



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 August 29, 2022

DATE: September 27, 2022

This memorandum summarizes agenda items from the meeting of the Water Conservation and Demand Management Committee held August 29, 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, Audrey Beaman, Roseryn Bhudsabourg, Neeta Bijoor, Sam Bogale, Glenna Brambill, Justin Burks, Theresa Chinte, Vanessa De La Piedra, Phil Dolan, Anthony Fulcher, Paola Giles, Vincent Gin, Samantha Greene, Andrew Gschwind, Jason Gurdak, Linh Hoang, Candice Kwok-Smith, Michael Martin, Carlos Orellana, Colin Resch, Don Rocha, Mary Samar, Ashley Shannon, Gregory Williams, and Jing Wu.

Guest Agencies in attendance were: Michael Bolzowski (California Water Service Company), Brian Boyer (Cinnabar Hills Golf Club), Tim Guster (Great Oaks Water Company), Katja Irvin (Sierra Club Loma Prieta Chapter), and Bill Tuttle and John Tang (San Jose Water Company-SJWC).

Public in attendance were: Arthur M. Keller, Ph.D., Nathan Metcalf, Doug Muirhead, and Julia Nussbaum.

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 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 approved Ordinance 22-02 to enforce these restrictions. Ordinance 22-02 went into effect on June 1, 2022.

In 2022, Santa Clara County and 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 August 4, 2022, indicates that the Santa Clara County is in severe drought. The northern Sierra Nevada snowpack, a primary source of imported water, is 16% of normal as of June 13, 2022. Staff will provide updates regarding latest drought conditions.

Groundwater levels in July have continued its typical pattern of summer decline. Greater than average declines in groundwater levels are expected this year because of the drought. Achieving the Board's water use reduction

target is essential to minimize the risk of resumed subsidence in North Santa Clara County and wells going dry, particularly in South Santa Clara County. That risk increases as the drought persists.

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

Water Conservation Outreach

Valley Water's "Say Yes" water conservation campaign continued in July. Success stories on the Landscape Rebate Program were highlighted in social media. In addition, Valley Water's 30-second "Say Yes to Saving Water" video was distributed to local movie theaters. Blogs were developed to discuss work at Anderson Dam and tree care.

In July, a social media campaign was developed asking residents to test their knowledge of drought and conservation, and to gauge how well residents understand Valley Water's drought-related messaging. The Speakers Bureau Program held four presentations in July.

Water Conservation Programs

With the close of Valley Water's fiscal year at the end of June, Valley Water reached an impressive milestone - over 1 million square feet of lawn was converted to low-water use landscape and a total of 1,432 rebates were issued for landscape conversion, irrigation equipment and rainwater rebates. Valley Water partnered with local non-profit Our City Forest for the July Do-It-Yourself Lawn Busters workshop, which taught attendees how to convert an area of turfgrass lawn into a low-water use landscape.

Valley Water developed a handout to highlight the Santa Clara County's conservation efforts and successes, including achieving the Governor's call for conservation in June 2022. The handout was provided to the Governor's office. The handout is shown in Appendix A of the attached July 2022 Drought Response Report.

Countywide Water Use Reduction

Countywide water savings is trending in the right direction with savings in June greater than in May. Countywide water savings was 9% in June 2022 compared to June 2019. Santa Clara County's cumulative water savings from June 2021 – June 2022 is 3%, compared to 2019. Countywide water savings was 15% in June 2022 compared to June 2020, which means Santa Clara County achieved the Governor's call for conservation. The county exceeded California's water savings of 8% in June 2022, compared to June 2020. California's cumulative water savings from July 2021 – June 2022 is 3%, compared to 2020. Santa Clara County's cumulative water savings during this time is 9%, compared to 2020.

Water Waste Enforcement

Valley Water's Water Waste Program is continuing its educational mission while enforcing the mandatory outdoor water use restrictions. Valley Water is addressing these complaints and coordinating with water retailers and municipalities on these efforts. Over 700 water waste complaints were received since enforcement of Ordinance 22-02 was launched in June. Runoff continues to be the most common complaint. Enforcement has been successful as there were fewer reports of water waste in July compared to June, which suggests that people are addressing their water waste or are less likely to waste water. One repeated complaint was received, which suggests that most people are addressing the water waste for which they were reported.

First Amended and Restated Ordinance 22-02

Effective June 10, 2022, commercial, industrial, and institutional (CII) non-functional turf must not be irrigated in California under regulations adopted by the State Water Resources Control Board. In the proposed First Amended and Restated Ordinance (An Ordinance of Santa Clara Valley Water District Adopting Drought Outdoor Water Conservation and Enforcement Measures), the restriction against watering CII non-functional turf has been added to the list of enforceable water use restrictions by Valley Water. In addition, the First Amended and Restated Ordinance includes refined procedures to coordinate with retailers in Valley Water's enforcement process, in order to avoid duplication of enforcement steps by Valley Water or retailers. Upon review by the Water

Conservation and Demand Management Committee, the First Amended and Restated Ordinance will be presented for Board consideration on September 13, 2022.

