

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

HQ. Bldg. Boardroom, 5700 Almaden Expressway, San Jose, California Join Zoom Meeting: https://valleywater.zoom.us/j/83371245441

### SPECIAL MEETING AGENDA

Friday, May 23, 2025 1:00 PM

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, Chairperson Richard Santos - SCVWD Dist. 3
Jim Beall - SCVWD Dist. 4
David Cohen - City of San Jose Dist. 4
Pamela Campos - City of San Jose, Dist. 2
Karen Hardy - City of Santa Clara, Dist. 3

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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

Friday, May 23, 2025

1:00 PM

HQ. Bldg. Boardroom, 5700 Almaden Expressway, San Jose, California Join Zoom Meeting: https://valleywater.zoom.us/j/83371245441

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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.

2.1. Elect 2025 Joint Recycled Water Policy Advisory Committee

25-0431

(SCVWD/San Jose/Santa Clara) - Chairperson.

Recommendation: Elect 2025 Chairperson for the Joint Recycled Water Policy

Advisory Committee.

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

Est. Staff Time: 5 Minutes

#### 3. APPROVAL OF MINUTES:

3.1. Approval of September 4, 2024, Joint Recycled Water Policy Advisory

25-0432

Committee Meeting Minutes.

Recommendation: Approve the minutes.

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

Attachments: Attachment 1: 090424 JRWPAC Minutes

Est. Staff Time: 5 Minutes

#### 4. REGULAR AGENDA:

4.1. Review Proposed Fiscal Year 2025-2026 Budgets for Silicon Valley Advanced <u>25-0433</u> Water Purification Center and South Bay Water Recycling.

Recommendation: This item is informational as the Santa Clara Valley Water

District Board of Directors and the San Jose City Council approved their respective proposed budgets for the ensuing fiscal year for the maintenance, expansion, replacement, improvement, and operation of the South Bay Water Recycling system and the Silicon Valley Advanced Water Purification

Center.

Manager: Kirsten Struve, 408-630-3138

Sam Bogale, 408-630-3505

Attachments: Attachment 1: PowerPoint

Est. Staff Time: 10 Minutes

4.2. Receive the Development of a Collaborative Potable Reuse Project Update <u>25-0256</u>

and Provide Feedback.

Recommendation: Receive information and provide feedback on progress towards

the development of a collaborative potable reuse project to

ensure our community is more drought resilient.

Manager: Kirsten Struve, 408-630-3138

Attachments: Attachment 1: Letter of Concurrence

Attachment 2: PowerPoint

Est. Staff Time: 10 Minutes

4.3. Receive Update on Valley Water's Purified Water Public Outreach and 2024 <u>25-0425</u> Public Perception Poll and Provide Feedback.

Recommendation: Receive information and provide feedback on:

A. Valley Water's public outreach highlights for the Purified

Water Program; and

B. The results from the 2024 public perception poll.

Manager: Rachael Gibson, 408-630-2884

Attachments: Attachment 1: Valley Water Outreach PowerPoint

Attachment 2: 2024 Public Perception Poll Results PowerPoint

Est. Staff Time: 35 Minutes

4.4. Receive Update on the Recycled Water Use at Data Centers in the Cities of San Jose and Santa Clara.

Recommendation: Receive an update on recycled water use at data center in the

Cities of San Jose and Santa Clara.

Manager: Kirsten Struve, 408-630-3138

Attachments: <u>Attachment 1: PowerPoint</u>

Est. Staff Time: 5 Minutes

#### 5. 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.

#### 6. ADJOURN:

6.1. Adjourn. The Next Regular Meeting is Scheduled at 10:00 a.m., on April 16, 2026 or TBD per Committee.

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#### Santa Clara Valley Water District



File No.: 25-0431 Agenda Date: 5/23/2025

Item No.: 2.1.

### 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:

Elect 2025 Joint Recycled Water Policy Advisory Committee (SCVWD/San Jose/Santa Clara) - Chairperson.

#### RECOMMENDATION:

Elect 2025 Chairperson for the Joint Recycled Water Policy Advisory Committee.

#### SUMMARY:

Consistent with Article 3.C of the Recycled Water Facilities and Programs Integration Agreement between the City of San José and the Santa Clara Valley Water District, adopted on March 2, 2010, members of the Recycled Water Policy Advisory Committee (Committee) shall elect one member to serve as Chairperson of the Committee at the first meeting in each fiscal year. The Chairperson shall serve until the election of a successor in the next fiscal year, or no longer a member of the Committee, whichever is earlier. Mid-fiscal year vacancies in the office of the Chair occurring in between regular elections will be filled by the Committee electing a new Chairperson to serve until the next regular election. The Chairperson shall preside at all meetings of the Committee. In the event of the Chairperson's absence from any meeting, the members of the Committee may elect a Chair Pro-Tem to serve as Chair during the latter's absence.

#### **ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:**

The election of Chairperson is not subject to environmental justice analysis.

#### ATTACHMENTS:

None.

#### **UNCLASSIFIED MANAGER:**

Candice Kwok-Smith, 408-630-3193

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#### Santa Clara Valley Water District



File No.: 25-0432 Agenda Date: 5/23/2025

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 September 4, 2024, 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 AND EQUITY IMPACT:**

The approval of minutes is not subject to environmental justice analysis.

#### ATTACHMENTS:

Attachment 1: 09042024 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

#### WEDNESDAY, SEPTEMBER 4, 2024 12:00 PM

(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 in the Valley Water Headquarters Building Boardroom at 5700 Almaden Expressway, San Jose, California, and by Zoom teleconference, at 12:00 p.m.

#### 1.1 Roll Call.

Valley Water Board Committee members in attendance were District 4 Director Jim Beall and District 3 Director Richard Santos.

City of San José/Santa Clara members in attendance were City of San Jose Councilmember Peter Ortiz and City of Santa Clara Councilmember Karen Hardy constituting a quorum of the Committee.

Valley Water District 6 Director Tony Estremera, Chairperson arrived as noted below.

Valley Water staff members in attendance were: Brandon Adriano, Emmanuel Aryee, Hossein Ashktorab, Aaron Baker, Henry Barrientos, Bart Broome, Lakeisha Bryant, Jiana Escobar, Rachael Gibson, Walter Gonzalez, Zachary Helsley, Lei Hong, Brian Hopper, Girlie Jacobson, Michele King, Candice Kwok-Smith, Nicole Merritt, Carlos Orellana, Medi Sinaki, Kirsten Struve, Charlene Sun, Darin Taylor, Cheryl Togami, David Tucker and Kristen Yasukawa.

