







August 31, 2023

### M E E T I N G N O T I C E JOINT RECYCLED WATER POLICY ADVISORY COMMITTEE (CITY OF SAN JOSE/CITY OF SANTA CLARA/SANTA CLARA VALLEY WATER DISTRICT)

Members of the Joint Recycled Water Policy Advisory Committee (JRWPAC):

Valley Water Director Hon. Tony Estremera, Committee Chair

Valley Water Director Hon. Richard Santos

Valley Water Director Hon. Jim Beall

CSJ District 4 Hon. Councilmember David Cohen

CSJ District 5 Hon. Councilmember Peter Ortiz

CSC District 3 Councilmember Karen Hardy

#### Supporting Valley Water Staff Members:

Rick Callender, Esq., Chief Executive Officer

Carlos Orellana, District Counsel

Michele King, Clerk of the Board

Melanie Richardson, Assistant Chief Executive Officer

Darin Taylor, Chief Financial Officer

Christopher Hakes, Chief Operating Officer - Watersheds

Aaron Baker, Chief Operating Officer - Water Utility

Rachael Gibson, Chief of External Affairs

Anthony Fulcher, Sr. Assistant District Counsel

Sam Bogale, Deputy Operating Officer

Bhavani Yerrapotu, Deputy Operating Officer

Kirsten Struve, Assistant Officer

Emmanuel Aryee, Deputy Operating Officer

Donald Rocha, Deputy Administrative Officer

Vincent Gin, Deputy Operating Officer

Hossein Ashktorab, Unit Manager, Recycled and Purified Water

Lei Hong, Utility Ops & Maintenance Manager

Charlene Sun, Treasury and Debt Manager

Medi Sinaki, Senior Engineer, Water Quality

#### Supporting City of San Jose Staff Members:

Jeff Provenzano, Deputy Director, Water Resources Division

Kerrie Romanow, Director, Environmental Services

Nora Frimann, City Attorney

Matthew Tolnay, Deputy City Attorney

Kip Harkness, Deputy City Manager

Pedro Hernandez, Program Manager, South Bay Water Recycling

Erica Gamboa, Administrative Assistant, Environmental Services Department

April Kellett, Staff Specialist

#### Supporting City of Santa Clara Staff Member:

Kathy Watanabe, Councilmember, District 1

Lisa Gillmore, Mayor

Gary Welling, Assistant Director, Water & Sewer Facilities

A Santa Clara Valley Water District (SCVWD) special Joint Recycled Water Policy Advisory Committee meeting has been scheduled to occur at 11:00 a.m. on Wednesday, September 6, 2023 at Valley Water Headquarters Building Boardroom, 5700 Almaden Expressway, San Jose, CA 95118.

Members of the public may join the meeting via Zoom Teleconference at: https://valleywater.zoom.us/j/83371245441

The meeting agenda and corresponding materials are located on Valley Water's website at: https://www.valleywater.org/how-we-operate/committees.



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### Santa Clara Valley Water District Joint Recycled Water Policy Advisory Committee

Headquarters Building Boardroom 5700 Almaden Expressway, San Jose, CA 95118

Join Zoom Meeting https://valleywater.zoom.us/j/83371245441

#### SPECIAL MEETING AGENDA

Wednesday, September 6, 2023 11:00 AM

District Mission: Provide Silicon Valley safe, clean water for a healthy life, environment and economy.

JOINT RECYCLED WATER POLICY ADVISORY COMMITTEE W/ CITY OF SAN JOSE, SANTA CLARA/SCVWD

Tony Estremera - SCVWD Dist. 6 Richard Santos - SCVWD Dist. 3 Jim Beall - SCVWD Dist. 3 David Cohen - City of San Jose Dist. 4 Peter Ortiz - City of San Jose, Dist. 5 Karen Hardy - City of Santa Clara, Dist. 3 All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body, will be available to the public through the legislative body agenda web page at the same time that the public records are distributed or made available to the legislative body. Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to participate in the legislative body's meeting. Please advise the Clerk of the Board Office of any special needs by calling (408) 265-2600.

Kirsten Struve (Staff Liaison)

Nicole Merritt (COB Liaison) Asst. Deputy Clerk II nmerritt@valleywater.org 408-630-3262

Notice: Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.

## Santa Clara Valley Water District Joint Recycled Water Policy Advisory Committee with Cities of San Jose and Santa Clara

#### SPECIAL MEETING AGENDA

September 6, 2023

11:00 AM

Headquarters Building Boardroom 5700 Almaden Expressway, San Jose, CA 95118

Join Zoom Meeting https://valleywater.zoom.us/j/83371245441

#### \*\*IMPORTANT NOTICES AND PARTICIPATION INSTRUCTIONS\*\*\*

Santa Clara Valley Water District (Valley Water) Board of Directors/Board Committee meetings are held as a "hybrid" meetings, conducted in-person as well as by telecommunication, and is compliant with the provisions of the Ralph M. Brown Act.

To maximize public safety while still maintaining transparency and public access, members of the public have an option to participate by teleconference/video conference or attend in-person. To observe and participate in the meeting by teleconference/video conference, please see the meeting link located at the top of the agenda. If attending in-person, you are required to comply with Ordinance 22-03 - AN ORDINANCE OF THE SANTA CLARA VALLEY WATER DISTRICT SPECIFYING RULES OF DECORUM FOR PARTICIPATION I N B O A R D A N D C O M M I T T E E M E E T I N G S I o c a t e d a t https://s3.us-west-2.amazonaws.com/valleywater.org.if-us-west-2/f2-live/s3fs-public/Ord.pdf

In accordance with the requirements of Gov. Code Section 54954.3(a), members of the public wishing to address the Board/Committee during public comment or on any item listed on the agenda, may do so by filling out a Speaker Card and submitting it to the Clerk or using the "Raise Hand" tool located in the Zoom meeting application to identify yourself in order to speak, at the time the item is called. Speakers will be acknowledged by the Board Chair in the order requests are received and granted speaking access to address the Board.

- Members of the Public may test their connection to Zoom Meetings at: https://zoom.us/test
- Members of the Public are encouraged to review our overview on joining Valley Water Board Meetings at: https://www.youtube.com/watch?v=TojJpYCxXm0

Valley Water, in complying with the Americans with Disabilities Act (ADA), requests individuals who require special accommodations to access and/or participate in Valley Water Board of Directors/Board Committee meetings to please contact the Clerk of the Board's office at (408) 630-2711, at least 3 business days before the scheduled meeting to ensure that Valley Water may assist you.

This agenda has been prepared as required by the applicable laws of the State of

California, including but not limited to, Government Code Sections 54950 et. seg. and has not been prepared with a view to informing an investment decision in any of Valley Water's bonds, notes or other obligations. Any projections, plans or other forward-looking statements included in the information in this agenda are subject to a variety of uncertainties that could cause any actual plans or results to differ materially from any such The information herein is not intended to be used by investors or potential investors in considering the purchase or sale of Valley Water's bonds, notes or other obligations and investors and potential investors should rely only on information filed by Valley Water on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System for municipal securities disclosures and Valley Water's Investor Relations the World website, maintained on Wide Web at https://emma.msrb.org/ https://www.valleywater.org/how-we-operate/financebudget/investor-relations, respectively.

Under the Brown Act, members of the public are not required to provide identifying information in order to attend public meetings. Through the link below, the Zoom webinar program requests entry of a name and email address, and Valley Water is unable to modify this requirement. Members of the public not wishing to provide such identifying information are encouraged to enter "Anonymous" or some other reference under name and to enter a fictional email address (e.g., attendee@valleywater.org) in lieu of their actual address. Inputting such values will not impact your ability to access the meeting through Zoom.

Join Zoom Meeting:

https://valleywater.zoom.us/j/83371245441

Meeting ID: 83371245441

Join by Phone:

1 (669) 900-9128, 83371245441#

- 1. CALL TO ORDER:
  - 1.1. Roll Call.
- 2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA.

Notice to the public: Members of the public who wish to address the Board/Committee on any item not listed on the agenda may do so by filling out a Speaker Card and submitting it to the Clerk or using the "Raise Hand" tool located in the Zoom meeting application to identify yourself to speak. Speakers will be acknowledged by the Board/Committee Chair in the order requests are received and granted speaking access to address the Board/Committee. Speakers' comments should be limited to three minutes or as set by the Chair. The law does not permit Board/Committee action on, or extended discussion of, any item not on the agenda except under special circumstances. If Board/Committee action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Board/Committee may take action on any item of business appearing on the posted agenda.