The Water Conservation and Demand Management Committee discussed the following: Ordinance's old and new language, violation reporting/occurrences, conservation progress, savings information, commending the residents adhering to conservation, filling of percolation ponds (recharging groundwater), and the committee thanked staff for doing a wonderful job. (Handouts on the Ordinance were distributed and can be found on the committee web page)

Aaron Baker was available to answer questions.

Public Comment:

Dr. Arthur Keller suggested adding an "and" to the first violation portion of the Ordinance.

The Water Conservation and Demand Management Committee took the following action:

The Committee unanimously approved staff's recommendation that the Board consider adopting the First Amended and Restated Ordinance 22-02.

4.2. DROUGHT RESPONSE PLAN - DRAFT VULNERABILITY ASSESSMENT

Michael Martin reported on the following:

Summary from Meeting Agenda Memo:

Santa Clara Valley Water District (Valley Water) is developing a Drought Response Plan (DRP) by integrating lessons learned from Valley Water's and other water agencies' past drought responses. Developing a robust approach for requesting water use reductions and improving Valley Water's ability to take actions during the early phases of a drought will improve Valley Water's drought response. The DRP has four main components: a benchmark study, a vulnerability assessment, water shortage contingency plan update, and a drought response framework. In March 2022, staff introduced the DRP to the Water Conservation and Demand Management Committee and presented the benchmark study. This memorandum summarizes the draft vulnerability assessment.

To develop the DRP, Valley Water has an internal stakeholder group composed of experts from across Valley Water and has a Task Force composed of Valley Water's retailers, Santa Clara County agricultural and environmental stakeholders, and other interested parties. Valley water collaborates with the internal stakeholder group and the Task Force through a series of workshops to discuss goals, approaches, and findings and to solicit feedback on draft elements of the DRP. Valley Water met with the Task Force to discuss and solicit feedback on the draft vulnerability assessment on June 30, 2022.

The draft vulnerability assessment evaluates the risks and impacts of drought to Valley Water's existing water supply and infrastructure. The report documents key factors that increase Valley Water's supply vulnerability during drought, which included climate change, existing and potential regulations, infrastructure conditions and constraints, and future water quality conditions (Attachment 2). Interrelationships between the factors may compound their effects on future water supply reliability.

Key findings from the draft vulnerability assessment include:

- Climate change is expected to reduce the availability of imported and local surface water supplies and increase the frequency and severity of drought. At the same time, the frequency of extreme precipitation events is expected to increase, and a greater proportion of annual precipitation may fall within a smaller number of large events. The shift in precipitation patterns may make surface storage capture and delivery more challenging.
- Upcoming and existing regulations, such as the Bay-Delta Water Quality Control Plan (Bay-Delta Plan) and Endangered Species Act/ California Endangered Species Act (ESA/CESA) permits are vulnerabilities to the future availability of imported water supplies. Locally, Fisheries and Aquatic Habitat Collaborative Effort (FAHCE) Settlement Agreement implementation, future Lake and Streambed Alteration Agreements, and other permits necessary for Utility operations could also reduce system flexibility. Regulatory-based vulnerabilities do not explicitly contribute to increased risk of hydrologic drought, rather they may exacerbate water shortage conditions during drought events.

- Infrastructure limitations and constraints can also exacerbate drought impacts. Key constraints include current storage restrictions on five out of ten local Valley Water reservoirs, limitations on physical delivery of stored surface water in out-of-county groundwater banks, and the potential for concurrent conveyance outages during drought events. Parallel to this, current infrastructure and reservoir operational rules may not maximize the capture and storage of surface water produced by the short, intense storm events that are predicted to occur with climate change.
- Water quality vulnerabilities can reduce system flexibility and potentially limit available water supply sources, which can worsen water shortages during drought. Surface water quality vulnerabilities, such as toxic cyanobacterial blooms and higher Total Dissolved Solids (TDS), are often direct impacts from drought stemming from lower streamflow, greater evaporation, and higher water temperature. Drought conditions can also affect groundwater quality through increased likelihood of saltwater intrusion. In addition, emerging groundwater contaminants, such as Per- and Polyfluoroalkyl Substances (PFAS), may result in additional treatment constraints that constrain system flexibility.