City of San Jose/Santa Clara staff members in attendance were: Nick Ajluni, Leanne Bolano, Eric Dunlavey, Victoria Gleason, Ryan Harrison, Pedro Hernandez, Darwin Lasat, Shilpa Mehta, Jeff Provenzano, Brisa Rojas, Lawrence Tam, Rosa Tsongtaatarii, and Gary Welling.

Public in attendance were: Phillipe Daniel (Liquisti LLC), Katja Irvin (Sierra Club-Loma Prieta Chapter), Anya Kaufmann and Shane Trussell (Trussell Technologies), and Sanjay Reddy (Carollo Engineers).

During Chairperson Estremera's absence, the meeting was facilitated by Director Santos.

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

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

Chairperson Estremera arrived.

#### 2. APPROVAL OF MINUTES:

3.1 Approval of May 29, 2024 Joint Recycled Water Policy Advisory Committee Meeting Minutes.

Recommendation: Approve the Minutes.

The Committee considered the attached minutes of the May 29, 2024 Committee meeting.

**Public Comments:** 

None.

It was moved by Councilmember Ortiz and seconded by Director Santos, and was carried by majority vote, that the minutes be approved. Councilmember Hardy abstained from the vote per not being present at the meeting.

#### 3. REGULAR AGENDA:

4.1 Expansion of the Purified and Recycled Water System and Development of a Potable Reuse Project.

Recommendation: Receive information and provide feedback on progress

toward the development of purified water and expansion of recycled water programs to ensure our community is more

drought resilient.

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: Kirsten Struve reviewed Slides 1 through 4, Slides 6 through 8, and Slide 10; and Jeff Provenzano reviewed Slide 5 and Slide 9.

Kirsten Struve and Jeff Provenzano were available to answer questions.

**Public Comments:** 

None.

For full meeting record, please review meeting videos at: https://www.valleywater.org/how-we-operate/committees/board-committees

The Committee received the information, took no formal action, and noted the following:

- The Committee noted the City of San Jose staff introductions for Eric Dunlavey and Pedro Hernandez and welcomed them to the team.
- The Committee expressed positive feedback and support for staff's collaborative progress; and noted the significance for continued public outreach regarding purified water education.
- The Committee noted support for a special meeting sooner than the next regular meeting on April 17, 2025, if needed to address amending agreements and progress, and for an afternoon special meeting start time.

#### 4. 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.

None.

#### 5. ADJOURN:

Adjourn. The Next Regular Meeting is Scheduled at 10:00 a.m. on April 17, 2025 or TBD per Committee.

Chairperson Estremera adjourned the meeting at 12:28 p.m. The next regular meeting is scheduled at 10:00 a.m. on April 17, 2025, or TBD per Committee.

Nicole Merritt Assistant Deputy Clerk II

Date Approved:

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#### Santa Clara Valley Water District



File No.: 25-0433 Agenda Date: 5/23/2025

Item No.: 4.1.

### 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:

Review Proposed Fiscal Year 2025-2026 Budgets for Silicon Valley Advanced Water Purification Center and South Bay Water Recycling.

#### RECOMMENDATION:

This item is informational as the Santa Clara Valley Water District Board of Directors and the San Jose City Council approved their respective proposed budgets for the ensuing fiscal year for the maintenance, expansion, replacement, improvement, and operation of the South Bay Water Recycling system and the Silicon Valley Advanced Water Purification Center.

#### SUMMARY:

On March 2, 2010, the Recycled Water Facilities and Programs Integration Agreement (Integration Agreement) was executed between the City of San Jose and Valley Water. This Agreement outlines the terms of the operational support payments upon commencement of operation of the Silicon Valley Advanced Water Purification Center (SVAWPC) as well as the policy considerations for blending the purified water produced by SVAWPC with the recycled water from City of San Jose and distributed via the South Bay Water Recycling system (SBWR). Pursuant to Article 3. Recycled Water Policy Advisory Committee, Powers and Duties, G.3., the Integration Agreement also specifically requires that on an annual basis, before May 1 of each year, that the parties review the budgets of SBWR and SVAWPC and make recommendations to the Santa Clara Valley Water District Board of Directors and the San Jose City Council on their respective proposed budgets for the ensuing fiscal year for the maintenance, expansion, replacement, improvement, and operation of the SBWR and the SVAWPC (Article 3.G.3 of Integration Agreement). This year, the parties agreed to not meet this April per the Integration Agreement due to a mutual decision to postpone the previously scheduled April 17 JRWPAC meeting to May 23 to allow for a more substantive update on the Purified Water Project to the committee and to ensure an afternoon timeslot to accommodate a committee member request; and that the parties believe it is not necessary to meet in April prior to budget adoption processes by their respective governing bodies.

San Jose's staff proposed Fiscal Year 25-26 budget for SBWR is \$16,200,633 and Valley Water's

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staff proposed Fiscal Year 25-26 budget for the Purification Center is \$9,091,190.

#### **ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:**

This item is not subject to environmental justice analysis.

#### **ATTACHMENTS**:

Attachment 1: PowerPoint

#### **UNCLASSIFIED MANAGER:**

Kirsten Struve, 408-630-3138 Sam Bogale, 408-630-3505

# Proposed O&M Budgets for SVAWPC and SBWR (FY 25-26)









Valley Water

# **SVAWPC O&M Highlights**

Operations of SVAWPC proceeded smoothly in FY24.

- Total production of purified water was 1637 MG.
- Product water met all permit requirements.
- Reverse osmosis (RO) concentrate met all San José-Santa Clara Regional Wastewater Facility (RWF) requirements.

## **SVAWPC O&M Highlights**

Valley Water continues to optimize plant operations and perform proactive maintenance at SVAWPC

- Performance evaluation of MF and RO membrane
- Annual autopsy and Clean-in-place of MF and RO
- Completed annual plant maintenance activities
- MF membrane replacement starting in April

# SVAWPC O&M Highlights



MF rack valve replacement



Staff replacing influent check valves



Staff performing PM on control cabinet



Inter-process Tank Inspection

# SVAWPC Budget (FY24-26)

Description	FY24 Actual	FY25 Adopted	FY26 Proposed
Energy	\$1,098,780	\$1,260,000	\$1,150,000
Chemicals	\$993,485	\$1,200,000	\$1,100,000
Labor	\$2,024,449	\$2,052,253	\$2,284,988
Other operations & maintenance (O&M) services & supplies	\$2,726,429	\$3,542,065	\$4,556,202
Sink Reserve Increase/(Decrease)	\$0	(\$1,292,735)*	\$0
Total O&M Cost	\$6,843,143	\$8,054,318	\$9,091,190

<sup>\*</sup> The full balance of the Sinking Reserve is \$1,298,138 at the end of FY24; \$1,292,735 was allocated to fund the Microfiltration (MF) membrane (2 racks) and Reverse Osmosis (RO) membrane replacement in FY25. And these funds were expensed in FY15 and FY16 when placed in the Reserve.