#### 3. APPROVAL OF MINUTES:

3.1. Approval of April 13, 2023 Joint Recycled Water Policy Advisory 23-0910

Committee Meeting Minutes.

Recommendation: Approve the minutes.

Manager: Candice Kwok-Smith, 408-630-3193

Attachment 1: 041323 JRWPAC Minutes

Est. Staff Time: 5 Minutes

#### 4. REGULAR AGENDA:

4.1. Receive the Public Outreach Efforts Update in Support of the Purified <u>23-0846</u>

Water Program and Provide Feedback.

Recommendation: Receive information and provide feedback.

Manager: Don Rocha, 408-630-2338

Attachments: Attachment 1: PowerPoint

Est. Staff Time: 5 Minutes

4.2. Receive an Update on the Partnership with Cities of San José and Santa 23-0876

Clara including a Direct Potable Reuse (DPR) Demonstration Project and

Provide Feedback.

Recommendation: Receive information and provide feedback.

Manager: Kirsten Struve, 408-630-3138

Attachments: Attachment 1: PowerPoint

Handout 4.2-A: Sierra Club

Est. Staff Time: 10 Minutes

4.3. Receive Potential Recycled Water Use at Lake Cunningham Update and

23-0875

Provide Feedback.

Recommendation: Receive information and provide feedback.

Manager: Kirsten Struve, 408-630-3138

Est. Staff Time: 5 Minutes

#### CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS.

This is an opportunity for the Clerk to review and obtain clarification on any formally moved, seconded, and approved requests and recommendations made by the Committee during the meeting.

#### ADJOURN:

6.1. Adjourn to Regular Meeting at 10:00 a.m. on April 18, 2024.

#### Santa Clara Valley Water District



File No.: 23-0910 Agenda Date: 9/6/2023

Item No.: 3.1.

#### COMMITTEE AGENDA MEMORANDUM Joint RWPAC with Cities of San Jose/Santa Clara

Government Code § 84308 Applies: Yes □ No ☒ (If "YES" Complete Attachment A - Gov. Code § 84308)

#### SUBJECT:

Approval of April 13, 2023 Joint Recycled Water Policy Advisory Committee Meeting Minutes.

#### RECOMMENDATION:

Approve the minutes.

#### SUMMARY:

A summary of Committee discussions, and details of all actions taken by the Committee, during all open and public Committee meetings, is transcribed and submitted for review and approval. Upon Committee approval, minutes transcripts are finalized and entered into the Valley Water's archives and serve as the historical record of the Committee's meeting.

#### **ENVIRONMENTAL JUSTICE IMPACT:**

There are no Environmental Justice impacts associated with this item.

#### ATTACHMENTS:

Attachment 1: 041323 JRWPAC Minutes

#### **UNCLASSIFIED MANAGER:**

Candice Kwok-Smith, 408-630-3193

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### JOINT RECYCLED WATER POLICY ADVISORY COMMITTEE CITY OF SAN JOSÉ/SCVWD/CITY OF SANTA CLARA

### DRAFT MINUTES

#### THURSDAY, APRIL 13, 2023 10:00 AM

(Paragraph numbers coincide with agenda item numbers)

#### 1. CALL TO ORDER:

A special meeting of the Santa Clara Valley Water District (Valley Water) Joint Recycled Water Policy Advisory Committee (Committee) was called to order via Zoom video teleconference at 10:10 a.m.

#### 1.1 Roll Call.

Valley Water Board Committee members in attendance were District 4 Director Jim Beall, District 3 Director Richard Santos, and Chairperson presiding District 6 Director Tony Estremera.

City of San José/Santa Clara members in attendance were City of San José Councilmembers David Cohen and Peter Ortiz; and Ms. Kerrie Romanow, Director of Environmental Services, and City of Santa Clara Councilmember Kathy Watanabe. Not present was City of Santa Clara Councilmember Karen Hardy.

Valley Water staff members in attendance were A. Baker, S. Bogale, L. Bryant, A. Fulcher, V. Gin, C. Hakes, L. Hong, E. Llamas, M. Richardson, M. Rivas, D. Rocha, M. Sinaki, K. Struve, C. Sun, D. Taylor, S. Tran, D. Tucker, Z. White, and B. Zisser.

City of San José/Santa Clara staff members in attendance were J. Davis, E. Gamboa, P. Hernandez, H. Louie, L. Nguyen, J. Provenzano, M. Tolnay, and G. Welling.

Public member guests were Brisa Moreno and Ryan Castillo.

#### 2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA

Chairperson Estremera declared time open for public comment on any item not on the agenda. There was no one present who wished to speak.

Chairperson Estremera requested staff and Committee members to introduce themselves.

Attachment 1

#### 3. APPROVAL OF MINUTES:

3.1 Approval of May 1, 2019, and May 3, 2021 Joint Recycled Water Policy Advisory Committee Meeting Minutes.

Recommendation: Approve the Minutes.

It was moved by Director Richard Santos, seconded by Councilmember Peter Ortiz, and unanimously carried, to approve the minutes of May 1, 2019, and May 3, 2021 Joint Recycled Water Policy Advisory Committee City of San José/SCVWD/City of Santa Clara-TPAC meetings, as presented.

#### 4. REGULAR AGENDA:

4.1 Elect 2023 Joint Recycled Water Policy Advisory Committee (SDVWD/San Jose/Santa Clara - TPAC) Chairperson.

Recommendation: Elect 2023 Chairperson for the Joint Recycled Water Policy Advisory Committee.

It was moved by Director Richard Santos, seconded by Councilmember Dave Cohen, and unanimously carried, to nominate and reelect Chairperson Tony Estremera as 2023 Chairperson.

4.2. Collaboration between Santa Clara Valley Water District and the Cities of San José and Santa Clara Pertinent to the Expansion of Water Reuse.

Recommendation: Receive information and update on the collaboration between

the Santa Clara Valley Water District (Valley Water) and the Cities of San José and Santa Clara (Cities) pertinent to the

expansion of water reuse.

Kirsten Struve, Assistant Officer, reviewed the information on this item, per the attached Committee Agenda Memo, and corresponding presentation materials contained in Attachment 1; gave a background of the expansion of recycled water between Valley Water and the City of San José and the current collaboration that included the City of Santa Clara to develop a locally controlled, drought-proof water supply for a climate uncertain future; and announced that this Committee conducts yearly reviews of the proposed budgets for SVAWPC and SBWR as well as grant opportunities and other potential future expansion work.

With regard to the submitted USBR grant application, Valley Water's application was supported with letters from each city. The grant would fund implementation of LOI and would benefit all three agencies.

The Committee members asked if Direct Potable Reuse (DPR) was being explored for a future project which staff confirmed. Committee members supported using more wastewater for potable and non-potable reuse and developing agreements to do so. Valley Water sent a letter to mayors and councils for both San José and

Santa Clara on accelerating the expansion of reuse. It was noted that this letter would be agendized at a TPAC meeting and that Valley Water would be invited.

The Committee noted the information without taking formal action.

4.3. Review Proposed Fiscal Year 2023-2024 Budgets for Silicon Valley Advanced Water Purification Center and South Bay Water Recycling System.

Recommendation:

That the Joint Recycled Water Policy Advisory Committee (Committee) makes recommendations to the Santa Clara Valley Water District (Valley Water) Board of Directors and the City of San José (San José) City Council on their respective proposed budgets for the ensuing fiscal year in regards to the maintenance, expansion, replacement, improvement, and operation of the South Bay Water Recycling (SBWR) system and the Silicon Valley Advanced Water Purification Center (Purification Center).

Kirsten Struve reviewed the information on this item, per the attached Committee Agenda Memo, and the corresponding presentation materials contained in Attachment 1 were reviewed by staff as follows: Medi Sinaki, Senior Engineer—Recycled and Purified Water Unit, reviewed Slides 1 through 6; Sam Bogale, Deputy Operating Officer, reviewed Slides 7 through 10; and Jeff Provenzano reviewed Slides 11 through 16.

During the presentation, the Committee noted and requested the following:

City of San José was onboarding a F.U.S.E. Fellow with the primary goal of developing and reaching out to stakeholders on the expansion of recycled water pipeline and alternative water supplies. Potential stakeholders mentioned were as follows: the State Building and Construction Trades Council of California and UA Local 393; downtown businesses interested in recycled water; disadvantaged areas identified on the Senate Bill 535 map (staff mentioned about planned outreach in these areas, and development of guiding principles); north San José, north Santa Clara and east San José.

With regard to the feasibility study in the San José area, the Committee requested that staff present options on a range of sizes including maximum expansion for a purification site instead of a pre-determined size.

