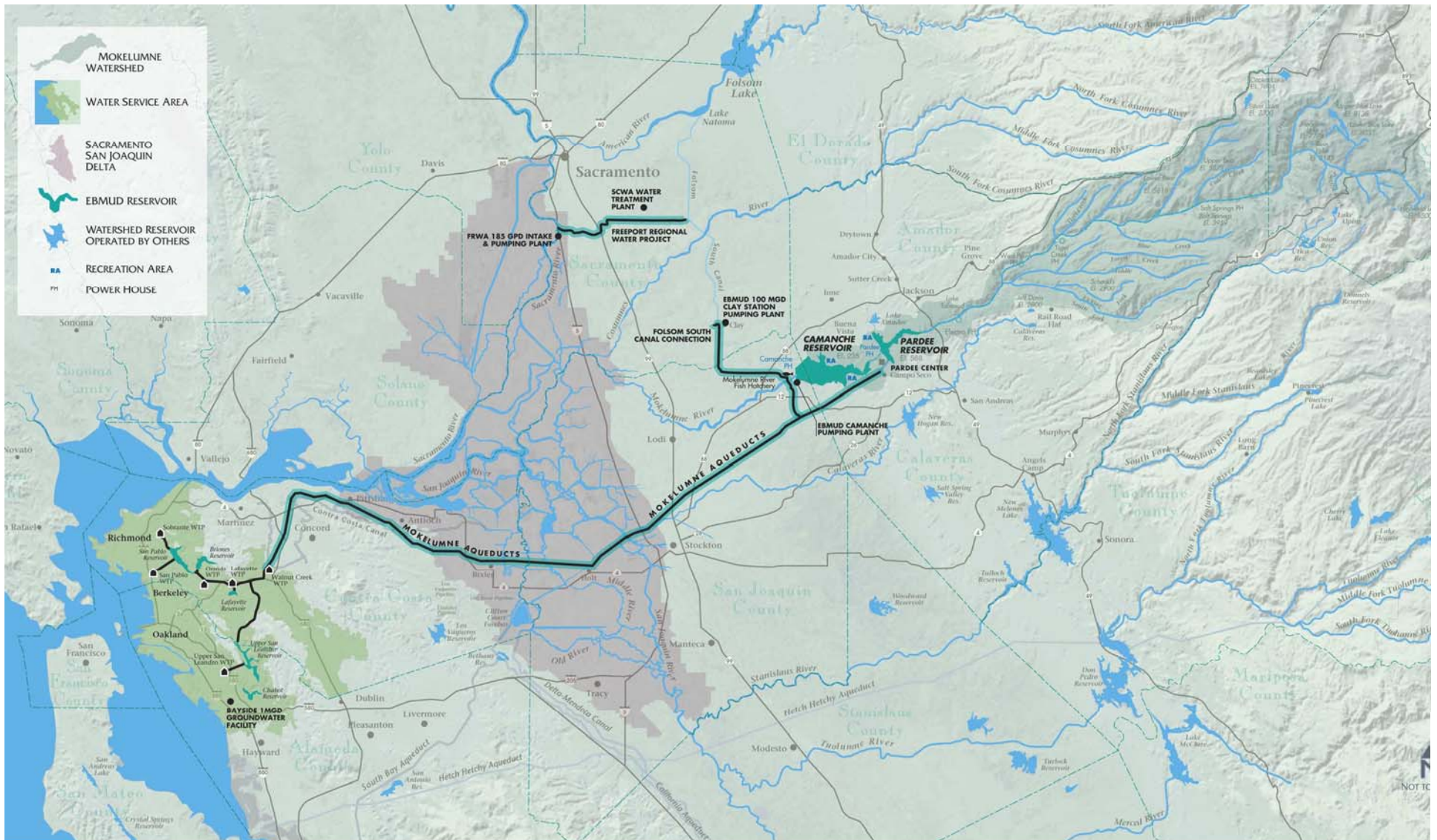
East Bay Municipal Utility District



- Publicly-owned utility created in 1923
- Serves Alameda and Contra Costa Counties
- Annual budget:
 - Operating \$461M
 - Capital \$262M
- Approximately 1750 employees
- Provides water and wastewater services



