

**WATER RESOURCES & CONSERVATION  
COMMITTEE MEETING SUMMARY MINUTES  
Wednesday, August 28, 2019  
4:15 p.m.**

**ATTENDANCE**

Directors: Paul Sethy (Chair), Aziz Akbari



Staff: Robert Shaver, Laura Hidas, Thomas Niesar, Stephanie Nevins, Devon Becker,  
Megan Maurino

**DISCUSSION TOPICS**

1. Qualified Water Efficient Landscape Program Update: Megan Maurino, Water Conservation Specialist, provided an update on the Bay Area Qualified Water Efficient Landscaper (BayQWEL) training program. The BayQWEL program was reviewed with the Water Resources and Conservation Committee on November 26, 2018.

The Qualified Water Efficient Landscaper (QWEL) training is a U.S. Environmental Protection Agency (EPA) WaterSense certified program, which provides 20 hours of training and a professional certification for landscaping and maintenance professionals with an emphasis on efficient water management. The BayQWEL program brings this training to the Bay Area, including the District's service area.

Staff has worked with the District's legal counsel and the other participating Bay Area water agencies to formalize a Memorandum of Agreement (MOA). The MOA became effective on July 1, 2019 and will be in effect for two years. Participating Agencies include: Bay Area Water Supply and Conservation Agency, City of Napa, Contra Costa Water District, East Bay Municipal Utility District, Santa Clara Valley Water District, San Francisco Public Utilities Commission, Sonoma County Water Agency, and Zone 7 Water Agency with Solano County Water Agency (SCWA) as the lead agency.

SCWA selected a Professional Certifying Organization (PCO), the California Water Efficiency Partnership (CalWEP), to administer the QWEL training program in the region through a request for proposal process. SCWA will finalize this arrangement at the SCWA September Board Meeting. The PCO coordinates all aspects of the training classes, hires a certified instructor, and hosts a QWEL exam. CalWEP hosted a Train-the-Trainer course in early August, which is required for instructors of the QWEL curriculum. As a result, there are several qualified English and Spanish speaking instructors in the region.

All participating agencies have agreed to host a minimum of one class per year with a regional maximum of 25 classes over two years. The District's staff is planning on hosting one BayQWEL training per year during the two year contract. The training schedule is not yet determined, but the first class hosted by the District will likely be in the spring of 2020.

The cost to the District is around \$10,000 per year for the logistics and training of each class and approximately \$2,000 per year in additional administration fees for training materials and continuing education unit management. There are sufficient funds in the FY 2019/20 and FY 20/2021 budget for this program. A Proposition 1 grant project proposal, which includes funding for BayQWEL trainings hosted by the District, has been submitted through the Bay Area Integrated Regional Water Management (BAIRWM) group.

This program supports the District's Strategic Plan Goal 2.1 – Maintain and Enhance Sustainability and Reliability of Local and Regional Water Supplies by increasing water-efficient practices in outdoor landscaping and irrigation throughout its service area, which is important for complying with the new AB 1668 and SB 606 legislation to make Conservation a California Way of Life.

Staff responded to questions regarding the recognition of certified professionals and the BayQWEL program advertising. Director Akbari asked what the cost would be for participants. Ms. Maurino stated that there is no cost to participants but there is an option to ask for a minimal registration fee to better ensure participants will attend the class. The Committee expressed support for the BayQWEL program.

2. Strategic Water Management Decisions in 2019: Devon Becker, Water Resources Engineer, provided an overview of 2019 water supply optimization decisions regarding production at the District's various facilities, as well as surface water source prioritization. Staff intends to make this an annual update after the water supply and delivery schedules have been finalized for the calendar year, which is typically in August.

The Water Supply & Production Optimization Team (WSaPO team) is an interdepartmental/interdivisional team comprised of members from Groundwater, Operations, Water Supply, Finance, and Water Resources Planning that focuses on optimizing water supply and water production decision-making throughout the year as conditions change. The District originally formed the WSaPO team in 2013 to plan for recharge facilities operations during construction of the new Shinn Diversion pipeline. The team's role increased significantly with the numerous operational and water supply challenges encountered during the most recent drought. The goal of the team is to outline initial water supply and production objectives for the year, and then continually revise these objectives as conditions evolve. The team typically meets once a month, with additional coordination as needed, especially between Groundwater, Water Supply/Water Resources Planning, and Operations.