### SBWR OVERVIEW



- SBWR was constructed in 1992 as a wastewater discharge compliance measure.
- SBWR offset almost 4 BILLION gallons of potable water in 2024.
- SBWR continues to serve as a key solution to maintaining outdoor spaces during droughts.
- SBWR supports critical infrastructure and economic growth.



### SBWR RETAILER UPDATE



- 2024 SBWR and SJW updated Wholesaler-Retailer Agreement
- SJW plans to expand recycled water up to 5,000 AFY in next 10 years
- Majority irrigation customers

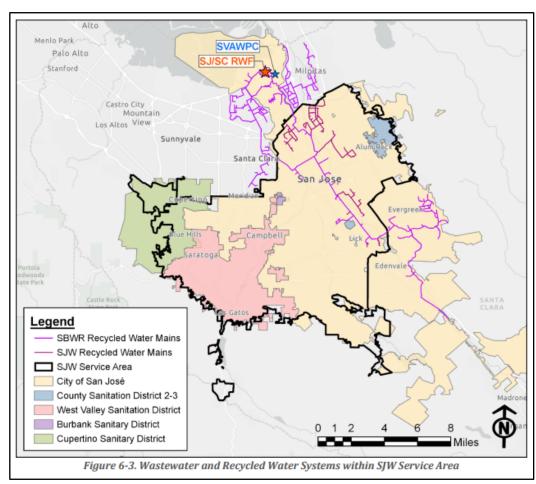


image courtesy of SJW 2020 UWMP

# SBWR O&M Highlights



- SBWR met all permit requirements.
- SBWR continues to perform maintenance operations and upgrades of aging infrastructure.
- Phase II Metering and Pressure Monitoring Improvements.
- SBWR system condition assessment & master plan updates.
- Pump station site improvements.

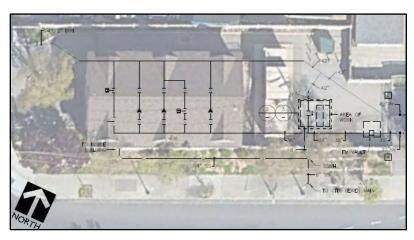


### SBWR O&M Multi FY Projects





**Annual Groundwater Monitoring** 



Pump Station #5 Bypass



**Hydrant Installation** 



**Emergency Planning & Reliability Improvements** 





Master Metering & Pressure Monitoring Improvements

# SBWR Budget (FY24-26)



Description	FY24 Actual	FY25 Adopted	FY26 Proposed
Program Administration, Permitting and Compliance	4,235,990	4,929,810	4,906,151
System Operations and Maintenance	8,488,197	9,454,286	10,084,286
Capital Planning and Engineering (Studies)	205,214	264,655	272,595
Communication and Outreach	25,998	51,565	51,565
City of San José Overhead and Capitated Services	683,310	805,488	886,037
TOTAL SBWR Operating Expenses	13,638,708	15,505,804	16,200,633
SBWR Wholesale Recycled Water Sales	20,720,162	19,167,632	23,777,649
City Net Operating Cost: (Savings)	(7,081,454)	(3,661,828)	(7,577,016)
City Net Operating Revenue	7,081,454	3,661,828	7,577,016

## Staff's Budget Recommendations

That the Joint Recycled Water Policy Advisory Committee recommends:

Accept this status report on the Proposed Budgets FY 25-26 for SVAWPC and SBWR.

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#### Santa Clara Valley Water District



File No.: 25-0256 Agenda Date: 5/23/2025

Item No.: 4.2.

### 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 the Development of a Collaborative Potable Reuse Project Update and Provide Feedback.

#### RECOMMENDATION:

Receive information and provide feedback on progress towards the development of a collaborative potable reuse project to ensure our community is more drought resilient.

### SUMMARY: Background

In January 2023, Santa Clara Valley Water District (Valley Water) and the Cities of San Jose and Santa Clara (Cities) executed a Letter of Intent for Collaborating on the Expansion of Recycled and Purified Water in Santa Clara County (LOI). The LOI recognizes that climate change makes our community more vulnerable to extreme weather conditions, including periods of long-term drought and more intense wet-weather events. To prepare for these extreme and uncertain events, the availability of a drought proof water supply and efficient water management justifies the significant and rapid expansion of recycling treated wastewater from the San Jose-Santa Clara Regional Wastewater Facility (RWF). On November 17, 2023, the Valley Water Board and San José City Council provided the following guidance to staff to ensure development of collaborative win-win solutions that meet the Cities' and Valley Water's needs:

- Confirmed support for aggressively pursuing a joint project to meet local water supply needs, including both a demonstration and full-scale potable reuse project that is the largest size practicable within funding, environmental, and technical constraints.
- Confirmed support for development of a feasibility study, demonstration facility and institutional arrangements, including land lease and wastewater availability agreements, within two years.
- Confirmed support for a coordinated public outreach program to ensure the success of a direct potable reuse project.

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• Twice-yearly or as-needed updates to the Joint Recycled Water Policy Advisory Committee (JRWPAC).

This memo summarizes progress since the September 2024 JRWPAC meeting.

#### **Agreements**

#### Staff Funding

Two City staff funding agreements have been executed: Valley Water will reimburse City of San Jose staff work supporting the demonstration and full-scale DPR facilities at up to \$1 million per year. Valley Water will reimburse the City of Santa Clara for up to \$350,000 of similar technical support. As a result of the staff funding agreement, in addition to the new Deputy Director of Purified Water and Regulatory Affairs, the City of San José has also filled two staff level positions to assist in the collaborative effort. Meetings are held at least every other week to advance the project and address technical and institutional/legal issues.

#### Demonstration Facility Agreements

Staff from the cities and Valley Water have been working to develop and amend the following agreements which support the existing Silicon Valley Advanced Water Purification Center (SVAWPC). The amendments will enable construction and operation of the Direct Potable Reuse (DPR) Demonstration Facility and associated Learning Center:

- 1. Integration Agreement: This agreement is being amended to include the demonstration facility, extend the term, update termination clauses, and update financial terms.
- Operations and Maintenance Agreement: This agreement is being amended to include operation and maintenance of the demonstration facility, which will provide additional flow for blending with recycled water.
- 3. Option to lease and amended lease: The option agreement would set aside 2 acres of land for the learning center/demonstration facility and also address the land needed for changes envisioned by the Microsoft project, i.e. moving the existing visitor trailer. The amended lease would include the additional areas and facilities and extend the term.

