



MEMORANDUM

FC 14 (01-02-07)

TO: Board of Directors

FROM: Water Conservation and
Demand Management
Committee

SUBJECT: Water Conservation and Demand
Management Committee Meeting Summary
for October 24, 2022

DATE: November 22, 2022

This memorandum summarizes agenda items from the meeting of the Water Conservation and Demand Management Committee held October 24, 2022.

Attendees:

Valley Water Board Members in attendance were: Committee Vice Chair Director Nai Hsueh (District 5) Director Barbara F. Keegan (District 2), and Committee Chair Director Linda J. LeZotte (District 4).

Staff members in attendance were: Joseph Aranda, Aaron Baker, Roseryn Bhudsabourg, Neeta Bijoor, Glenna Brambill, Theresa Chinte, George Cook, Vanessa De La Piedra, Phil Dolan, Paola Giles, Vincent Gin, Linh Hoang, Matt Keller, Jessica Lovering, Carlos Orellana, Angus Parton, Colin Resch, Don Rocha, Mary Samar, Ashley Shannon, Kirsten Struve, and Jing Wu.

Guest Agencies in attendance were: Brian Boyer (Cinnabar Hills Golf Club) and Michael Bolzowski (California Water Service Company-CWS).

Public in attendance was: Ryan Castillo, Arthur M. Keller, Ph.D., Julia Nussbaum, Yerae Seo, and Kathy.

ACTION ITEMS

4.1 MONTHLY UPDATE ON PROGRESS TOWARDS ACHIEVING VALLEY WATER'S WATER USE REDUCTION TARGET AND WATER CONSERVATION EFFORTS RELATED TO THE DROUGHT EMERGENCY

Neeta Bijoor reported on the following:

Summary from Meeting Agenda Memo:

On June 9, 2021, the Board adopted Santa Clara Valley Water District (Valley Water) Resolution 21-68 which declared a water shortage emergency condition pursuant to California Water Code §350, called for water use reduction of 15% compared to 2019, and urged the County of Santa Clara (County) to proclaim a local emergency. The County ratified its proclamation of a drought emergency on June 22, 2021. Valley Water Resolution 22-20 amended Valley Water Resolution 21-68 on April 12, 2022, to call for no more than 2 days of irrigation in a week for ornamental lawns and prohibit excessive runoff, midday irrigation, and irrigation after rainfall. On May 24, 2022, the Board pursuant to Water Code §375 adopted Ordinance 22-02 to enforce these restrictions. Ordinance 22-02 went into effect on June 1, 2022, and was amended on September 13, 2022, to include the State's watering ban on watering non-functional turf at Commercial, Industrial, and Institutional (CII) properties.

In 2022, Santa Clara County (County) and the State of California entered the third year of drought, and experienced the driest January, February and March on record. Valley Water's Federal and State imported water allocations were drastically reduced to historic lows. On March 28, 2022, Governor Gavin Newsom issued Executive Order N-7-22 to call on local water suppliers to move to at least Stage 2 of their water shortage contingency plans. The U.S. Drought Monitor Report from October 13, 2022, indicates that the county is in primarily severe drought, with the eastern edges in extreme drought. The northern Sierra Nevada snowpack, a primary source of Valley Water's imported water, is 16% of normal as of June 13, 2022. Staff will provide updates regarding latest drought conditions.

Despite ongoing drought conditions, groundwater levels are stabilizing or increasing in some areas of the county because of recent increases in managed recharge (made possible by emergency imported water supplies) and ongoing water conservation by the community. Other areas in the county continue to have declines in water levels.

Conservation is an important strategy to help reach the Board's 15% call for water use reduction and mitigate against negative impacts.

Water Conservation Programs and Outreach

Valley Water is continuing to see high participation rates in water conservation programs through September 2022. Valley Water hosted a webinar in September focusing on Garden Design Basics with 118 in attendance on Zoom and Facebook Live.

Valley Water's "Say Yes" water conservation campaign continues. In September, the media responded to Valley Water's water conservation updates regarding the commercial watering ban, the Landscape Rebate Program, the impact of September rain to our water supply, and the progress of the Anderson Dam Seismic Retrofit Project. On September 29, 2022, Valley Water, in conjunction with Save Our Water and Google, conducted a news conference encouraging the community and businesses to conserve water as the extreme drought continues. The event took place at Google's Bay View campus. The event was emceed by Valley Water CEO Rick Callender. Speakers included Valley Water Chair Pro Tem John L. Varela, Director Gary Kremen, California's Natural Resources Secretary Wade Crowfoot, State Senator Josh Becker, the State Water Board's Sean Maguire, Mountain View Mayor Lucas Ramirez and Google's Water & Entitlements Lead Drew Wenzel. DGDG CEO Jeremy Beaver also attended and provided comments to media members about his company's use of Valley Water's Landscape Rebate Program. Reporters from ABC7 News, KRON and KCBS Radio were in attendance, while representatives from KPIX, KGO Radio, Morgan Hill and Gilroy Life, KQED, Bay City News and the Mercury News listened to and recorded our live stream. In addition, the Speakers Bureau Program held two presentations in September.