In 2019, the team helped the District successfully meet its contractual minimum purchase requirement with SFPUC of 8,567 acre-feet (AF) for FY 18/19. The team typically targets 103% of the District's minimum purchase to minimize cost, yet still provide an operational buffer. In FY 18/19, the District purchased just 68 AF over the minimum purchase requirement, representing usage of less than 101% of the minimum purchase. In dollars, this means the District spent only ~\$120,000 over the minimum purchase, which represents substantial savings to the District.

The factors that drive the water management strategic decisions for the year are the following: cost, hydrology, quantity of surface water supplies including Table A allocation from the State Water Project (SWP), quantity of SFPUC supplies and contractual obligations, groundwater levels, facility outages and other operational contingencies, the District's Semitropic storage balance, and "other objectives," including items such as long-term water supply planning. However, the SWP Table A allocation is the single largest variable in determining the optimal production scheme and the quantities and timing of water deliveries in any given year.

The annual Water Supply Optimization process is conducted in two parts:

1. The District uses the Production Optimization Model, a multi-variable Analytical Solver optimization software, to determine the most cost-effective monthly production scenario based on the unit variable production cost at each production facility for a projected level of water demand. The output from the Production Optimization Model can be generalized into the monthly quantities for Groundwater production facilities, SFPUC production facilities, and Surface Water production facilities.
2. Prioritization of which surface water source to use is the second key element of the annual optimization process. Source water to the District's surface water treatment facilities can come from multiple sources [i.e. Lake Del Valle (LDV) water; SWP "Article 56" water, also known as Carryover water held in San Luis Reservoir; SWP Table A; Semitropic Water Bank; or conceivably, other water purchase/transfer agreements). This second prioritization step is the focus of this Board Committee update.

The District began 2019 with relatively healthy groundwater levels [37.2 ft. Above Hayward Fault (AHF) and 13.6 ft. Below Hayward Fault (BHF)], 9,979 AF of Carryover water in San Luis, 136,261 AF stored in the Semitropic Water Bank, and essentially no water stored in LDV (noted as -78 AF due to residual negative natural inflow recorded by DWR in July 2018). The SWP began 2019 with an initial allocation of 10%, issued on in November 2019. Allocation increases to 15%, 35% and 70% were issued on January 25, February 20, and March 20, 2019, respectively. The final 2019 SWP Table A allocation was increased to 75% on June 19, 2019, attributable to studies showing DWR storage and regulatory targets being met at a higher allocation.

The surface water source prioritization in 2019 was the following: 1.) LDV flood stage releases (no delivery cost; no depletion of LDV storage balance); 2.) LDV stored water (no delivery cost; evaporation of storage over time); 3.) Article 56, i.e. Carryover water (Prior to Table A water as is only good for the calendar year; can spill if San Luis fills and DWR needs project storage; SWP variable cost); 4.) Table A water (SWP variable cost); and 5.) Semitropic returns (Note: Semitropic deposits are optimized as water supply, optimal contractual cost structure, and capacity allow). Mr. Becker reviewed the decision timeline for 2019 based on this prioritization approach with the Committee.

In response to previous Board interest, Mr. Becker explained that Article 21 water, or “interruptible water,” is water that can be made available to SWP contractors that have signed the Monterey Amendment when there is excess water in the State system. However, the contractual stipulations of Article 21, along with the capacity constraints of the SWP infrastructure, often limit the District’s ability to use Article 21. DWR made Article 21 water available from February 19, 2019 through March 31, 2019, with a total volume of 331,457 AF made available to all contractors. The District did not request Article 21 in 2019. The primary reason for this was that the District had a remaining balance of Carryover water in San Luis in February when Article 21 became available, and it is considered good management practice to use Carryover water that is likely to spill prior to requesting Article 21. The District requested in February to move all Carryover water to Semitropic in the following month of March when it became clear that San Luis was likely to spill given the volume of water in the SWP system. However, this request was only partially filled, due to capacity issues on the California Aqueduct. However, since movement of Carryover water is prioritized before movement of Article 21 water, there was no way for the District to have used any Article 21 water in 2019 even if it had been requested. Last, even if the District had been able to request Article 21 locally in 2019, there would not have been any economic incentive to do so given the availability of LDV flood releases in both February and March that do not require variable cost and do not impact the District’s LDV storage balance.

Although only 618 AF of Carryover water was able to be delivered to Semitropic in February 2019, the District has planned to store as much Table A water in Semitropic as possible under its O&M fee for this year. So far, the District has delivered 2,700 AF, 2,828 AF, and 2,701 AF in May, June and July, respectively, with another 4,424 AF of deliveries scheduled for the remainder of 2019.

Strategic water management decisions have an annual horizon, but will continue to be affected by updated demand projections, future modeling, and other long-term water resources planning decisions. Staff intends to bring this topic back to the Committee each year for an update.