Staff anticipates adoption by the Board and city councils in June 2025.

Microsoft Corp. is currently planning to build an access road to a data center on an adjacent privately owned parcel to the east. Construction for the access road is planned for June 2025. City and Valley Water staff are working together on this project. Staff plans to include the needed land for the Microsoft project changes and the DPR Demonstration facility in the land lease amendment. In addition, an agreement between Microsoft, the City of San Jose and Valley Water is being developed.

#### Roadmap

Based on the roadmap previously presented, City and Valley Water staff have embarked on a

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facilitated process to develop a project charter which will form the basis of future long-term agreements. This project charter will include mutual objectives discussed at the May 2024 JRWPAC meeting, identify roles and responsibilities, and the risks and opportunities to ensure the project can be implemented. Staff from Valley Water and the Cities of San Jose and Santa Clara held a workshop with staff from the San Francisco Public Utilities Commission to discuss developing a partnership charter for the Purified Water Project (PWP) on September 25, 2024. All agencies are interested in partnering on a purified water project.

Long-term interagency agreements for the full-scale facility will be developed in parallel to address wastewater availability, operations and maintenance of the full-scale DPR facility, Reverse Osmosis (RO) concentrate, waste stream management, and terms of a land lease. Staff from all agencies have had a facilitated workshop specifically related to wastewater availability and RO concentrate and are engaging in additional technical meetings to develop an approach and technical studies in support of the long-term agreements.

#### **Technical Studies**

The final DPR regulations went into effect on October 1, 2024. Valley Water's Project Management Consultant's subconsultant Trussell Technologies, Inc., who have helped in the development of the DPR regulations and are known for their expertise in potable reuse regulatory and permitting strategies, have prepared a roadmap for DPR project permitting. Unlike Indirect Potable Reuse (IPR), the DPR permitting requirements are much more complex. The DPR permitting steps include, but are not limited to, the following:

- · the need for a demonstration facility for validation studies of pathogen and chemical control,
- development of a corrosion control and stabilization plan for the water distribution system used to convey the DPR water (including at the retailer level),
- wastewater characterization and source control studies spanning at least two years or longer,
- development of plans to address water safety, monitoring, and operations,
- Title 22 Engineering Report, and
- Direct Potable Reuse Responsible Agency (DiPRRA) agreement which demonstrates how the wastewater and water agency will work together.

These studies and reports will need to be prepared concurrently with the development of the full-scale facility's 60 percent design and are required prior to submitting the permit application to the Division of Drinking Water (DDW) at the State Water Board. Thereafter, a public meeting will be held by the State Water Board prior to the start of the construction stage.

The regulatory process ensures that multiple safeguards are in place, and the water produced by a DPR facility meets the stringent safety requirements for potable reuse. Valley Water staff and our consultants are continuing to review these requirements and updating the budget and timelines for

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the San Jose Purified Water Project.

As part of the continuous efforts to keep the regulatory entities informed about the project, Valley Water hosted a tour for DDW staff to introduce them to the project on October 24, 2024, and also began a series of meetings with DDW about the San José Purified Water Project in January 2025. DDW was very engaged in the meetings with high level expert staff and the project concept was received very well.

#### Reverse Osmosis Concentrate

Staff from the City and Valley Water are continuing to collaborate with the San Francisco Bay Regional Water Quality Control Board on a strategy for Reverse Osmosis Concentrate (ROC) management that is effective and protective of the environment. The Regional Water Board provided a letter of concurrence on September 13, 2024 (Attachment 1) that presents the steps towards regulatory compliance for the management of reverse osmosis concentrate in the future. The Regional Water Board communicated that RO concentrate management was feasible when supported by technical studies to address constituents of concern and to preserve beneficial uses of the South Bay. In addition, they suggested the long-term RO concentrate management would need to include feasible treatment options to address contaminants. Such options may include nature-based solutions or other forms of advance treatment processes capable of reducing the load of contaminants to the South Bay.

#### Grants and Feasibility Study

Valley Water staff has been working to procure engineering consultant assistance to develop a San Jose DPR project feasibility study and provide future grant application support for the design and construction of a full-scale project. In August 2024, Valley Water initiated the procurement process to select a technical consultant to provide multi-year support to promote state and federal grant and loan applications. City of San José staff are directly supporting the review and selection of an engineering consultant to provide this support. The San Jose-Santa Clara Purified Water Program Feasibility Study was previously estimated at \$1,524,996 and was recently funded with \$381,249 by the Bureau of Reclamation. Preparation of a feasibility study is a prerequisite for obtaining design and construction grants in the future with the Cities and Valley Water committed to work together on its development.

The cost estimate for the Phase 1 demonstration project was based on preliminary information. As presented to the Valley Water Capital Improvement Program (CIP) committee and Board, the estimated cost for Phase 1 -Demonstration Facility has been updated to include the staff funding agreements for the cities, and consultant and staff support for planning, design, regulatory requirements, project management and CEQA compliance. Consequently, the revised inflated Total Project Cost (TPC) is \$106.46M.

#### **Next Steps**

The focus of the next six months will be: executing amendments in support of the demonstration facility, release an RFP for a design consultant, and continue development of a charter as a basis for long-term agreements related to the full-scale facility, developing pertinent information/data and

Item No.: 4.2.

presenting to the regulatory agencies and continue outreach efforts.

#### **ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:**

There are no environmental justice and equity impacts associated with this item. This action is unlikely to or will not result in adverse impacts and is not associated with an equity opportunity.

#### **ATTACHMENTS**:

Attachment 1: Letter of Concurrence

Attachment 2: PowerPoint

#### **UNCLASSIFIED MANAGER:**

Kirsten Struve, 408-630-3138

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September 13, 2024

Santa Clara Valley Water District
Attn: Kirsten Struve, Assistant Officer
Recycled and Purified Water Unit
5750 Almaden Expressway, San José CA 95118
Sent electronically to kstruve@valleywater.org

City of San José
Attn: Jeff Provenzano, Assistant Director
Environmental Services Department
200 East Santa Clara Street, 10<sup>th</sup> Floor Tower, San José, CA 95113
Sent electronically to Jeffrey.Provenzano@sanjoseca.gov

### Subject: Concurrence with Proposed Regulatory Process for Discharge of Reverse Osmosis Concentrate from an Advanced Water Purification Facility in San José

Dear Kirsten and Jeff:

We recognize the progress that the Santa Clara Valley Water District (Valley Water) and the cities of San José and Santa Clara have demonstrated to address the need for a resilient and local water supply through collaboration on recycled water projects in San José.

