DSRSD • EBMUD RECYCLED WATER AUTHORITY
(DERWA)
Board of Directors Regular Meeting Minutes
Monday, July 23, 2018

Dublin San Ramon Services District
7051 Dublin Boulevard, Dublin, California 94568

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1. CALL TO ORDER – Chair Howard called the DSRSD • EBMUD Recycled Water Authority (DERWA) meeting to order at 6 p.m. at the Dublin San Ramon Services District Boardroom.

2. PLEDGE TO THE FLAG

3. ROLL CALL – Directors present: Chair Dwight (Pat) Howard, Vice Chair John Coleman, Director Frank Mellon, and Director Georgean Vonheeder-Leopold. DERWA Staff present: Mike Tognolini, Authority Manager; Richard Lou, Treasurer; Doug Coty, General Counsel; and Nicole Genzale, Authority Secretary.

4. SPECIAL ANNOUNCEMENTS/ACTIVITIES - None

5. PUBLIC COMMENT – 6 p.m. - None

6. CONSENT CALENDAR

   A. Approve Minutes of Regular Board Meeting of March 26, 2018

   B. Treasurer's Reports for March 31, April 30, and May 31, 2018

   C. Quarterly Investment Report – March 31, and June 30, 2018

Motion by Director Mellon, Second by Director Vonheeder-Leopold, to approve the Consent Calendar. Motion carried (4-0) by the following vote:

AYES: Mellon, Vonheeder-Leopold, Coleman, Howard
NOES:

7. BOARD BUSINESS

   A. Report for Discussion – DERWA Supply and Storage Alternatives

   Authority Manager Tognolini gave a Supplemental Supply and Demand Management Update to the Board addressing the following topics. He introduced DSRSD Engineering Services Manager Judy Zavadil and EBMUD Associate Engineer Dr. Grace Su who provided additional information during the presentation.

   - Demand Management (Jan - July 2018 DERWA Daily Recycled Water Demand)
     Increasing demands have set new records for daily deliveries, maxing out at over 11 mgd (million gallons per day) as compared to 10.1 mgd last year. There has been a pattern of reduced demand on Saturdays, but an uptick for Pleasanton on roughly the same day due to delivering recycled water through the Pleasanton system to storage in the Tassajara Reservoir, enabling Pleasanton to draw from as needed. He commended DSRSD operations staff for their accomplishments taking advantage of low demand days to maximize storage and level out demand. As a result, no potable water augmentation was needed in June and July to meet increased demand. He also compared DERWA's rising 7-Day Running Average Recycled Water Demand over the last five years. DERWA is producing an average of almost 10 mgd this month, which is close to the average

wastewater flow at the plant of 10.3 mgd. He noted temperatures have been more consistent this summer, so fewer high temperature days have impacted demand.

Mr. Tognolini reviewed the following demand management strategies: (1) DSRSD, EBMUD, and Pleasanton conducted customer email outreach in June encouraging wise use of recycled water, (2) conduct ongoing customer account reviews to mitigate misuse, (3) possibly contacting users to shift demands on peak days, (4) ask member agencies to consider pricing strategies, and (5) consider customer cutbacks during droughts, which could become a State requirement.

- Short-term Storage to Level Out Peak Daily Demands
  Two available storage locations: (1) Tassajara Reservoir holds eight million gallons and is connected to the Pleasanton system, and (2) storage basins at the wastewater treatment plant. Together these would provide 18.6 million gallons of storage when needed to manage high temperature days.

- Potable Water Supplies
  - From Pleasanton at Treatment Plant – has 1.1 mgd capacity but is interruptible by Pleasanton. For ongoing operations flexibility, staff will seek extension of the temporary agreement with Pleasanton that provided supplemental potable water supply during the plant expansion construction.
  - From DSRSD at Tassajara Reservoir – 1 mgd capacity
  - From EBMUD at R100 - Could provide 0.5 mgd, but not available in 2018. Amador Reservoir would be the mechanism to move the supply, but it has been taken out of service because potable water demand is being met without it and it is in a low demand pressure zone.

- Near-term Supply and Storage Development
  - DERWA will need about 4 mgd supply or 250 mg storage in four years, based on 2018 demand projections.
  - Potable water addition continues to be available to help with peak demand days.
  - Central Contra Costa Sanitary District (CS) wastewater diversion is currently being discussed for a possible supply agreement.

  Ms. Zavadil reviewed DERWA's efforts to obtain wastewater supply from CS. She illustrated the possible diversion at the Larwin Pump Station (PS) near California High School in south San Ramon. Staff is currently in discussions regarding a supply agreement. CS staff has expressed concerns regarding operational, supply availability, and potential longer-term dependency if they were to agree to the diversion.

  The Board and staff discussed CS's projected demands, their concerns, and DERWA's ongoing efforts to negotiate an agreement. If successful, the project design, agreement, and construction could result in supplemental supply as soon as May 2019. A consultant is currently working on design to help address CS's concerns. Staff would propose a five-year agreement term, with the option for one-year extensions. The flow from south San Ramon would provide roughly 1.5 mgd, about 1 mgd less than the full flow of the Larwin PS. Though the Larwin PS has had its share of overflows and odor problems, CS is more comfortable with this diversion option, and wishes to include San Ramon in the conversation due to sensitivities in the community.