With regard to agricultural use of recycled water, south county is supplied with recycled water by the South County Regional Wastewater Authority.

With regard to SVAWPC funding, the Sinking Fund Reserve intended to replace RO membranes and UV unit bulbs would not be carried anymore on future fiscal years and instead absorbed in Valley Water's regular budget cycle as opposed to setting up another reserve.

With regard to SBWR funding proposal, proposed funding presented at this meeting was only for regular maintenance and did not include recycled water expansion.

City of San José staff added that expansion of the South Bay Water Recycling would come from leveraging San José Water Company to do the build out, potential funds from Valley Water, and federal and state funds while Prop 218 restricts use of repair funds to expand recycled water. Director Beall shared his experience with Prop 218 related to ability to allocate funds to disadvantaged communities.

With regard to San José Water Company's master plan on recycled water, the plan was amended recently, and talks were ongoing with the City of San José on expansion to the east side of San José with still unidentified pipeline alignments. The Committee requested staff to consider inviting San José Water Company at a future meeting to present on their master plan.

Director Beall announced that he was willing to make a general presentation to any stakeholder organizations such as the West Valley Sanitation District and help in communication efforts and requested everyone to remember the recent passing of Santa Clara City Manager Don Von Raesfeld.

Councilmember Ortiz mentioned that with the City's policy on social economic equity, east San José should be included in the recycled water expansion project.

Motion: Accept status report on the Proposed Budgets FY 23-24 for

SVAWPC and SBWR.

Move to Approve: D. Cohen Second: T. Estremera

Director Santos requested the motion be amended to include that staff would report back with identifying areas for the expansion of SBWR and funding, and Director Beall requested a map that would identify opportunities.

Motion: Accept status report on the Proposed Budgets FY 23-24 for

SVAWPC and SBWR and that staff would incorporate comments and directions on a plan to cover areas requested

by the Committee including a detailed map.

Move to Approve: D. Cohen Second: R. Santos

4.4. Review and Consider Joint Recycled Water Policy Advisory Committee (City of San José/SCVWD/City of Santa Clara-TPAC) Name Update.

Recommendation: Review and approve the update on the Joint Recycled Water

Policy Advisory Committee (City of San José/SCVWD/City of Santa Clara -TPAC) name and eliminate reference to TPAC.

It was moved by Councilmember Ortiz, seconded by Chairperson Estremera and carried by roll call vote that the Joint Recycled Water Policy Advisory Committee would be renamed to Joint Recycled Water Policy Advisory Committee (City of San José/SCVWD/City of Santa Clara) and eliminate reference to TPAC.

5. ADJOURN: Attachment 1

Chairperson Estremera mentioned that a future agenda will include San José Water Company to present on their master plan. Councilmember Ortiz reminded everyone that there would be a conversation about an equity map and define what disadvantaged communities mean in relation to this project among Committee members. Director Jim Beall mentioned about a future brainstorming of potential users of recycled water such as schools, the airport, Caltrans, freeway landscaping and target these big potential users. Alternate Councilmember Watanabe requested to add water conservation in exploring water usage for future discussion.

Chairperson Estremera adjourned the meeting at 12:00 noon. The next meeting would be scheduled within the next six months and after general counsel had provided comments on the Letter of Intent.

Eva M. Sans Assistant Deputy Clerk II

Approved:

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#### Santa Clara Valley Water District



File No.: 23-0846 Agenda Date: 9/6/2023

Item No.: 4.1.

#### COMMITTEE AGENDA MEMORANDUM Joint RWPAC with Cities of San Jose/Santa Clara

Government Code § 84308 Applies: Yes  $\square$  No  $\boxtimes$  (If "YES" Complete Attachment A - Gov. Code § 84308)

#### SUBJECT:

Receive the Public Outreach Efforts Update in Support of the Purified Water Program and Provide Feedback.

#### **RECOMMENDATION:**

Receive information and provide feedback.

#### SUMMARY:

To ensure a reliable water supply to keep Silicon Valley thriving well into the future, the Santa Clara Valley Water District (Valley Water) works to expand water reuse with wastewater partners in Santa Clara County, including the cities of San José and Santa Clara. In order to achieve public acceptance of adding advanced purified water to our water supply, staff is actively engaging the public, through efforts including conducting an educational tour program of the Silicon Valley Advanced Water Purification Center (SVAWPC), actively advocating for support from key stakeholders, implementing robust multi-media outreach including social media and news blog posts, and community events/open houses, and presenting on the issue to a broad cross-section of stakeholders.

Public acceptance has been a significant issue in the implementation of potable reuse projects across California. Once a negative perception takes hold, it is extremely difficult to overcome. Significant investment of time and resources in public outreach and engagement can ensure that projects are supported and successful before and after the project is built.

Consequently, Valley Water has implemented ongoing public engagement strategies that seek to advance awareness and acceptance of recycled and advanced purified water since 2011. This program is tailored based on annual public opinion surveys that revealed overall support for potable reuse using advanced purified water. Staff continues to build on previous outreach efforts and modifies strategies as necessary based on results of the annual countywide poll on public perception of recycled and advanced purified water.

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In recent years, staff has seen an increase in support for "advanced purified recycled water for drinking." In 2020, the public perception survey showed there was a 57% support among those polled. In 2022, the support increased to 61%. Staff works with a consulting firm specializing in research and data analysis to better understand the reasons for support and opposition, and use that information to build out Valley Water's public engagement strategies.

Staff works with EMC Research to collect data annually on public perception towards water reuse. The polls are made available in two formats - through an individual online survey and phone interviews - and are executed in four languages: English, Chinese, Vietnamese, and Spanish. In the most recent survey conducted in September 2022, EMC Research surveyed a sample size of 600, with an overall margin of error of +/- 4.0 percentage points.

Key takeaways from the survey results include:

- Awareness of water reuse has increased, and a majority continue to support advanced purified recycled water for drinking.
- As seen in previous research, additional information further increases support. However, about one-third are opposed, which is consistent with prior years' survey results.
- After they have heard about the benefits of advanced purified water, three in five interviewees support incorporating it into the tap water supply via groundwater or treatment plant.
- Benefits for the environment, ensuring access to water during future emergencies and through the ongoing drought, and advanced purified recycled water being used in other places, are particularly compelling reasons to support using advanced purified water.
- Assurances about the cleanliness and safety of advanced purified water are compelling to a
  majority of the interviewees but are less effective than messages about the benefits to the
  environment and drought resistance of this water supply.

Staff is currently working with EMC Research to launch this year's countywide public perception poll. Staff will continue to build on previous outreach efforts and modify strategies based on the results of this year's poll to better engage the community.

#### Silicon Valley Advanced Water Purification Center Tour Program

The SVAWPC offers a great opportunity to bring members of the public on-site to see advanced water purification technology firsthand. Staff began hosting tours at the facility since its opening in 2014. During the COVID-19 pandemic, staff offered virtual tours of the facility. Our virtual tour format included videos of the advanced purification processes, images of the technology equipment and props used during the in-person tour, and a standard question-and-answer segment. From April 2020 to November 2022, staff reached over 6,200 members of the public through 227 virtual tours.

In October 2022, public in-person tours at the SVAWPC were relaunched and the tour program

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momentum picked up right where it left off before the pandemic. Registration for many of the public tours have been at capacity. Members of the public can sign up for tours on the first Friday or second Saturday of each month. Public tours are promoted through Valley Water's various social media platforms, Nextdoor, and through other Valley Water programs and presentations in the community. Staff also host several private in-person tours throughout the month. All members of the public can also request a private tour of the facility, with a minimum of 10 attendees.

The SVAWPC also serves as a central site for open house events. Last fall, staff partnered with the Silicon Valley Bicycle Coalition and launched the Ride Out the Drought campaign at the facility to kick start a month-long drought awareness campaign. Over 100 bike riders gathered at the SVAWPC to learn more about the facility and how it ties into Valley Water's comprehensive approach to making our region's water supply more sustainable and drought-proof. The riders were able to take a walking tour of the facility and ask tour guides in-depth questions about each of the different processes.