During an April 25, 2024, meeting of the Water Board, City of San José, and Valley Water; Valley Water staff communicated their agency's intention to construct an Advanced Water Purification Facility with a production capacity of 24 million gallons per day in San José, pending negotiations with the cities. The facility will be designed and operated based on the regulatory requirements of the California Code of Regulations, Title 22, section 4.17.10, and is planned to be located next to the existing Silicon Valley Advanced Water Purification Center. It would receive tertiary treated wastewater from the San José/Santa Clara Regional Wastewater Facility (RWF) as its feedwater. Valley Water is evaluating the feasibility of initially discharging reverse osmosis concentrate via blending with RWF effluent. To minimize impacts to the Lower South Bay as concentrate flow increases and remaining RWF effluent flow decreases, Valley Water plans to provide additional treatment with nature-based solutions (NBS) or other advanced treatment technologies.

We appreciate Valley Water's efforts to explore alternatives for managing reverse osmosis concentrate, including its commitment to evaluate NBS and other potential treatment measures. We offer the following comments on the proposed plan:

- 1. Based on the information and analysis shared to date, the concentrate discharge through the RWF outfall and Artesian Slough may be feasible in the short term, assuming relatively low concentrate volumes. We will need to see evaluations of the expected combined effluent concentrations and potential mixing zones. In the long term or at higher concentrate volumes, the compliance strategy will need to include NBS or an advanced treatment option to reduce the loads of nutrient and contaminants of emerging concern.
- 2. Future compliance with the RWF's NPDES permit may be achievable if permit modifications (e.g., changes to mixing zones) are supported by technical studies with concurrence from the Water Board. We anticipate the need for continued dialogue regarding nutrient

discharges and additional management practices to ensure compliance with foreseeable effluent limits and preservation of existing beneficial uses of the Lower South Bay, Coyote Creek, and Artesian Slough.

- 3. The technical studies supporting concentrate management and other supporting information should be included with a future City of San José application for permit reissuance. We understand that Valley Water will conduct technical studies in coordination with the City of San José. These studies must include a reasonable potential analysis, hydrodynamic modeling for concentrate discharge, toxicity evaluations, and nutrient load projections. The application must also include a justification for continuing the RWF's exceptions to the shallow water and dead-end slough discharge prohibitions in <a href="Basin Plan Table 4-1">Basin Plan Table 4-1</a>.
- 4. The Water Board expects Valley Water to continue exploring NBS and other advanced concentrate treatment options as compliance strategies for concentrate management. Many of these treatment methods have multiple benefits. For example, horizontal levees have been shown to remove nutrients and other emerging contaminants while providing protection against sea level rise. We expect Valley Water to conduct additional technical studies to inform and assess the effectiveness of concentrate management while preserving the beneficial uses of the Lower South Bay, Coyote Creek, and Artesian Slough.

We appreciate the opportunity to work with Valley Water and the cities of San José and Santa Clara on this project. If you have any questions, please contact William Burrell at (510) 622-2317 or william.burrell@waterboards.ca.gov.

Sincerely,

Bill Johnson

Chief, NPDES Wastewater Division

cc: David Tucker, Valley Water, <a href="mailto:dtucker@valleywater.org">dtucker@valleywater.org</a>
Eric Dunlavey, City of San José, eric.dunlavey@sanjoseca.gov



# Joint Recycled Water Policy Advisory Committee Valley Water, City of San José, City of Santa Clara May 23, 2025



### **Potable Reuse: Project Commitment**



- Potable reuse goal
  - 24,000 AFY by 2035 focus on a project in San José
  - Letter of Intent with the Cities:
    - VW Board & San José City Council directed aggressive pursuit of joint project to meet local supply needs that is the largest size practicable within funding, env. & technical constraints.
- Approved Capital Improvement Program
  - San José Purified Water Project Phase 1 (Demonstration Facility)



### Staff Funding Agreements Fully Executed

- City of San José
  - Up to \$1M per year for three years
- City of Santa Clara
  - Estimated cost is up to \$350,000 to support negotiations

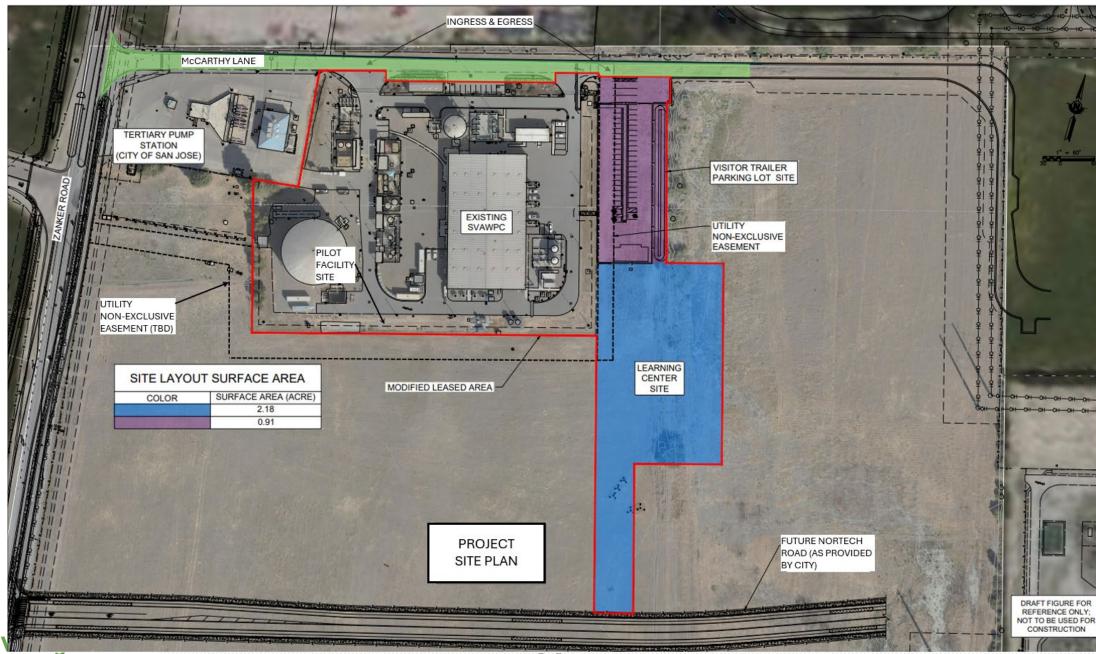
Meetings are held at least every other week to advance the project and address technical and institutional/legal issues



### **Demonstration Facility Agreements Drafts**

Agreement	Proposed Changes
Integration Agreement	Being updated to include the demonstration facility, extend the term, and revise termination and financial terms.
O&M Agreement	Being amended to cover operation and maintenance of the demonstration facility, which will supply additional flow for recycled water blending.
Option to Lease & Amended Lease	Reserves 2 acres for the learning center/demo facility and addresses site changes from the Microsoft project. The lease will include these additions and extend the term.