- Groundwater Storage and Production
  Dr. Su presented a map of the groundwater basins in and near DERWA's service area, and reviewed the Main Basin, Fringe Basin, existing wells, and Tassajara area groundwater information:

- Main Basin - Storage capacity about 250 thousand acre feet (taf) and groundwater (GW) production ranged from 13 - 29 taf per year between 2007 -2017
- Fringe Basin (North–Dublin, Camp, and Bishop Subbasins) - Storage capacity about 76 taf based on average depth of 100 feet, limited GW use, primarily for irrigation, GW production information not available, estimated well yields in Dublin Subbasin: 20–980 gpm (gallons per minute)
  - Groundwater Quality - Zone 7 samples annually for inorganic constituents of concern (COC) and the GW quality objectives for: TDS (total dissolved solids), Nitrate, Boron and total Chromium.
- Existing Wells Near Transmission Lines – Three wells are still in existence: San Ramon Nursery, San Ramon Golf Club, and Chevron. Staff is evaluating viability of the Nursery well, which is owned by PG&E and was installed by a previous nursery in 1990, but has been dormant due to water quality issues. Staff conducted a pump test and collected samples for testing. The Board and staff discussed the feasibility and regulations regarding use of wells for recycled water storage.
- Tassajara Area Groundwater
  - Outside of delineated Department of Water Resources groundwater basin
  - Groundwater used by rural residents and for irrigation
  - Mostly low permeability material including clays, clay with sand, shales, and siltstone
  - Low well yields (2.5 - 12 gpm)
  - Area is not suitable for groundwater storage based on the geology and low well yields

Next Steps

- Decide if Nursery well can be used based on production and water quality and negotiate a use agreement.
- Identify additional well sites and locations to test drill for new wells.
- Determine if groundwater is a viable supplemental supply option.

– Longer-term Supply and Storage Alternatives

- Groundwater storage in the Fringe or Main Basin - Fringe Basin has low storage potential based on currently available information, and storage of recycled water in the Main Basin is under Zone 7 Water Agency (Zone 7) jurisdiction and expected to be used for potable reuse.
- Groundwater wells in the Main Basin (groundwater pumping) - Zone 7 Hopyard Well 7, Pleasanton Well, or a new well would be subject to Zone 7 fees comparable to potable connection fees.
- Tri-Valley Potable Reuse – Ms. Zavadil provided background on the completed potable reuse technical feasibility study, status on potable reuse end use regulations, and potable water purification methods. The study concluded there are viable project options in the Tri-Valley. The participating agencies have received the study results and are interested in pursuing next steps. A project could be completed in eight years. A project would cost $112 - $222 million, increasing monthly water bills $5 - $15 for customers at buildout. A project would yield 5 - 10 mgd.

– Other Potential Supplies

- Livermore – Deliveries to Pleasanton through the recycled water intertie and to the DERWA Plant from Livermore-Amador Valley Waste Management Authority (LAVWMA). Livermore is evaluating its supply to support ultimate build-out needs and a global reuse project. Having significant discussions with Livermore regarding supply diversion is unlikely for one or two years. The Board and staff discussed

the possible pursuit of establishing one-year supply diversion agreements until Livermore has determined use for its wastewater supply, as that supply is currently being pumped into the Bay.

- East Bay Discharge Authority (EBDA)/LAVWMA – Would require new pumping plants and pipelines to pump water from near the Bay and would incur a high capital cost.

Mr. Tognolini concluded the presentation outlining DERWA's near-term next steps:

- Pursue Central San diversion by spring 2019.
- Extend potable water agreement with Pleasanton.
- Identify/install Fringe Basin wells for peak production by spring 2021.
- Conduct investigation to determine Fringe Basin groundwater storage potential.

8. MANAGER'S REPORTS

A. Capital Projects – Phase 2 Recycled Water Treatment Plant Expansion Project Update

Authority Manager Tognolini reported the main project elements have been completed. The Pump Station R1 Variable Frequency Drives project, added for cost efficiency's sake, will be completed over the next few months. He noted the DSRSD operations staff is making great strides refining the process to operate the new Actiflo system, handling process upsets, and realizing system flexibility. Project construction is expected to finish under the $18.8 million budget, but additional budget may be required to conduct filter testing to re-rate the filters and re-rate plant capacity, with the goal to reach 16.2 mgd. The current interim capacity rating is 12.3 mgd.

He reported DERWA signed an agreement last month with the State for a $2.5 million principle forgiveness loan, which becomes a grant upon signing for the loan. Staff will submit necessary documentation for reimbursement in the next few months. Staff will also re-apply for a Federal grant up to $3 million under the WIIN (Water Infrastructure for Improvements to the Nation) Act.

Lastly, he announced invitations will be sent soon for the celebratory event to be held for August 15 completion of the treatment plant expansion.

B. Confirm Next Board Meeting – September 24, 2018

The Board confirmed the next meeting will be held as scheduled on September 24, 2018.

9. BOARDMEMBER ITEMS - None

10. ADJOURNMENT

Chair Howard adjourned the meeting at 7:29 p.m.

Submitted by,

Nicole M. Genzale, CMC
Authority Secretary