Director Akbari asked if staff prepares any metrics/statistics of annual cost savings based on the outcome of our strategic decisions, as such data might highlight the District’s responsible management of resources. Mr. Shaver noted that keeping SFPUC purchases to the minimum purchase is the most significant cost savings to the District and is the best indicator of our cost-effective management. Thomas Niesar also added that the IRP used an “all usage” unit cost approach, which lumped all of the different supply costs together into a single unit cost on an annual basis. This approach showed historical improvement in unit cost at the District as a result of optimization, but that once such optimization was fully implemented, the reduction reached a plateau, which is reflective are where we are today.

3. Water Efficiency Master Plan Update: Stephanie Nevins, Water Conservation Supervisor, provided an update on the status of the District’s Water Efficiency Master Plan (WEMP), specifically the customer survey component of the project. The District entered into a contract with Maddaus Water Management (Maddaus) to develop the WEMP, approved by the District’s Board on January 10, 2019. Developing the WEMP is the first step in the

District's multi-year effort to update its water supply master plan, the Integrated Resources Plan (IRP), and is part of Strategic Goal 2.3 – Evaluate New and Innovative Water Management Concepts.

Conducting a saturation survey of District customers is the next step in the project and is included in the scope of work for the District's contract with Maddaus. The primary goal of the survey is to determine the saturation of low flow fixtures/devices and the level of adoption of other water use efficiency measures by District customers throughout the service area. The survey will be professionally designed with questions that will focus on past conservation behavior, including the installation of water efficient fixtures/devices and adoption of other water efficiency measures, future conservation plans or interests, customer knowledge of Advanced Metering Infrastructure (AMI), customer interest in using AMI data as a tool to save water, how customers think the District is doing with conservation, and customer outreach preferences. The target date for the survey is the end of September 2019.

Probolsky Research, a national research firm, has been subcontracted by Maddaus to conduct the survey, which will be conducted over the phone or through email in several different languages on a representative sample of District customers. Customers will be alerted that they may be called and asked questions. Staff is coordinating with Project Engineering and Public Affairs to develop the survey questions related to AMI and outreach. Survey results will help determine the water use efficiency potential in the service area and help identify appropriate water use efficiency program strategies for the District.

Staff discussed how the survey fits into the WEMP schedule, as well as other tasks and milestones. The final WEMP should be released before the end of 2020, after a public workshop and Board adoption. Staff will bring updates regarding the progress of the WEMP to the Committee and Board, as needed. A smaller, simpler survey, accessible on the District's website, is also planned so that any customer can provide input on the WEMP. Staff responded to questions from Director Akbari. The Committee expressed support for the project.

4. Delta Conveyance Updates: Laura Hidas, Manager of Water Resources, provided an update on the public negotiation process that is underway related to proposed amendments to the State Water Project water supply contracts that would be necessary for a Delta conveyance facility. Three negotiation sessions have been held so far, and a technical team was set up to review feasibility of some aspects of the proposals to date. The public negotiation process is expected to result in an Agreement in Principle (AIP) among DWR and the State Water Contractors that addresses cost allocation and other matters that will be the basis of a contract amendment if a Delta conveyance project is approved, and after environmental review. The District will continue to participate in the negotiations and staff will provide updates to the Board as new information becomes available. At this time, it is anticipated that an AIP could come to the Board for consideration later this fall.
5. Governor's Portfolio Initiative: Thomas Niesar, Water Supply and Planning Manager, and Laura Hidas, Manager of Water Resources, provided a brief update on the Governor's Water Resilience Portfolio Initiative, which is intended to integrate and build on programs, policies

and investments already in place to create a climate-resilient water system for California. The State has requested input from the public and local agencies on this initiative, and written comments have been requested by September 1 for consideration by the Governor's Portfolio team. Staff has engaged with industry association efforts to provide input to the Portfolio Initiative through the Association of California Water Agencies (ACWA) and California Urban Water Agencies (CUWA). Additionally, staff is developing a letter to be signed by the General Manager and highlight the District's past successes and lessons learned in implementing an integrated portfolio approach to water management that may be informative to this statewide effort. Ms. Hidas briefly reviewed the topics being considered for inclusion in a CUWA letter, and Mr. Niesar explained that the District's letter will cover similar topics as well as lessons learned from the District's experience with Integrated Resources Planning. Both letters will be finalized and submitted prior to the September 1 comment deadline.

6. Public Comments: There were no comments.

### **RECOMMENDATIONS**

Topics discussed by the Committee were informational only, and no recommendations are being made.