In September, staff shared an informative video describing the details of Valley Water's enforcement ordinance. This video includes information on the new ban on watering decorative lawns on commercial, industrial and institutional properties. Several posts were shared to encourage our social media audience to sign up for events and webinars hosted by Valley Water and its partners on water conservation topics such as drip irrigation installation and intro to garden design.

Data analytics and targeted marketing of water conservation programs

At the September 28, 2022, Water Conservation and Demand Management Committee meeting, the Committee requested additional information on what type of data Valley Water may need to target our programs, including data that may be needed from retailers.

Data currently provided by retailers monthly includes water use by water source. Data provided by retailers for Valley Water's water demand study included water fees by sector, number of accounts, and monthly sectoral water use data dating back to 2000 or as far back as retailers' had data for if they didn't have data going back to 2000. Retailers with whom we partner on Advanced Metering Infrastructure (AMI) provide data on leak detection reports.

Valley Water's data includes rebate program participation, water waste reports, treated water deliveries, communications/campaign data, etc. The Water Conservation Strategic Plan gathered information on participation in Valley Water's rebate programs, which has now been developed into a GIS tool to help Valley Water staff target outreach. This data includes information on demographics, rent vs. own, income, etc.

Valley Water conducts data analysis and market research to target its efforts to promote water conservation and participation in its conservation programs. Valley Water uses digital campaigns that target advertising based on keywords.

In addition, Valley Water targets customers in specific sectors or categories to promote specific messaging and programs. For example, a targeted campaign to inform commercial, industrial and institutional entities about the outdoor watering ban and enforcement was launched. Digital ads will run on targeted platforms like Google,

Facebook, LinkedIn and Twitter, as well as streaming audio and video platforms. We are also deploying messaging on billboards located in industrial and commercial areas around the county, to encourage widespread awareness of the ban and encourage people to report violations against the ban. Information on the CII ban will also be shared via a countywide postcard and e-mail blast to homeowners' associations.

Valley Water will continue to utilize data gathered on participation in its programs to guide future marketing efforts. Valley Water will continue to use the Strategic Plan to implement and target programs.

Countywide Water Use Reduction

Valley Water's water savings call of 15% compared to 2019 was exceeded in August 2022, for the second time in a row. Countywide water savings was 16% in August 2022 compared to August 2019. This shows that our water conservation programs, our enforcement program launched in June, and our increased public outreach have all been effective in helping us achieve savings.

Countywide water savings was 17% in August 2022 compared to August 2020, which means the county also exceeded the Governor's call for conservation (15% compared to 2020). California's water savings in August 2022 was 10% compared to August 2020.

Santa Clara County's cumulative water savings from June 2021 – August 2022 is 5%, compared to 2019. Using a 2020 baseline, Santa Clara County's cumulative water savings from July 2021 – August 2022 is 10%, while California's cumulative water savings during this period is 4%.

Water Waste Enforcement

Valley Water's Water Waste Program is continuing its educational mission while enforcing mandatory outdoor water use restrictions. Valley Water is addressing these complaints and coordinating with water retailers and municipalities on enforcement efforts. Over 1,500 water waste complaints were received since enforcement of Ordinance 22-02 was launched in June. Runoff continues to be the most common complaint. As of October 13, 2022, 34 complaints were received related to the ban against watering CII non-functional turf. Enforcement has been successful as there have been only three complaints of water waste following the first complaint, which suggests that people are addressing their water waste following the first complaint.

The Water Conservation and Demand Management Committee discussed the following: semitropic deliveries, leaks, contract monitoring, collection of data, water conservation outreach, and targeting programs, GIS tool-participation rate level tool (how does it work and would be good to have an interactive session), digital platforms in outreach and any limitations, Landscape Rebate Program (would like to see award distribution data), and continued funding of Lawn Busters Program.

Kirsten Struve, Justin Burks, Don Rocha, and Ashley Shannon were available to answer questions.