Attachment 2, Page 5 of 11

### Roadmap

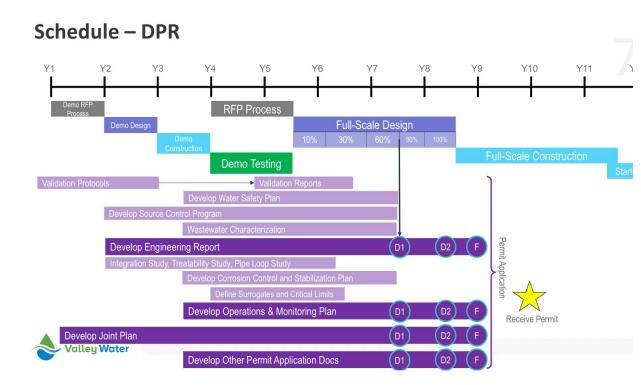
Develop long-term interagency agreements in parallel

- Address wastewater availability
- DPR facility operations
- ROC and waste stream management
- Establish land lease terms



### **Technical Studies**

- Developed roadmap for DPR project permitting
- Technical studies (e.g., validation studies and source control studies) are required
- Permit application to DDW must be submitted before construction, following a public meeting
- DDW staff were introduced to the project on Oct 24, 2024; ongoing meetings began Jan 2025
- DDW provided strong engagement and positive feedback on the project concept





## Reverse Osmosis Concentrate Management (ROCM)

- City and Valley Water collaborated with the San Francisco Bay Regional Water Quality Control Board on the letter of concurrence
- Supported by technical studies addressing constituents of concern and preserving beneficial uses of the South Bay
- Valley Water will continue exploring nature-based solutions (NBS) and advanced treatment for concentrate management compliance



September 13, 2024

Santa Clara Valley Water District Attn: Kirsten Struve, Assistant Officer Recycled and Purified Water Unit 5750 Almaden Expressway, San José CA 95118 Sent electronically to kstruve@valleywater.org

City of San José
Attn: Jeff Provenzano, Assistant Director
Environmental Services Department
200 East Santa Clara Street, 10th Floor Tower, San José, CA 95113
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- Future compliance with the RWF's NPDES permit may be achievable if permit modifications (e.g., changes to mixing zones) are supported by technical studies with concurrence from the Water Board. We anticipate the need for continued dialogue regarding nutrine.



### **Grants**

- August 2024 Valley Water procurement for technical consultant to provide multi-year support for state and federal grant and loan applications.
- Valley Water continues acquiring an engineering consultant to assist in developing a San José Purified Water Project feasibility study.
  - The feasibility study is required for future grant applications to support design and construction of the full-scale project.
  - City of San José staff are directly supporting the review and selection of engineering support.



### **Next Steps**

The focus of the next six months will be:

- Executing amendments in support of the demonstration facility
- Release an RFP for a design consultant
- Continue development of a charter as a basis for long-term agreements related to the full-scale facility
- Developing pertinent information/data and presenting to the regulatory agencies
- Continue outreach efforts



## QUESTIONS



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#### Santa Clara Valley Water District



File No.: 25-0425 Agenda Date: 5/23/2025

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 Update on Valley Water's Purified Water Public Outreach and 2024 Public Perception Poll and Provide Feedback.

#### RECOMMENDATION:

Receive information and provide feedback on:

- A. Valley Water's public outreach highlights for the Purified Water Program; and
- B. The results from the 2024 public perception poll.

#### SUMMARY:

#### A. Public outreach highlights for the Purified Water Program

To ensure a reliable water supply to keep Silicon Valley thriving well into the future, Valley Water works diligently to expand water reuse for non-potable and potable purposes and explore water reuse opportunities with regional partners in Santa Clara County. As Valley Water expands its water reuse portfolio, staff actively engages the public in all related efforts to promote awareness and build support for advanced purified water for drinking.

Other water reuse projects throughout the state and country have proven that public acceptance is significant to the implementation of potable reuse projects. Decades of media coverage and oversimplified explanations of the water reuse process have contributed to negative perceptions amongst the general public. Significant investment in public outreach, awareness and engagement can help to educate the public about the advanced water purification process and water quality, as well as about the importance of developing a locally controlled water supply for our future.

Since 2011, Valley Water has implemented ongoing public outreach strategies based on:

- Industry research, best practices and data Identifying key messages and public perception trends through annual public perception polls, tour surveys, and water reuse industry research.
- 2. Interactive engagement opportunities Providing hands-on opportunities for the public to learn

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about purified water because seeing is believing and tasting is trusting.

3. Influence-based stakeholder outreach - Identifying and establishing partnerships with trusted leaders and spokespeople to become ambassadors of purified water.

Inspiring behavior change and shifting public perception is a long-term, ongoing effort. Highlights from Valley Water's purified water public outreach efforts are described below.

#### Industry Research, Best Practices and Data

Past public opinion surveys have shown overall support for potable reuse using purified water. Valley Water continues to build on previous outreach efforts and updates and modifies strategies as necessary based on results of the annual countywide poll on public perception of recycled and advanced purified water, the pre- and post-tour surveys and industry research and best practices.

- **Public Perception Poll** The 2024 public perception poll results are described below and in Attachment 2.
- Pre- and Post-Tour Surveys As part of Valley Water's robust tour program for the Silicon Valley Advanced Water Purification Center (Purification Center), tour participants take a brief survey before and after they take a tour. These tour surveys help gauge the effectiveness of the tours in increasing public support. Tour attendees take a pre- and post-tour survey to measure their understanding of purified water and what they learned on the tour. In fiscal year 2025, the tour surveys showed a 7% increase in general support for purified water, a 12% increase in general support for Indirect Potable Reuse (IPR), and an 11% increase in general support for Direct Potable Reuse (DPR).
- Water Reuse Industry Research and Best Practices Valley Water is actively engaged in
  and participates in the WateReuse Communications Collaborative Committee and the
  WateReuse Education Advisory Group. Both committees are a collective of water
  professionals in the water reuse industry that share best practices on effective communication
  and outreach strategies to build support for potable reuse. Valley Water will continue to align
  its outreach efforts with the industry standards and learn from other water agencies.