As a part of the draft vulnerability assessment, mitigation actions are identified to decrease drought vulnerabilities. Mitigation actions are intended to be long-term projects and programs that reduce the potential for water shortages in the future. The Water Supply Master Plan (WSMP) identifies projects that increase water supply reliability. The WSMP is reviewed on an annual basis through the Monitoring and Assessment Program (MAP) to incorporate the latest available data, modeling, and project information. The draft vulnerability assessment identifies ways WSMP projects could enhance water supply reliability and mitigate drought risks based on discussions with Valley Water staff concerning specific system vulnerabilities during drought. This evaluation resulted in a conceptual prioritization of mitigation actions summarized below:

- Meeting Valley Water's conservation targets should continue to be prioritized as they are a critical component in reducing water demand and mitigating drought risk.
- To help mitigate droughts while Anderson Reservoir is under construction, near-term investment in additional imported water transfer agreements should continue to be prioritized. Transfer agreements may not be a reliable tool in the future given climate change and potential future regulatory impacts in the San Francisco Bay Delta watershed and may not be as cost-effective as other options; thus, water transfer agreements are not recommended as a long-term solution.
- Potable reuse (including indirect and direct potable reuse projects) will be highly important in maintaining future water supply reliability. Potable reuse projects are locally controlled and are less impacted by climate change, drought, and environmental streamflow regulations that affect existing surface water supplies. They also provide an important diversification to the water supplies available to Valley water. These projects should be prioritized given their drought resiliency and ability to supplement existing water supply sources.
- Evaluation and/or implementation of projects and programs that enhance beneficial use of local water supplies, such as Lexington Pipeline and forecast informed reservoir operations, should continue to be explored.
- Diversification of storage, such as an additional out-of-county groundwater bank or new surface water storage (e.g., Los Vaqueros Expansion, Pacheco Reservoir) could help increase operational flexibility and drought reliability by increasing Valley Water's ability to store wet year water for withdrawal during dry years.
- Implementation of imported water supply projects and programs that allow for greater operational flexibility, including improving the ability to capture the expected shorter, high flow events, (e.g., Delta Conveyance Project and Sites Reservoir) should continue to be explored.

Next Steps

The draft vulnerability assessment was reviewed by internal stakeholders and the Task Force. Staff is incorporating comments into the draft vulnerability assessment to finalize the report. Work has started on the next segment of the DRP, which examines how Valley Water monitors for drought and requests short-term response actions from the public when necessary.

Valley Water will provide regular updates on the progress of the DRP development to the Water Conservation and Demand Management Committee, the Environmental and Water Resources Committee, and other interested advisory committees. The draft and final DRP will be presented to the Board of Directors for comments and approval, respectively.

- Fall 2022: Draft Drought Monitoring and Water Shortage Response
- Winter 2022: Draft Drought Response Framework

- End of 2022: Draft DRP
- Early 2023: Bureau of Reclamation reviews and comments on the DRP
- Summer 2023: Final DRP brought to the Board for approval

The Water Conservation and Demand Management Committee discussed the following: questions on the mitigation action summary, costs, impacts, rates and having some thought-provoking discussions, water quality, emerging contaminants, projects possibly having a 1-project focus, and a suggestion was made to have an internal/contract economic analyst on board to give a different perspective on water.

Samantha Greene, Aaron Baker, and Vanessa De La Piedra were available to answer questions.

The Water Conservation and Demand Management Committee took no action

4.3 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.

1. Sustainable Groundwater Management Act (SGMA)
There was no verbal update.

Samantha Greene reported on:

2. Flood Mar
 - Expect to finish our study with UC Water in December
 - Received initial draft of tool that evaluates potential areas for implementation and draft report of institutional considerations for program implementation
 - Staff are currently reviewing those draft products and plans to present the refined draft versions to committees in the fall for feedback
 - FloodMAR is of interest at the state level and so staff is also looking out for potential grant opportunities that could help support a pilot project and/or program implementation
3. Ag Water use baseline study:
 - Expect to finish our study with UC Merced in December
 - Received draft report and provided comments
 - Will present draft report to committees in fall
 - Draft report currently finds:
 - agriculture is mostly efficient in our county
 - Limited data on greenhouse and nursery irrigation practices. While greenhouse and nursery irrigation is a small percentage of the total irrigation used in the county, there is an opportunity for understand their water usage more and increase efficiency in those sectors
 - Improvements could be made with better metering, but the improvements may not be worth the cost per the recent study performed by Darin's group
 - Expand soil moisture metering

The Water Conservation and Demand Management Committee took no action.

The next regularly scheduled meeting was changed to September 28, 2022, 10:00 a.m.

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

Thank you!

Glenna Brambill, Management Analyst II,
Board Committee Liaison
Office of the Clerk of the Board

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