Public Comment:

Dr. Arthur Keller questioned the people standing on turf (slide on page 27), and also, can the contracted landscapers receive the landscape rebate money directly.

The Water Conservation and Demand Management Committee took no action.

4.2. WATER USE DATA FOR HOMES AND BUSINESSES

Ashley Shannon reported on the following:

Summary from Meeting Agenda Memo:

Conditions in the State of California continue to be very dry, with Santa Clara County being classified by the U.S. Drought Monitor as being in severe drought with some of the edges of our county. Achieving the Board's target of 15% savings as directed by Santa Clara Valley Water District (Valley Water) Resolution 21-68 is becoming even more paramount. Demand reductions during drought are predominately achieved through targeted messaging, outreach, behavioral changes, and changing equipment to eliminate leaks and to increase efficiency. Short-term

savings can also yield long-term savings. In addition, drought encourages high participation in Valley Water's water conservation programs.

Valley Water has provided a robust water conservation program (Program) since 1992. In November 2019, the Board approved the 2040 Water Supply Master Plan that updated the long-term conservation targets to 99,000 acre-feet per year (AFY) and 109,000 AFY by 2030 and 2040, respectively. In October 2021, the Water Conservation and Demand Management Committee (Committee) received Valley Water's updated Water Conservation Strategic Plan (Strategic Plan) which will guide staff on how best to achieve the long-term targets. The Strategic Plan determined that Valley Water will meet its long-term targets if participation is increased. The plan also analyzed and identified methods for successfully increasing participation in areas with high participation and identified variables that could similarly increase participation in areas with historically low participation. Valley Water continues to promote our many conservation programs, saving 76,584 acre-feet of water in fiscal year 2021.

The purpose of this memorandum is to respond to the Committee's request at the September 28 meeting to provide an overview of the Program's rebates, services, and resources offered for I water use monitoring, including leak detection or inefficient water use, for indoor and outdoor water conservation.

Submeter Rebate Program

Valley Water provides a \$150 equipment rebate per submeter installed at multi-family properties like mobile home parks, Homeowners Associations (HOAs), Accessory Dwelling Units (ADUs or "granny units"), condominiums and apartment complexes. According to a Valley Water study, installing submeters can reduce annual water use at multi-family complexes by 15-30%. Providing monthly water use data, submeters can make individuals financially responsible for their individual usage by encouraging efficiency and by quickly reporting leaks, which also assists with long-term maintenance. The benefits of submeters can potentially keep rent and HOA dues lower by incentivizing individual billing. Rebating for submetering eq equipment is a cost-effective program for Valley Water, providing water savings at \$171 per acre-foot program's participation has varied with 1,879 total rebates issued from fiscal year 2013-2022 totaling \$73,650 with no participation from fiscal year 2017-2019.

Landscape Rebate Program Landscape Meter Rebate

Valley Waters Landscape Rebate Program offers a wide range of water-saving devices that would qualify for a rebate such as dedicated landscape meters, flow sensors, hydrometers, and weather-based irrigation controllers. The purpose of these devices is to monitor the water use throughout the irrigated landscape to communicate with the irrigation controller with real-time water use data. These devices also can shut down irrigation zones or stations where leaks have been detected from the irrigation valve until the leak has been repaired. From fiscal years 2012- 2022 Valley Waters Landscape Rebate Program has issued rebates for 383 dedicated landscape meters, flow sensors, and hydrometers totaling up to \$243,182.12. In comparison between fiscal years 2012-2022 Valley Waters Landscape Rebate Program has rebated over 5,281 weather-based irrigation controllers totaling over \$1,000,000. Each of these irrigation controllers could be paired with a dedicated landscape meter to provide these customers with leak detection and leak protection.

Valley Water's Large Landscape Program

The Large Landscape Program offers landscape surveys and site-specific irrigation budgets to help nearly 4,000 properties track their water use against how much they should be using. During the last drought, this data was used to help properties stay in compliance of water reduction calls. (3,807 total sties with 2,600 CII sites).

Through Valley Water's Large Landscape Program, AMI data for irrigation account customers can link to a customer facing online portal. The portal can communicate hourly water use information through specialized charts, leak notifications, and insights related to day spikes, midday irrigation, and days-per-week irrigation frequency.

AMI – Advanced Metering Infrastructure and Home Water Use Reports

Advanced Metering Infrastructure (AMI) provides near real-time customer water consumption data, sends leak and high usage alerts, and allows customers to monitor their own water usage on an hourly basis through an online portal. Valley Water has cost-share agreements with City of Milpitas and City of Morgan Hill to install AMI. The City of Gilroy has AMI and received grant funding from Valley Water as well.