While there are established outreach best practices from other water agencies that can be applied, they are primarily regarding purified water for Indirect Potable Reuse (IPR). Valley Water is at the forefront of the water reuse industry for its planning for Direct Potable Reuse (DPR) which is paving the way on the technical side as well as for outreach messaging.

In December 2023, the State Water Board adopted new regulations for Direct Potable Reuse in California. At the announcement of the new regulations, the WateReuse Association and water agencies across California responded to media inquiries on the regulation's impact on communities across the state. Valley Water responded to each media inquiry, which brought local and national attention. Valley Water's potable reuse project plans were mentioned in 16 news outlets countrywide, including the Washington Post, the Associated Press, The Hill, and Bloomberg. Valley Water also made headlines on social media, garnering 5.7 million views and 7,000 comments on celebrity

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comedian King Bach's social media channel. King Bach posted an initial negative reaction to the DPR regulations, which included media clips of Valley Water's purification center and outreach staff. Valley Water quickly posted a response video which was well-received by King Bach and his followers. This response post received Valley Water's highest social media engagement to date, with more than 51,000 views on the agency's social channels on Direct Potable Reuse.

#### Interactive Engagement Opportunities

The research and data show that seeing is believing and tasting is trusting. Hands-on and interactive experiences are vital to public awareness and support for purified water for drinking. Valley Water's interactive engagement efforts include an educational tour program of the Silicon Valley Advanced Water Purification Center (Purification Center) and tasting the bottled purified water.

• Tours of the Purification Center - The tour program for the Purification Center continues to serve as the flagship outreach strategy and the most effective tool to increase public awareness and support for purified water. The tour includes walking through the operating Purification Center and seeing the treatment process up close, with opportunities to touch samples of the filters and membranes. Staff hosts tours for the public twice a month. Public tours are promoted through Valley Water's various social media platforms and through other Valley Water programs and presentations in the community. All members of the public can request a private tour of the facility for a minimum of 10 attendees at any time.

To date in fiscal year 2025, staff has hosted 1,455 members of the public through 67 tours. Since 2014, staff has hosted 20,657 tour attendees through 946 tours, including recurring inperson public and private group tours, stakeholder/VIP tours, special events, and virtual tours.

• Bottled Demonstration Water Taste Tests - Valley Water is the first agency to bottle purified water for outreach purposes under new regulations established in 2017, the second agency in California, and third in the nation to bottle purified water for outreach and demonstration purposes as part of its comprehensive education program. The purified water bottles were approved for distribution by the Division of Drinking Water and the California Department of Public Health in February and March of 2024. Sharing the bottled purified water for the public to taste during the tours and events helps to boost the public's assurance of the quality of purified water for drinking and support for the overall use of purified water.

In fiscal year 2025, staff distributed 4,713 bottles.

#### Influenced-based Stakeholder Outreach

Staff provides various tailored engagement opportunities for key stakeholders throughout the community, including academic and science professionals, local elected officials, environmental groups, faith-based leaders, ethnic community leaders, water industry professionals, and the media.

 Medical Community Partnerships - Partnering with the medical community is a critical strategy to garner overall public support for purified water for drinking. Scientists and doctors have been identified as the most trusted messengers for purified water advocacy, this was

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recently confirmed in the 2024 public perception poll results. In 2022, staff developed a relationship with the Santa Clara County Medical Association (SCCMA) and continues to garner their support for purified water for drinking. On May 10, 2024, Valley Water held a Direct Potable Reuse workshop that brought industry leaders together to examine California's new Direct Potable Reuse regulations. Dr. Steven Jackson, SCCMA's Environmental Health Committee Chair, presented at the Direct Potable Reuse workshop on medical professionals' relationship with advocating for clean water. In addition, Valley Water is working with the WateReuse Association, the Environmental Protection Agency, and consulting firm Envirospectives on a national Water Reuse Action Plan toolkit for water agencies across the country to reference best practices when conducting outreach and support from the medical community.

- Older Adult Outreach Based on the 2024 public perception poll results, adults aged 50 and over are the least favorable toward purified water. Consequently, Valley Water has implemented tailored outreach efforts to reach the older adult audience. In fiscal year 2025, Valley Water presented to the Almaden Lions Club and participated in Happy Hollow Park & Zoo's Senior Safari event.
- VIP Tours and Engagement Staff provided tours and presentations to the following key stakeholder groups in fiscal year 2025.
  - 10 Year Anniversary Media Event
  - Pacheco Storm Water & San Benito County Staff
  - PureWater Peninsula Parties
  - Valley Water's VIP Water Walk Tour (included elected officials and their representatives at the local, state and federal level)
  - San José City College
  - Evergreen Valley College (co-presented with the City of San José Purified Water Program at the San José-Santa Clara Regional Wastewater Facility)

#### **Outreach Next Steps**

The purified water public outreach and engagement efforts will continue and be modified as necessary to be aligned with the research and data, tailored based on Valley Water's water reuse approach, and as the purified water projects are developed and ultimately implemented. Valley Water is collaborating with the City of San José on outreach and engagement efforts.

Valley Water is currently focusing on the following priority outreach initiatives:

• **VIP Tours and Engagement** - Valley Water plans to continue to outreach to, or engage with, key stakeholders and community leaders, especially elected officials, school officials, and

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court members, to bolster awareness of and support for purified water for drinking.

- Expand Medical Community Partnerships Valley Water will continue to build on the
  success of the Santa Clara County Medical Association (SCCMA) endorsement and continue
  to engage with the SCCMA and the medical community. Valley Water is working to secure
  support from more medical leaders and organizations in the form of letters, video testimonials
  or endorsements in support of purified water for drinking purposes, which has proven to help
  gain the public trust and support for potable water reuse.
- **Tailored Older Adult Outreach** Valley Water will continue tailoring outreach opportunities for the older adult community through presentations and tours.
- **Expand Youth Outreach** Valley Water developed a new education activity for school-aged youth to learn about purified water. Valley Water continues to partner with local universities and colleges and work with the Youth Commission to promote the tour program and purified water to youth in Santa Clara County.
- Focused Outreach to Environmental Organizations Valley Water plans to continue to
  engage environmental stakeholders and organizations on water reuse options, including
  purified water, through focused meetings, special tours and general outreach.
- **Develop Learning Center** As part of Phase 1 of the DPR Demonstration Facility Project, Valley Water will continue to work with the Purified Water Project team on the specifications for a learning center and explore local partnership opportunities.
- Purified Water Project Communications and Outreach In addition to the ongoing general
  purified water public outreach efforts, Valley Water is also developing a tailored outreach
  strategy for the planned Direct Potable Reuse (DPR) Project. This will include engagement
  with the project neighbors and community, as well as collaboration with the project partners,
  the Cities of San José and Santa Clara.