Large events and public and private tours at the SVAWPC all help to increase awareness of the benefits of water reuse and build public support for advanced purified water for drinking. Staff conducts pre and post tour surveys and the results show a 24% increase in support after attendees tour the facility and learn about the technology behind purified water. This indicates the importance of getting more community members into the facility to see the technology and address any of their concerns about advanced purified water. Since the inception of the educational tour program in 2014, staff has hosted:

- 15,791 members of the public
- 692 tours, including recurring in-person public and private group tours, stakeholder/VIP tours, special events and virtual tours

Additionally, staff continues to work to bottle advanced purified water at the facility for outreach and demonstration purposes. Technical staff completed testing of the quality of the water produced and submitted an operations plan that is part of the State Department of Drinking Water's (DDW) review and approval process to allow bottled water production. Once the operations plan is approved by DDW, Valley Water will be able to begin bottling advanced purified demonstration water produced at the SVAWPC. Bottling sample purified water for demonstration taste test during the tours will help to boost the public's assurance of the quality of advanced purified water for drinking, and support for the overall use of advanced purified water for drinking. Currently, Orange County Water District (OCWD) is the only agency bottling advanced purified demonstration water in California. Valley Water has been using OCWD's bottles for taste testing during our tours, which has helped to demonstrate the quality and taste of advanced purified water. Once we produce our own bottles, we will be able to provide members of the public further reassurance of the quality of purified water produced at our own facility.

#### Stakeholder Outreach

To ensure that we engage a broad base of community members through our robust outreach efforts, staff works with our consultant on strategic outreach to identify key stakeholder groups, which include project proponents, opinion leaders, interested community members, and the general public. We

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have identified different tools to conduct outreach to each stakeholder group, such as tailored presentations, attending industry specific meetings, providing private tours, and offering translated collateral materials and self-guided tours in several languages.

Results of our annual public perception poll show that health and safety is a major concern for most respondents. Additionally, previously conducted focus groups also concluded that many were willing to change their minds about drinking advanced purified water if given trustworthy assurances of the water's safety. As a result, a priority key stakeholder group for outreach was the medical community. Staff built a framework for specialized outreach to the medical community to increase awareness of water reuse and the benefits and safety of advanced purified water. Through this effort, staff acquired the endorsement and support of the Santa Clara County Medical Association (SCCMA). Members of SCCMA also co-authored several articles with Valley Water staff to highlight the benefits and safety of advanced purified water and the need for potable water reuse to sustain our region's water supply for the future. The articles were a part of SCCMA's medical journal, "The Bulletin," which has been highly referenced in the WateReuse Association. The WateReuse Association is the nation's only trade association solely dedicated to advancing laws, policy, funding, and public acceptance of recycled water. The collaboration with SCCMA is now a part of the Environmental Protection Agency's National Water Reuse Action Plan to highlight successful outreach efforts.

Additionally, staff continues to meet and host tours for key stakeholders throughout the community including academic and science professionals, local elected officials, environmental groups, faithbased leaders, youth, ethnic community leaders and water industry professionals.

Here is a list of a few key stakeholder groups that staff have provided tours to this past year:

- League of California Cities
- San José City Council Members
- San Jose Chamber of Commerce (Water & Energy Committee)
- State Assemblymember Gail Pellerin
- Milpitas City Council Member
- Leadership Mountain View
- City of Palo Alto Zero Waste
- City of Palo Alto City Council Members
- City of Saratoga Administrative Services Department
- SPUR (Planning & Urban Research Association)
- California Water United Conference Tour
- California-Nevada Desal Workshop (American Water Works Association)
- Valley Water Youth Commission
- Silicon Valley Youth Climate Action Group
- Jewish Youth Climate Action
- Girls Give Back
- Stanford Climate Ventures
- San Jose State University Environmental Resource Center

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In addition to hosting private tours for key stakeholder groups, staff also goes into the community to conduct presentations and attend events. Recent community events/presentations include:

- Mountain View Tech Showcase
- San Jose State University Earth Day
- Library Tours with the cities of Campbell, San Jose, Mountain View and Sunnyvale.
- Santa Clara University Multicultural Global Village
- India Community Center
- Sacred Heart Community Service

#### **Next Steps:**

Staff will continue to utilize the findings from the annual public perception poll to strengthen the key messages and incorporate them into collateral materials. Staff is also building stronger relationships in historically underserved communities to ensure they are engaged in the conversation of potable water reuse, and that they understand the long-term benefits to the overall community. Staff is working to build a mobile educational unit that will allow us to take the purification process into the community and expand our outreach even broader. Staff intends to utilize this tool to help further engage communities that have been historically underserved and marginalized by attending cultural events, school functions and other neighborhood events to ensure broader and more tailored outreach. Staff hopes to launch a mobile unit next year. Outreach and engagement efforts will continue and be modified as necessary, as the Purified Water Program is developed and ultimately implemented.

#### **ENVIRONMENTAL JUSTICE IMPACT:**

There are no Environmental Justice impacts associated with this item.

#### ATTACHMENTS:

Attachment 1: PowerPoint

#### **UNCLASSIFIED MANAGER:**

Don Rocha, 408-630-2338

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# Public Outreach

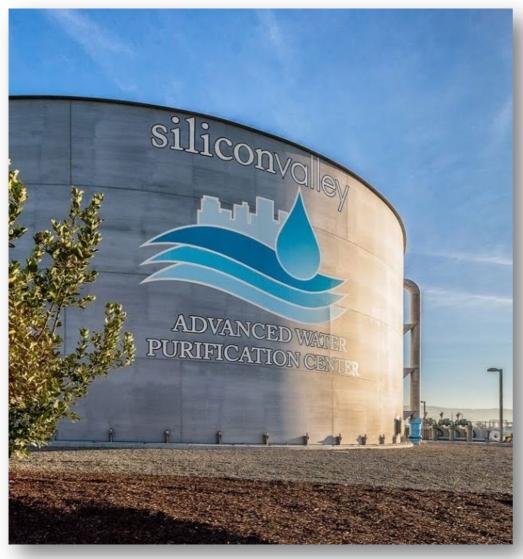
Silicon Valley Advanced Water Purification Center

Presentation to the Joint Recycled Water Policy Advisory Committee – Cities of San José & Santa Clara

September 6, 2023



### **History of SVAWPC**



- Opened in early 2014
- Provides purified water to enhance the quality of recycled water
- Serves as a demonstration, research, and educational facility
- To date:
  - 692 Tours
  - 15,791 Participants



### **Comprehensive Outreach Framework**

### **Objectives**

- Engage, educate and bring awareness about the benefits of advanced purified water to the general public
- Foster trust, acceptance and support for advanced purified water for drinking
- Builds support for the expansion of purified water project





### **Public Perception**

#### **Annual Poll**

- Gauge how Santa Clara County residents feel about advanced purified water for drinking
- Measure public acceptance over time
- Identify key themes/messages that resonate with supporters
- Latest one conducted in September 2022

#### **Focus Groups**

- Two focus groups with adult residents of Santa Clara County who were hesitant about or opposed to the idea of using advanced purified water for drinking.
- Conducted to supplement annual public perception poll
- Conducted via zoom in February 2021



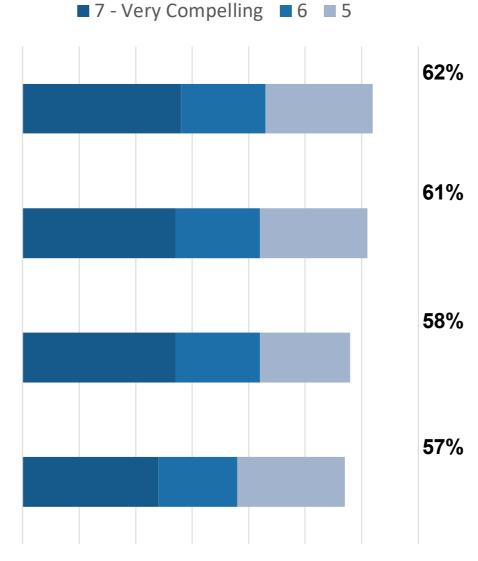
### **Top Messages**

Reusing water is good for the environment.

Ensuring access to water during future emergencies.

Ensuring access to water during future droughts.

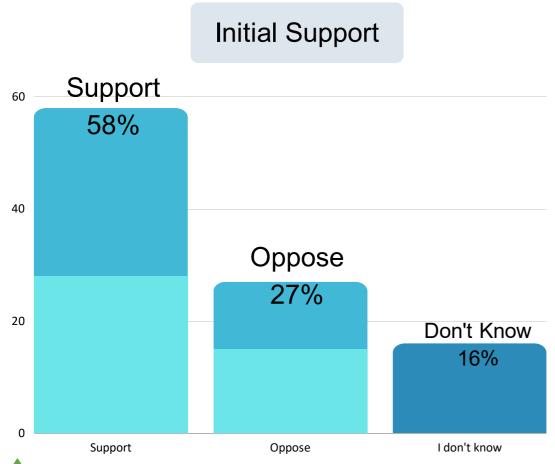
Advanced purified and recycled water is already being used successfully in other areas.