Also, Valley Water partners with the Cities of Gilroy, Santa Clara, Milpitas, and Morgan Hill and San José Municipal Water to provide Home Water Use Reports. These reports alert customers to potential spikes in their water use due to leaks and include information about relevant conservation programs.

Several of Valley Water's other retailers have plans for full operational deployment of AMI over the next three to four years, including the largest retailer, San Jose Water Company.

Individual Flow Monitoring Devices

Valley Water has explored several options for developing additional programs that encourage water use tracking, including individual flow monitoring devices. Existing pilot study results vary in the demonstrated and sustained water savings from the installation of these devices. AMI performs the same function. Some of our retailers do not allow installation of individual flow monitoring devices on their meters. San Jose Water Company anticipates a full operational AMI infrastructure within the next 3-4 years. Pilot studies of many individual water monitoring devices haven't been done, but AMI has been tested widely, including a pilot study through Valley Water's Water Conservation Grant funding with proven significant savings. Given the Strategic Plan's results and available staff resources, at this time, staff is focused on increasing participation in Valley Water's existing programs.

Next Steps

The next steps to increase water use awareness and leak detection would be to consider increasing rebates offered such as the rebate amounts for submeters and landscape flow meters, increasing marketing of these programs and partnering with community stakeholders to support and highlight these programs.

The Water Conservation and Demand Management Committee discussed the following: impediments of residents not taking advantage of program, comparison of flow meters vs AMI, and suggested ACWA input,

Justin Burks, Kirsten Struve, and Ashley Shannon were available to answer questions.

Public Comment:

Dr. Arthur Keller questioned how leaks are detected early on without AMI.

The Water Conservation and Demand Management Committee took no action.

4.3. UPDATE ON ZONES OF CONTROLLED DRINKING WATER WELL CONSTRUCTION FOR THE PURIFIED WATER PROJECT.

George Cook reported on the following:

Summary from Meeting Agenda Memo:

To increase water supply reliability and help avoid groundwater depletion, the Santa Clara Valley Water District (Valley Water) plans to use highly treated recycled water (purified water) for groundwater replenishment. To meet regulatory requirements, Valley Water is required by law to establish zones of controlled drinking water well construction (well control zones) near the recharge ponds where purified water will be used. Within the primary well control zone, state regulations prohibit the construction of new drinking water wells as one of many safeguards for a purified water groundwater recharge project. Valley Water must also establish a secondary zone of potential controlled drinking water well construction.

Information on the well control zones and the regulation of groundwater extraction via Board Resolution 18-04 was provided at Water Conservation and Demand Management Committee (Committee) meetings on November 22, 2021, and April 25 and July 25, 2022. As discussed at previous Committee meetings, an ordinance is needed to establish the well control zones. Valley Water met with State Board staff in November 2021 to present the proposed well control zones, discuss how they were developed, and request input. Following that meeting, a draft ordinance was presented to the Committee on July 25, 2022. The Committee provided feedback on the appeals process and staff noted the ordinance would be presented to the Board in fall 2022 for potential adoption.

In a September 2022 project update meeting, State Board staff raised several questions, including the size and configuration of the well control zones. Valley Water is working to respond to this recent feedback and is preparing for a potential tracer study that would further support delineation of the well control zones. To ensure the well control zones align with State Board expectations and support outreach to appropriate property owners, staff is no longer planning to take the ordinance to the Board in Fall 2022. Instead, staff plans to bring the ordinance to the Board when the additional information is developed, and further regulatory coordination has

occurred. Staff will continue to update the Committee on the well control zones and related ordinance as work progresses.

The Water Conservation and Demand Management Committee discussed the following: regulatory agencies, information on the appeals process and what happens when State and Valley Water Board adopt this process (next steps).

The Water Conservation and Demand Management Committee took no action.

4.4 STANDING ITEMS REPORT

Committee Chair Director Linda J. LeZotte reviewed the materials as outlined in the agenda items.

Summary from Meeting Agenda Memo:

Standing items will allow regular reports from staff on subjects that may be of interest to the committee members.

There were no verbal updates for:

1. Sustainable Groundwater Management Act (SGMA)
2. Flood Mar
3. Agricultural Water Use Baseline Study

The Water Conservation and Demand Management Committee took no action.

The next regularly scheduled meeting is November 28, 2022.

If you have any questions or concerns, you may contact me at, gbrambill@valleywater.org or 1.408.630.2408.

Thank you!

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Office of the Clerk of the Board