MEMORANDUM
FC 14 (01-02-07)

TO: Board of Directors

FRO Environmental and Water Resources Committee

SUBJECT: Environmental and Water Resources Committee Meeting Summary for October 17, 2022

DATE November 22, 2022

This memorandum summarizes agenda items from the special meeting of the Environmental and Water Resources Committee held on October 17, 2022.

Attendees:
Committee members in attendance were: Swanee Edwards, Loren Lewis, and Mary Lou Mazzone (District 1), Charles Ice and Elizabeth Sarmiento (District 2), Bob Levy (District 4), Mike Michitaka (District 5), Tess Byler, and Arthur M. Keller, Ph.D. (District 7).

Board members in attendance were: Director Tony Estremera and Director Linda J. LeZotte (Board Representative) and Director Nai Hsueh (Board Alternate).

Staff members in attendance were: Lisa Bankosh, Rechelle Blank, John Bourgeois, Glenna Brambill, Justin Burks, Vincent Gin, Samantha Greene, Michael Martin, Brian Mendenhall, Mark Seelos, Sarah Young and Jing Wu.

Public in attendance were: Hon. Jim Beall, Ryan Castillo, Hon. Stephen A. Jordan, and Hon. Tara Martin-Milius.

AGENDA ITEM:
4.1 DROUGHT RESPONSE PLAN-DRAFT VULNERABILITY ASSESSMENT
Michael Martin reported on the following:

Summary from Meeting Agenda Memo:
Valley Water is developing a Drought Response Plan (DRP) to expand and refine our list of drought response actions and to establish a robust approach for determining when to implement those actions. Refining our drought response for the early phases of a drought will improve Valley Water's overall 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 April 2022, staff introduced the DRP to the Environmental and Water Resource Committee with the benchmark study. This memo summarizes the draft vulnerability assessment.

To develop the DRP, Valley Water has established an internal stakeholder group composed of experts from across Valley Water and a Task Force composed of Valley Water's retailers, municipalities, agricultural and environmental stakeholders, and other interested parties. Valley Water is collaborating with 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 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. Higher temperatures can lead to increased irrigation

demand and evaporation. The shift in precipitation patterns, from snow to rain in the Sierras, may make surface storage capture and delivery more challenging.

- 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 supplies. Locally, Fisheries and Aquatic Habitat Collaborative Effort (FAHCE) Settlement Agreement implementation, future Lake and Streambed Alternation Agreements, and other permits necessary for Utility operations could reduce system flexibility. These requirements on local reservoir operations can also impact the amount of water available to meet water supply needs. Regulatory-based vulnerabilities do not explicitly contribute to increased risk of hydrologic drought, rather they can exacerbate water shortage conditions during drought events.
- Infrastructure limitations and constraints can also exacerbate drought impacts. Key constraints include current storage restrictions on five local reservoirs, limitations on physical delivery of stored water from 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 supply sources which can worsen water shortages during drought. Surface water quality vulnerabilities, such as toxic cyanobacterial blooms and higher total dissolved solids, 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. Valley Water uses its Water Supply Master Plan (WSMP) to identify 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 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 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 imported water transfer agreements should continue to be prioritized. However, 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 and may not be as cost-effective as other options.
- Potable reuse (including indirect and direct potable reuse projects) will be 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 supplies. Purified water would provide an important diversification to Valley Water's supplies. These projects should be prioritized given their drought resiliency and ability to supplement existing supply sources.
- Evaluation and/or implementation of projects and programs that enhance beneficial use of local 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 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 in 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 Vulnerability Assessment to finalize the report. Work has started on the next

segment of the DRP, which examines how Valley Water monitors drought conditions and short-term community-based actions it can take to minimize water use 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.

The Environmental and Water Resources Committee discussed the following: Water Supply Master Plan, drought percentages, water conservation summary, semitropic water, south county-rural-and agricultural water, potable water use, groundwater banking diversification, different sources of water researched, level of responsibility distributed, water quality in south county, implementation of SGMA, climate change, earthquake events, recycled water, PFOS, microfiltration and reverse osmosis, groundwater recharge/contamination, and conversion of lawns/landscaping.

Samantha Greene, Vincent Gin and Director Nai Hsueh were available to answer questions.

The Environmental and Water Resources Committee took no action.

4.2 EXPANSION OF THE WATER RESOURCES PROTECTION MANUAL (RIGHT OF WAY USE POLICY PROJECT)

Mark Seelos reported on the following:

Summary from Meeting Agenda Memo:
The Right of Way Use Policy Project (ROWUPP) is aimed at developing a policy guidance document for the allowable uses, or conditions of use, of Valley Water right of way. The project was initiated as a capstone project for the 2021-2022 Emerging Leaders Certification Program.

In 2002, representatives from Valley Water, 15 cities, the county, business, agriculture, streamside property owners, and environmental interests formed the Water Resources Protection Collaborative to clarify and streamline local permitting for streamside activities. The Collaborative adopted *Guidelines and Standards for Land Use Near Streams* in 2007. Subsequently, Valley Water repealed its existing Ordinance 83-2, enacted the **Water Resources Protection Ordinance,** and adopted the Water Resources Protection Manual (Manual). The Manual is Valley Water's implementation of the Guidelines and Standards for Land Use Near Streams.

While the Manual is comprehensive in implementing the Guidelines and Standards for Land Use Near Streams for general countywide use, requirements for actions affecting Valley Water right of way and facilities are not comprehensively addressed. ROWUPP intends to fill the Manual's gaps in guidance by developing right of way use criteria specific to facility type (streams, reservoirs, pipelines, percolation ponds, and mitigation lands) with input from internal and external stakeholders. This policy guidance is anticipated to be considered by the Board of Directors as an amendment to the Water Resources Protection Manual.

Staff will present a general overview of the ROWUPP and will return to the Committee at its January meeting with a detailed presentation for feedback. At that time, staff will also present Valley Water's outreach to municipalities regarding the Guidelines and Standards for Land Use Near Streams, a separate but related effort.

The Environmental and Water Resources Committee discussed the following: permitting, flood control projects, regulatory gaps, number of violators fined, and illegally built bridges.

Lisa Bankosh was available to answer questions.

The Environmental and Water Resources Committee took no action.

The next regularly scheduled meeting is Monday, January 23, 2023.

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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