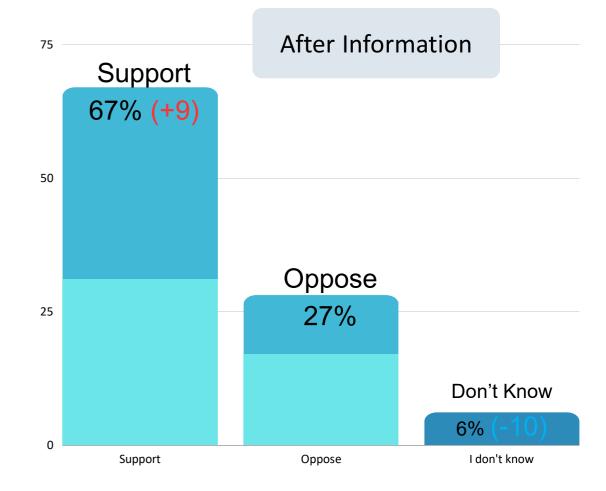




### **Support After Additional Information**

After information about the benefits is presented, over two-thirds of residents say they support the use of advanced purified recycled water for drinking.

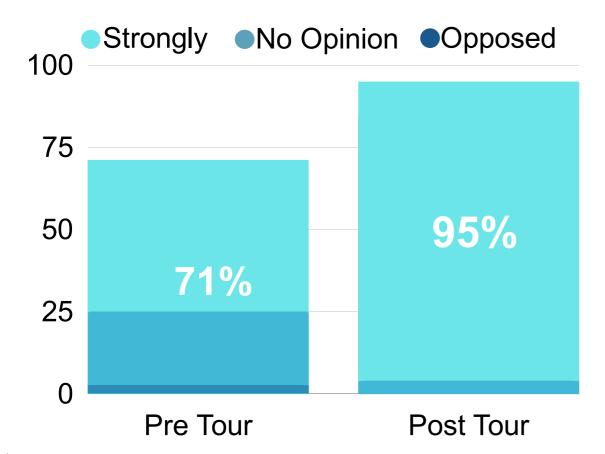


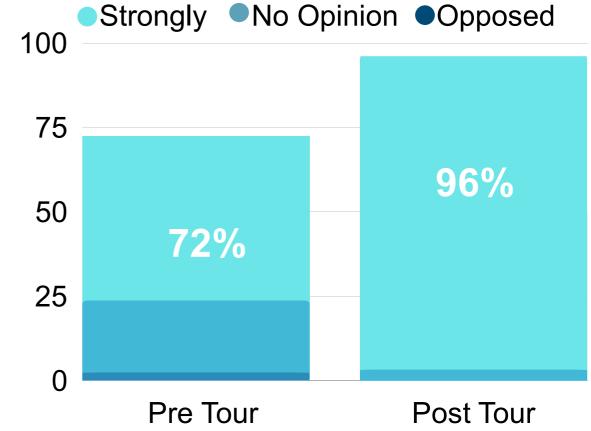




### **Pre/Post Tour Survey**

Support for Direct Potable Reuse Support for Indirect Potable Reuse







### **Robust Educational Tour Program**

Public tours and private tours upon request

Partnerships with local libraries to host tours

Self-guided tours & Live Virtual tours



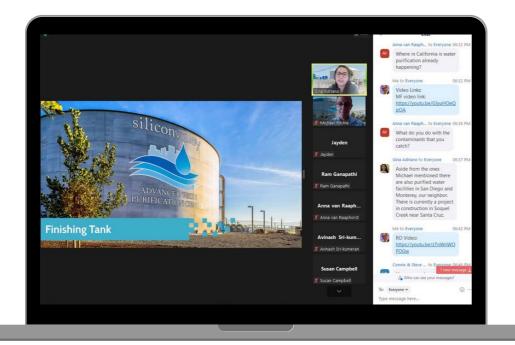


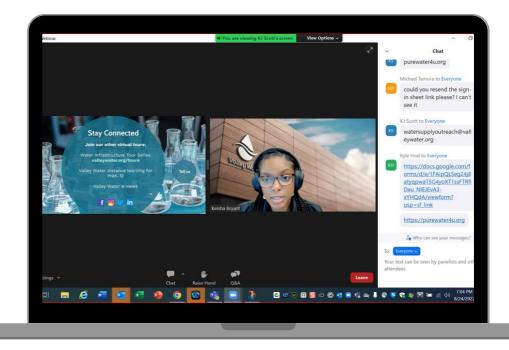




### **Impacts During Pandemic**

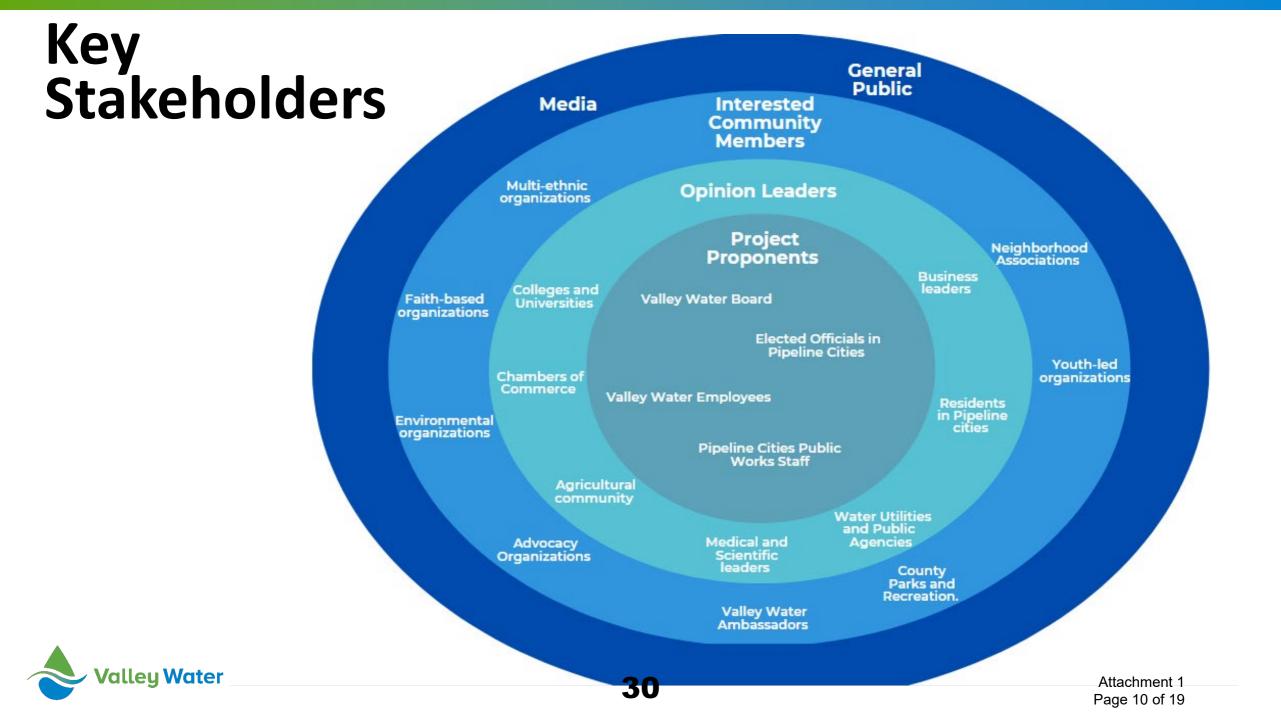
- Hosted our last pre-pandemic in-person tour in March 2020.
- Hosted our first virtual tour during the pandemic in April 2020
- 222 tours with 6,317 attendees during the pandemic







Attachment 1 Page 9 of 19



### San Jose & Santa Clara Elected Officials



San Jose Council Member David Cohen



San Jose Council Member Pam Foley



San Jose Council Member Omar Torres



Santa Clara City Council Member
Karen Hardy
(part of League of CA Cities)



San Jose Council Member Peter Ortiz



San Jose Council Member Domingo Candelas



San Jose Council Member Bien Doan (Staff)



### Santa Clara County Medical Association

- Obtained the support and endorsement of the Santa Clara County Medical Association through working with their Environmental Health Committee
- Physicians from SCCMA co-authored a series of articles alongside Valley Water staff to discuss the benefits and safety of advanced purified water for drinking
- The articles were published in a special edition of their medical journal
- Continuing our engagement efforts with SCCMA and expanding outreach to other medical communities (i.e. local health clinics)