EBMUD's Mokelumne Source Water Supply System



Supplemental Supply - Freeport



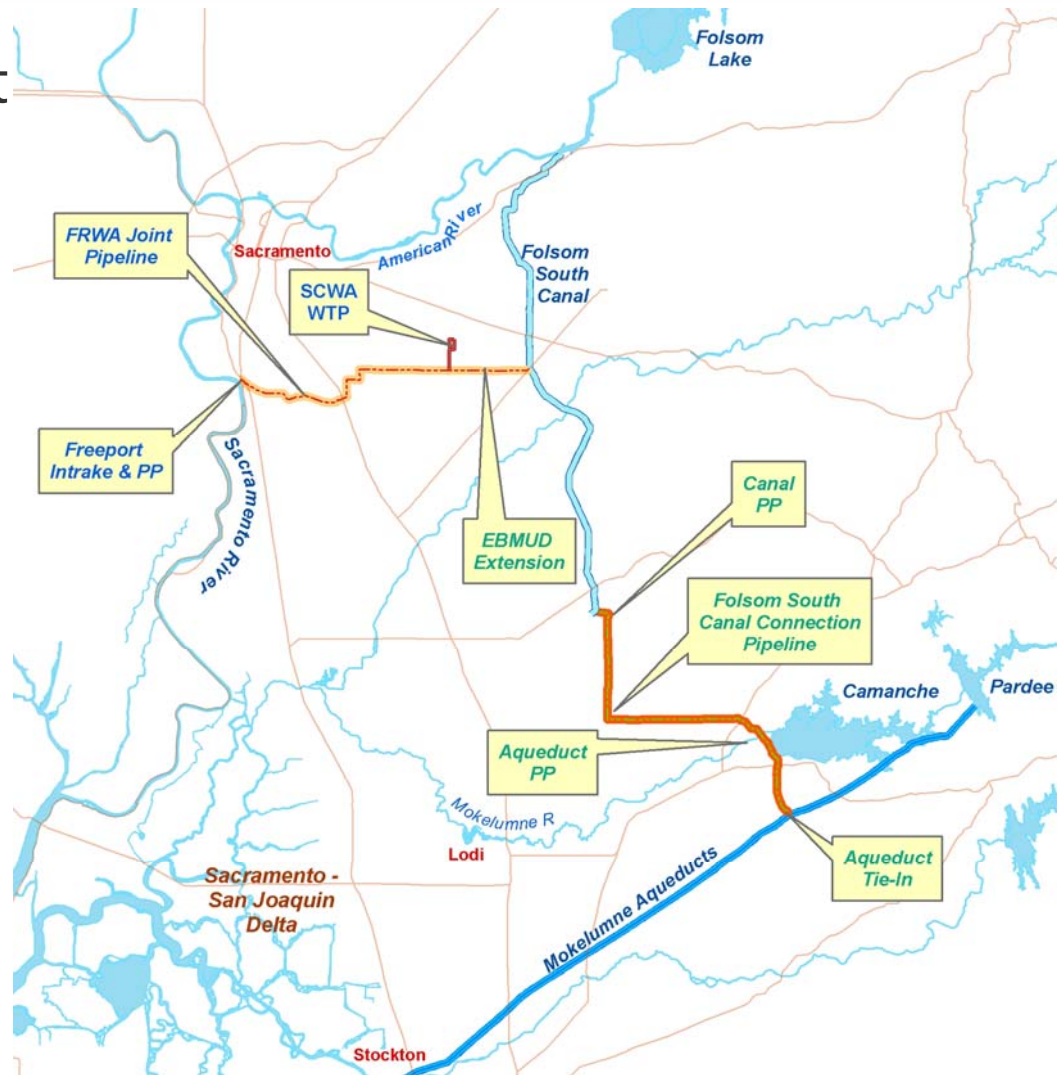
- EBMUD & SCWA sign JPA in 2002 creating FRWA
- Dry year supply for EBMUD, normal/wet year supply for SCWA



Freeport Regional Water Project Facility Description



- 185 mgd Regional Project
 - 100 mgd EBMUD
 - 85 mgd SCWA
- FRWA
 - Sacramento River intake north of Freeport
 - 12 miles of 84" pipeline
- SCWA
 - Treatment plant
 - 1 mile of 66" pipeline
- EBMUD
 - Two pumping plants
 - 22 miles of 72" pipeline
 - Tie into existing aqueducts



FRWA Operations



- **Who Operates?**

- SCWA under contract with FRWA (intake and pipeline up to SCWA WTP turnout)
- EBMUD operates EBMUD extension pipeline and all Folsom South Canal Connection (FSCC) facilities

- **When Operated?**

- SCWA operates FRWA every year
- EBMUD anticipates using Freeport 3 out of every 10 years for dry year needs
- EBMUD CVP Contract is triggered when EBMUD system storage is below 500 TAF