WATER AND HEALTH:
THE COMING WATER CRISIS AND
WHAT WE CAN DO ABOUT IT



Attachment 1
Page 12 of 19

# Community-Centered Approach

- Engage underrepresented and historically marginalized communities
- Understand their priorities and how water resiliency fits into their community issues
- Presentations to trusted community leaders
- Attend community events to have a presence
- Connect them to additional resources at Valley Water
- Build strong and trusting relationships to garner support and endorsement of advanced purified water for drinking



### **Community Events**

**Tabling Events** 

**Ride Out the Drought** 

**Infrastructure Bus Tour** 









# Informational Materials, Videos and Testimonials

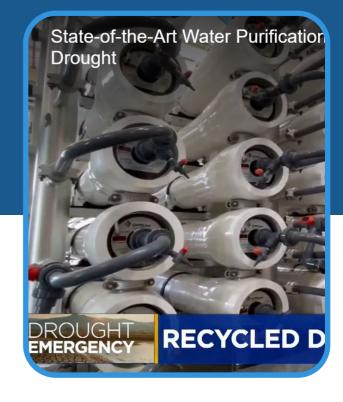
- <u>Purified Water poster and Project Fact</u> Sheet
- Self-guided tours
- Promotional videos

- Social Media
- Speaker's Bureau
- eNewsletters

- PBS Special
- Tour testimonials
- Media Campaign









### Website Improvement

- www.purewater4u.org
- Revamped our website
- Self-guided tours
- Public tour schedule and registration
- Collateral Materials
- Testimonials / Supporter Page





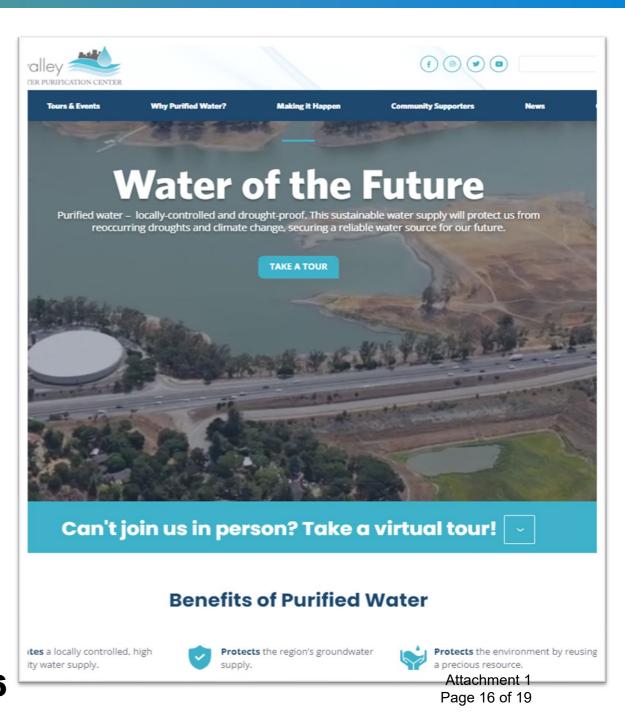


Richard Luthy & class, Educator and Students, Stanford University MS Engineering



David Lin, Leadership Mountain View, Santa Clara County





# Youth and Young Adults Outreach

- Education non-profit organizations
- Valley Water Youth Commission

- Partner with Valley Water's Education Outreach Program
- Partner with local colleges and universities

- Youth tours and educational resources
- 4th grade 12th grade









## **Looking Ahead**

Creating a mobile tour unit (Tour-on-the-Go)

- Updating our visitor's center to add more educational signage
- Bottling demonstration water

- Hosting Industry Specific Tour Days (i.e. Doctor's Day)
- 10-Year Anniversary of Opening in 2024











# Thank You!

### Santa Clara Valley Water District



File No.: 23-0876 Agenda Date: 9/6/2023

Item No.: 4.2.

### COMMITTEE AGENDA MEMORANDUM Joint RWPAC with Cities of San Jose/Santa Clara

Government Code § 84308 Applies: Yes  $\square$  No  $\boxtimes$  (If "YES" Complete Attachment A - Gov. Code § 84308)

#### SUBJECT:

Receive an Update on the Partnership with Cities of San José and Santa Clara including a Direct Potable Reuse (DPR) Demonstration Project and Provide Feedback.

#### RECOMMENDATION:

Receive information and provide feedback.

#### SUMMARY:

In January 2023, Valley Water and the Cities of San José and Santa Clara (Cities) executed a Letter of Intent for Collaborating on the Expansion of Recycled and Purified Water in Santa Clara County (LOI) further clarifying the roles and responsibilities of each agency to maximize water reuse. The LOI is a key outcome of our interagency discussions and provides a framework to collaborate on future Non-potable and potable reuse opportunities. The LOI provides a description of mutual goals, the steps, process, and schedule for developing a collaborative agreement to advance indirect and direct potable reuse (DPR) in Santa Clara County. A principal goal of these discussions is to maximize the use of treated wastewater to best serve the water supply needs of the community and to develop a more sustainable, water-resilient future with a collaborative agreement.

In February 2023, the Cities and Valley Water collaborated on a grant application to the United States Bureau of Reclamation (Reclamation) WaterSMART program for financial resources to implement the LOI. This grant application would support negotiations and the development of a purified water feasibility study in San Jose. This feasibility study will be reviewed by Reclamation and submitted to Congress before the project would be eligible for construction funding under the WINN Act and Title XVI grant programs. Reclamation is also expected to announce funding opportunities under the Large-Scale Water Recycling Program that have a total project cost >\$500M, at 25% cost share, with no per project maximum. The latter will offer opportunities to support a potential future full-scale DPR project. Staff level discussions to implement the LOI have determined that the first feasible phase of a significantly larger purified water project will focus on developing a DPR demonstration facility adjacent to the Silicon Valley Advanced Water Purification Center (SVAWPC). This proposed project

**File No.:** 23-0876 **Agenda Date:** 9/6/2023

Item No.: 4.2.

would assist with the development of the future full-scale DPR facility in the following areas:

 operational and performance to inform process selection and optimization and regulatory permitting

- public outreach and education,
- training of operations staff in advanced water treatment technologies
- development of needed agreements.

This project is timely as the regulations for DPR are now nearing finalization. The latest version of the regulations was released in July 2023. The proposed regulations will be going through the Administrative Procedure Act (APA) which includes a public comment period and then move through the process of promulgation in 2024. It is anticipated that the DPR regulations will be adopted in the same year.

The proposed demonstration facility will provide a vital role in the evaluation and demonstration of treatment technologies to meet these new DPR criteria, and provide an engineering foundation for construction of full scale purification facilities. The information for the DPR Demonstration will also pave the way for the needed agreements between Valley Water and the cities.

Valley Water staff is continuing to develop the proposal, including updating the costs and developing a Capital Improvement Program (CIP) project for a 1 Million Gallon per day of DPR Demonstration Project. At this time preliminary cost estimates are \$42 Million for capital and \$2 Million for Operation and Maintenance. Staff will work with San José and Santa Clara staff to better refine project needs and facility costs as well as interagency agreements in the coming months. Feedback from the Valley Water Board, Recycled Water Committee and the JRWPC will be incorporated as the project is further developed.

#### **ENVIRONMENTAL JUSTICE IMPACT:**

There are no Environmental Justice impacts associated with this item.

#### ATTACHMENTS:

Attachment 1: PowerPoint Handout 4.2-A: Sierra Club

#### **UNCLASSIFIED MANAGER:**

Kirsten Struve, 408-630-3138

# Direct Potable Reuse (DPR) in San Jose









### DPR Opportunities in San Jose

- Letter of Intent (LOI) for Collaborating on the Expansion of Recycled and Purified Water in Santa Clara County:
  - ☐ Maximizing RWF wastewater reuse to benefit the water supply needs of the community
  - ☐ Improve water supply reliability and climate resilience in the face of impacts from climate change
- California DPR regulations will greatly expand reuse options and opportunities

# Water Reuse Funding Programs

- CA Water Recycling Funding Program (SWRCB)
  - ☐ Construction Loans and Grants, Planning Grants
  - ☐ Propositions 1, 13 & 68
  - Clean Water State Revolving Fund
- United States Bureau of Reclamation (BOR)
  - ☐ BOR Planning and Pre-Construction Grants (January 2023)
  - ☐ Title XVI Reclamation abd Reuse Projects (WaterSMART)
  - ☐ Large-Scale Water Recycling Program (Projects >\$500M)
- United States Environmental Protection Agency (EPA)
  - ☐ Water Infrastructure Finance and Innovation Act (WIFIA) Program

### Benefits of DPR Demonstration

Collaboration between Valley Water and the Cities of San José and Santa Clara:

- Develop needed agreements to build DPR facility and identify interests for all the agencies involved
- Collaboration on education and public outreach for acceptance of DPR as a source of water
- Being prepared for implementation of a future full-scale DPR facility that protects public health: regulatory/permitting, optimize process, staff training

### **Example Demonstration Projects**



Metropolitan Water District of Southern California and Los Angeles County Sanitation Districts



Hampton Roads Sanitation District



City of San Diego Pure Water Program -Demonstration Pure Water Facility

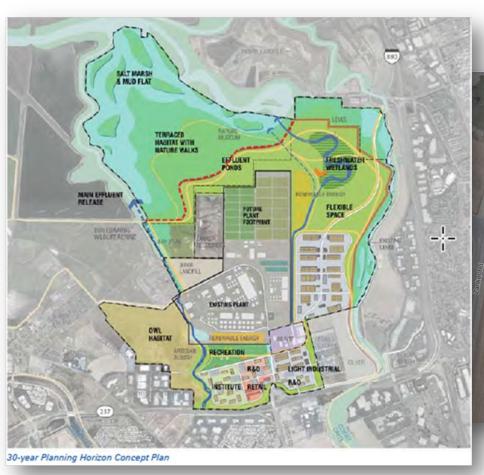


Las Virgenes-Triunfo Pure Water Demonstration Facility



East County Advanced Water Purification Program (Padre Dam)

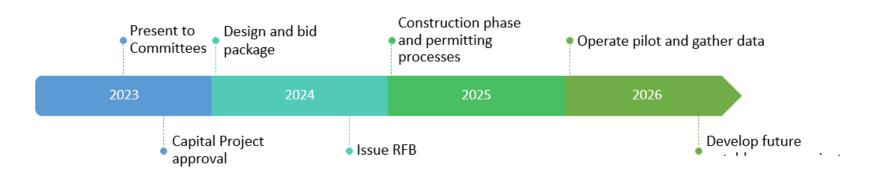
### **Possible Location**





### **Project Cost & Schedule**

- Valley Water CIP Project approval process
- Project timeline of 3-5 years
- Current estimate for CIP process: \$42M capital with \$2M operating cost.
- Demonstration facility will be built upon for larger facility.



#### Michele King

From: Dashiell Leeds <dashiell.leeds@sierraclub.org>

Sent: Thursday, August 10, 2023 5:22 PM

To: Richard Santos; Tony Estremera; Jim Beall; District4; district5@sanjoseca.gov; Romanow, Kerrie;

khardy@santaclaraca.gov; kwatanabe@santaclaraca.gov

Cc: Katja Irvin; James Eggers; Barbara Kelsey; mayor@sanjoseca.gov; Clerk of the Board; Kirsten Struve

**Subject:** SCLP letter to Joint Recycled Water Policy Advisory Committee

Attachments: SCLP Letter to SJ Joint Recycled Water Committee Final-combined.pdf

Follow Up Flag: Follow up Flag Status: Flagged

\*\*\* This email originated from outside of Valley Water. Do not click links or open attachments unless you recognize the sender and know the content is safe. \*\*\*

Dear Joint Recycled Water Policy Advisory Committee,

The Sierra Club Loma Prieta Chapter is pleased to see renewed activity on the Joint Recycled Water Policy Advisory Committee with the City of San Jose/Santa Clara. We support Valley Water's efforts to expand advanced purified water treatment in San José to provide a potable water supply that promotes self-reliance and resiliency.

You will find our Fact Sheet attached which explains why we support this project, includes relevant background information, and provides a list of recommended actions to advance potable reuse of recycled water. We are available to meet with you or your staff to discuss this information in more detail.

Please see the attached document for our full comments and fact sheet.

Sincerely, Katja Irvin Water Committee Co-Chair Sierra Club Loma Prieta Chapter

Email sent from account of: Dashiell Leeds Conservation Coordinator Sierra Club Loma Prieta Chapter



#### SAN MATEO, SANTA CLARA & SAN BENITO COUNTIES

August 10, 2023

Santa Clara Valley Water District
Joint Recycled Water Policy Advisory Committee with the City of San Jose/Santa Clara
Sent via e-mail

Re: Sierra Club position on potable reuse in San Jose

Dear Joint Recycled Water Policy Advisory Committee,

The Sierra Club Loma Prieta Chapter is pleased to see renewed activity on the Joint Recycled Water Policy Advisory Committee with the City of San Jose/Santa Clara. We support Valley Water's efforts to expand advanced purified water treatment in San José to provide a potable water supply that promotes self-reliance and resiliency.

You will find our Fact Sheet attached which explains why we support this project, includes relevant background information, and provides a list of recommended actions to advance potable reuse of recycled water. We are available to meet with you or your staff to discuss this information in more detail.

We look forward to participating in the process to bring potable wastewater reuse to San Jose. We encourage the Committee and your agencies to commit to move forward expeditiously to initiate the following activities:

- Coordinate on needed agreements for a Direct Potable Reuse Pilot project,
- Develop outreach and communications plans and engage stakeholders and subject matter experts,
   and
- Initiate a Program Feasibility Study that includes assessment of the long-term potential for potable and non-potable reuse.

Please note that this letter does not constitute support for any legislation or grant application related to this effort. The Sierra Club considers such requests on a case-by-case basis.

Sincerely,

Katja Irvin Water Committee Co-chair Sierra Club Loma Prieta Chapter

Cc:

Mayor Matt Mahon Clerk of the Board, Valley Water Kirsten Struve, Assistant Officer for Water Supply Division, Valley Water

sierraclub.org/loma-prieta ~ 3921 East Bayshore Road, Suite 204, Palo Alto, CA 94303



SAN MATEO, SANTA CLARA & SAN BENITO COUNTIES

#### Potable Wastewater Reuse in San Jose Will Provide Multiple Benefits

The Sierra Club supports Valley Water's efforts to expand purification of effluent from the San José-Santa Clara Regional Wastewater Facility for potable reuse to provide a water supply that promotes self-reliance, resiliency, and resource protection. The State of California prioritizes this regional, cost-effective, and environmentally beneficial approach to stretch water supplies. Planning for the future of direct potable reuse will ensure a sustainable, drought-proof supply and reduce reliance on imported water from the San Francisco Bay Delta – which is becoming less reliable with climate change and decreasing Sierra snowpack.

#### **Capacity for Wastewater Reuse**

- The County's four regional wastewater treatment facilities process about 140,000 acre-feet per year (AFY) of wastewater, but currently only about 11% of the treated wastewater is reused for non-potable uses such as landscaping.
- Valley Water's near-term goal is to meet 10% of the County's water demands with recycled water by 2025 and provide up to 11,200 AFY for potable reuse by 2028.
- Valley Water's long-term goal is 24,000 AFY of additional reuse by 2040. This could be NPR, IPR, and DPR. This will increase recycled water from six percent of water supply in 2020 to 13 percent in 2040.
- Wastewater processed at the San José-Santa Clara Regional Wastewater Facility has the potential to provide up to 24,000 AFY for potable reuse.
- Silicon Valley Advanced Water Purification Center capacity can increase from 8 to 10 million gallons per day (MGD) without expanding the footprint.
- Valley Water's agreement with Palo Alto/Mountain View commits 9 MGD (10,000 AFY) of treated effluent to a purification facility for potable reuse.
- San Francisco Bay Area has the potential to increase water reuse to 497,000 AFY compared to 49,000 AFY currently reused.

#### **Water Reuse Definitions**

"Recycled Water ... generally refers to treated domestic wastewater used more than once before passing back into the natural water cycle."

"Non-potable Reuse (NPR) refers to recycled water that is not used for drinking, but is safe to use for irrigation, industrial uses, or other non-drinking water purposes."

"Potable Reuse refers to recycled water sufficiently purified through advanced treatment to meet or exceed federal and state drinking water standards ..."

"Indirect Potable Reuse (IPR) involves blending purified water with water supply in an environmental system, such as a surface water reservoir or groundwater basin, that acts as [an environmental] buffer for retaining and diluting the reuse supply before treating the blended supply."

"Direct Potable Reuse (DPR) involves the treatment and distribution of purified water using engineering controls, without an environmental buffer, in the form of raw water augmentation or treated water augmentation."

#### We Ask San Jose and Santa Clara to Work with Valley Water To

- **Initiate robust public involvement.** Develop outreach and communications plans and engage stakeholders and subject matter experts as soon as possible.
- **Consider siting.** Location of water purification facilities near sensitive bayland ecosystems will have impacts on these natural areas, and will be susceptible to sea-level rise.
- Prioritize the Program Feasibility Study. Assess the potential for potable and non-potable reuse, as well as onsite and district-scale (decentralized) NPR. Consider reduced influent due to conservation and decentralized NPR, and effluent needed to blend reverse osmosis (RO) concentrate. Evaluate alternative scenarios to inform long-term planning for expansion of potable reuse facilities.
- **Enhance source control programs.** Reduce contaminants of concern flowing into wastewater treatment facilities from industrial and commercial dischargers.
- Prioritize direct potable reuse. DPR could reduce costs and minimize environmental impacts
  due to reduced pipeline length and reduced energy use for pumping compared to IPR through
  groundwater recharge.
- Manage RO concentrate. Use science-based policies and procedures to mitigate potential
  adverse environmental impacts from disposal of RO concentrate, including ongoing attention
  to constituents of emerging concern such as PFAS (per- and polyfluoroalkyl substances) and
  microplastics.
- Monitor water quality. Continuously monitor discharges to the environment to ensure
  mitigation methods are preventing negative water quality impacts. Employ real-time
  monitoring of DPR supplies to protect public health in case of advanced treatment system
  failures.

#### References

- 1. Sierra Club California, January 13, 2020, Sierra Club California Comments on Draft Water Resilience Portfolio, https://www.sierraclub.org/sites/default/files/sce/sierra-club-california/PDFs/SierraClubCA\_DraftWaterPortfolioComments.pdf.
- 2. Santa Clara Valley Water District (SCVWD), *Countywide Water Re-use Master Plan (CoRe Plan)*, June 2021, <a href="https://www.valleywater.org/your-water/recycled-and-purified-water">https://www.valleywater.org/your-water/recycled-and-purified-water</a>.
- 3. SCVWD, *Water Supply Master Plan 2040*, November 2019, <a href="https://www.valleywater.org/yourwater/water-supply-planning/water-supply-master-plan">https://www.valleywater.org/yourwater/water-supply-master-plan</a>.
- 4. SCVWD, Recycled Water Committee Agenda, Regular Meeting, Wednesday, May 24, 2023, https://s3.us-west-1.amazonaws.com/valleywater.org.us-west-1/s3fs-public/052423%20RWC%20Agenda%20Packet 0.pdf.
- 5. Santa Clara County Medical Association, *The Bulletin*, Vol. 29, No.2, Second Quarter 2022, https://issuu.com/18621/docs/q2 2022.
- 6. SCVWD, *Recycled Water Committee Meeting Minutes, Regular Meeting, Wednesday, May 24, 2023*, <a href="https://s3.us-west-1.amazonaws.com/valleywater.org.us-west-1/s3fs-public/0000%20052423%20RWC%20Approved%20Minutes.pdf">https://s3.us-west-1.amazonaws.com/valleywater.org.us-west-1/s3fs-public/0000%20052423%20RWC%20Approved%20Minutes.pdf</a>.
- 7. Pacific Institute, *The Untapped Potential of California's Urban Water Supply: Water Efficiency, Water Reuse, and Stormwater Capture*, April 2022, <a href="https://pacinst.org/publication/california-urban-water-supply-potential-2022">https://pacinst.org/publication/california-urban-water-supply-potential-2022</a>.

### Santa Clara Valley Water District



File No.: 23-0875 Agenda Date: 9/6/2023

Item No.: 4.3.

### COMMITTEE AGENDA MEMORANDUM Joint RWPAC with Cities of San Jose/Santa Clara

Government Code § 84308 Applies: Yes ☐ No ☒ (If "YES" Complete Attachment A - Gov. Code § 84308)

#### SUBJECT:

Receive Potential Recycled Water Use at Lake Cunningham Update and Provide Feedback.

#### RECOMMENDATION:

Receive information and provide feedback.

#### SUMMARY:

At the June 28th Recycled Water Committee (RWC), Valley Water staff presented information related to the history and operation of the City of San Jose's recreational park, Lake Cunningham. The RWC previously asked staff to investigate the feasibility of using tertiary treated recycled water at the park to mitigate water quality issues and re-establish use of the lake for recreational purposes. Staff determined that the use of recycled water would not address the water quality issues at the lake, but perhaps Valley Water could explore other ways to assist the City of San Jose (City) in improving the quality of the lake water. The RWC members requested the addition of this item to this Joint Recycled Water Policy Advisory Committee meeting to discuss and suggest referring this topic to collaborative meetings not related to recycled water, such as the next Joint City Council and Valley Water Board meeting to determine future collaborative efforts between the City and Valley Water to address water quality at the lake.

#### BACKGROUND

The Cunningham Flood Detention Facility is situated in the Valley Water's East Zone within Lake Cunningham Regional Park (LCRP), a 202-acre water-oriented park located in the southeast section of San Jose and is upstream of Valley Water's Lower Silver Creek Flood Protection Project. The park was designed and constructed in accordance with a LCRP Master Plan originally developed in 1976 by the City of San Jose (City) to function dually as a recreational and flood detention facility. Lower Silver, Flint, and Ruby Creeks flow along the perimeter of the park.

In 1978, Valley Water entered into a Joint Use Agreement (1978 Agreement) with the City to develop a joint recreational-flood detention facility at the LCRP site. Per the 1978 Agreement, the City holds

File No.: 23-0875 Agenda Date: 9/6/2023

**Item No.:** 4.3.

fee title to all the park lands and is responsible for the park's recreational-related facilities including Lake Cunningham (Lake). The City granted Valley Water an easement to all park lands and Valley Water is responsible for the flood improvement measures in LCRP which include the creeks, creek levees, and overflow weirs. The easement, recorded in October of 1980, includes language that allows for Valley Water to take measures necessary for flood protection purposes provided the measures are compatible with the park uses.

The City was the lead agency responsible for the design and construction of the improvements in the late 1970s and early 1980s and Valley Water assisted by providing design input and funds towards the construction of the park. The flood detention facility was planned to provide temporary storage of floodwaters from Lower Silver Creek, Flint Creek, and Ruby Creek in the park and the City was not to hold Valley Water responsible for any damages caused by the planned inundation.

In 2019 Valley Water completed flood protection improvements to raise the levees, build a floodwall, replace storm drain and check valve at the big meadow area. The project was FEMA certified for a 100-year flood event.

#### 2022 City of San Jose Study

The 2022 study indicates several water quality issues and provides recommendations of proposed corrective actions to address these issues. Some of the issues relate to water temperature and stagnant water. Elevated water temperatures impact the geochemical process causing changes in water chemistry that impact phytoplankton and create inhabitable conditions for aquatic organisms. The water in the Lake is unable to be exchanged with fresh water which also contributes to elevated water temperatures. Contributions from sediments, bird feces, vegetation, fertilizers, run-off of irrigation and surface water also results in high nutrient levels. Bird feces also contribute to elevated bacterial concentrations.

Treatment options and recommendations from the 2022 study include alum treatment to remove phosphorous from the Lake, runoff sediment management and mechanical mixing. In addition, the construction of shoreline wetlands and vegetated swales to reduce nutrient loading, expansion of wetland areas and floating wetlands. To reduce fecal coliform loading, planting vegetative buffers is recommended.

#### **Recycled Water**

Tertiary treated recycled water from the City's South Bay Water Recycling (SBWR) system runs approximately 3 miles away from the Lake. The nearest SBWR recycled water distribution line runs along a very busy corridor along Senter Road near the intersection of Tully Road in East San Jose. It is unclear at this time if sufficient recycled water is available to feed the Lake, and a hydraulic study would be required to make this determination and the City would need to determine if SBWR can supply water for the Lake. Past attempts to use recycled water to augment natural water bodies, including stream flow augmentation, did not succeed due to permitting issues related to water temperature and the presence of emerging contaminants such as Per- and polyfluoroalkyl substances, commonly referred to as PFAS compounds. A 2008 Valley Water and Stanford University

**File No.:** 23-0875 **Agenda Date:** 9/6/2023

Item No.: 4.3.

study evaluated these impacts and determined that temperature differences between recycled water and receiving waters would require the installation of chillers to lower recycled water temperatures to prevent impacts to aquatic organism. Furthermore, the presence of PFAS compounds have ecotoxicological effects which bioaccumulate in aquatic and terrestrial organisms.

Given the stagnant nature of the water in the Lake and the potential presence of constituent of concern in recycled water that can impact aquatic and terrestrial organisms, staff does not recommend the use of recycled water in the lake since this would not address water quality issues already present in the Lake.

#### **ENVIRONMENTAL JUSTICE IMPACT:**

This item does not have any impact on Environmental Justice.

#### ATTACHMENTS:

None.

#### **UNCLASSIFIED MANAGER:**

Kirsten Struve, 408-630-3138