- **Unassigned Capacity**

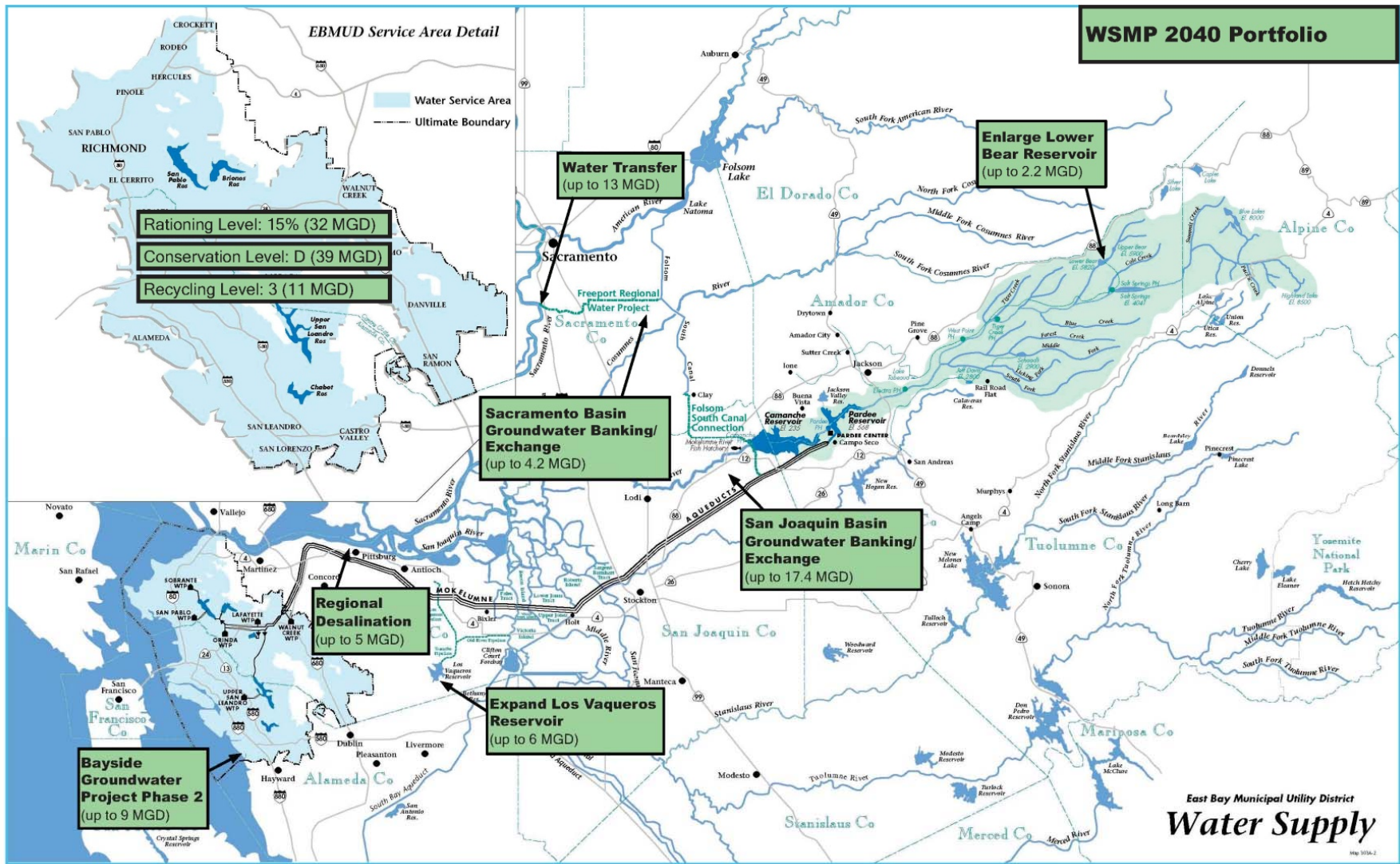
- SCWA & EBMUD are interested in negotiating with interested parties the use of unassigned capacity, both in the short and long terms.

EBMUD's Water Needs (Beyond Freeport)



- The 2040 Water Supply Management Plan identified future demands and potential supplemental supply sources (approved by EBMUD Board in 2012)
- Normal and Wet Year Supply is sufficient
- Need up to 115 TAF additional dry year supply over the 3 year drought planning sequence
- Preferred Portfolio identifies potential projects, when combined, can address supplemental need

EBMUD's Portfolio for 2040



Water Sources, Conveyance, Storage, and Extraction



- **Water Sources**
 - Water transfers from the Sacramento River Basin upstream of Freeport
 - Available excess local, state or federal water
- **Scenarios to Convey & Store Water**
 - Wet/Normal Year Water conveyed via Freeport facilities and diverted to percolation/injection/in lieu sites in Sacramento County.
- **Water Delivery to EBMUD**
 - Water extracted from basin, delivered to FSC to meet dry-year need (3 out of 10 years)
 - Water taken in-lieu via FSC, assuming an exchange with an area interest.
 - Open to other configurations

Characteristics of a Regional Groundwater Project



- Provides additional water for groundwater recharge in Sacramento County
- Provides dry year water supply to EBMUD
- Widely supported by Sacramento area interests (agencies, NGOs, agricultural community)
- Consistent with the Water Forum Agreement and Central Sacramento County GMP
- Provides environmental benefit
- Reasonable cost versus alternatives
- Maximizes use of existing facilities

What EBMUD could contribute to a Regional Partnership



Infrastructure

FRWA facilities may be used to convey Sacramento River water to the FSC (and potential percolation/injection sites)

Water

EBMUD is investigating water transfer opportunities, wet year water best fit for storage

Funding

EBMUD is open to cost sharing with interested regional partners, depending on the benefits shared.

Potential Issues/Needs



- Water Accounting Framework must be developed
- Acceptance of EBMUD taking stored water and exporting it
- Identify/resolve issues with storage and extraction of state or federal water
- EBMUD will support, but not lead the project

Closing Remarks/Next Steps



Closing Remarks

- Any Questions?
- Contact Mike Tognolini mtognoli@ebmud.com
or (510) 287-0125