#### B. Results from the 2024 public perception poll

A countywide survey was implemented by EMC Research in August 2024 to collect data on public perception toward water reuse. The poll was made available in two formats - through an individual online survey and phone interviews - and was administered in four languages: English, Chinese, Vietnamese, and Spanish. A total of 600 interviews were completed, with an overall margin of error of +/- 4.0 percentage points.

The 2024 public perception poll included questions relating specifically to direct potable reuse since California adopted the new DPR regulations in December 2023, and tested the impact of an increase to water rates on the favorability of purified water.

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Key takeaways from the poll results include:

 Even with minor adjustments to question phrasing to make the concept of using advanced purified recycled water in the drinking water supply more relatable, public support has remained consistent with previous years.

- However, there is a slight decrease in support and a stronger level of opposition when discussing specific methods of incorporation, such as indirect and direct potable reuse.
- Overall perceptions of recycled water have become marginally less favorable.
- As anticipated, presenting cost information on its own does initially reduce support. However, when additional context is provided on the need, safety, and benefits of advanced purified recycled water for enhancing the drinking water supply, this mitigates the impact of cost concerns and restores support.
- Older adults aged 50 and over demonstrated a lower net support (lower support and higher opposition) than adults aged 18-49, which highlights the need for more tailored outreach to older adults.
- Scientists and doctors are the most trusted messengers for purified water advocacy, followed by environmental organizations.

The poll also included various key messages and the following messages were the most compelling to garner favorability toward purified water for drinking:

- 1. Drought Resilience "Droughts in California are becoming more frequent and severe. We will have wet years, but in the long run, it's getting hotter and drier, and our sources of water, like the Sierra snowpack, are diminishing. We must invest in drought-proof sources like advanced purified recycled water now so we can meet our water supply needs in the future."
- 2. Water Shortage Prevention "Cities across the United States are facing water crises, with some even having to shut off water to some residents due to shortages. Investing in advanced purified recycled water in Santa Clara County will provide our residents with a reliable supply of clean water so we don't risk running out."
- 3. **Climate Change Mitigation** "Reusing water protects our water supply from the impacts of climate change, ensuring a local and renewable source of water to maintain our quality of life whether we're in a wet or dry year."
- 4. **Water Purity** "The advanced recycled water purification process produces water that is purer than most bottled water."
- Successful Use in Other Areas "Advanced purified recycled water is already being used successfully to produce clean and safe drinking water in other areas, including Monterey, Los Angeles, and Orange Counties."

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Valley Water will continue to analyze the results and use the information to tailor the public outreach efforts accordingly.

#### **ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:**

The general purified water outreach efforts include engaging with disadvantaged communities through multi-lingual communications materials and trusted community leaders.

#### ATTACHMENTS:

Attachment 1: Valley Water Outreach PowerPoint

Attachment 2: 2024 Public Perception Poll Results PowerPoint

#### **UNCLASSIFIED MANAGER:**

Rachael Gibson, 408-630-2884

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### 2025 Purified Water Outreach Highlights

Presented by **Francesca Lomotan, MPH**, Supervising Program Administrator

Joint Recycled Water Policy Advisory Committee – Cities of San José & Santa Clara – May 23, 2025



### **Purified Water Public Outreach**

Since 2011, staff has implemented ongoing public outreach strategies based on:



Industry research, best practices and data;



Interactive engagement opportunities; and



Influence-based stakeholder outreach

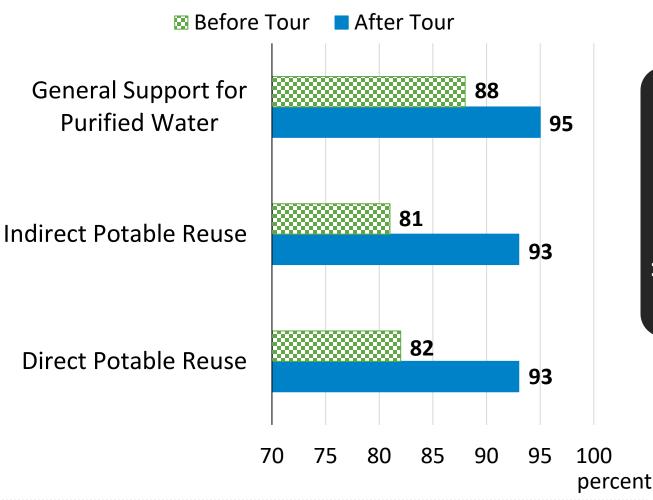
to educate, promote awareness, and build support for advanced purified water for drinking.



### Industry Research, Best Practices and Data

3

- Public perception poll
- Pre- and post-tour surveys
- Water reuse industry research and best practices





### Industry Leader in Direct Potable Reuse (DPR)

Valley Water is at the forefront of the water

- reuse industry for DPR
- Media relations
- Social media response





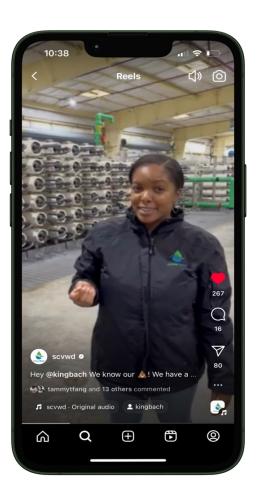




Over 50,000 social media engagements



Recognition from industry leaders for DPR response





### **Interactive Engagement Opportunities**

Seeing is believing and tasting is trusting!

 Tours of the Purification Center



Bottled
Demonstration Water
Taste Tests



### **Tours of the Purification Center**





1,455 Tour Attendees in Fiscal Year 2025 20,657 Tour Attendees Total



67 Tours in Fiscal Year 2025 946 Tours Total









### **Bottled Demonstration Water Taste Tests**

4,713 bottles distributed in fiscal year 2025







### Influence-based Stakeholder Outreach

- 10 Year Anniversary
   Media Event
- VIP Tours and Engagement
- Medical Community Partnerships
- Older Adult Outreach





### **VIP Water Walk Tour**





# Medical Community Partnerships



### **Older Adult Outreach**







### **Next Steps for Fiscal Year 2026**

- VIP tours and outreach, including school officials and court members
- Expand medical community partnerships
- Tailored older adult and environmental organizations outreach

- Expand youth outreach
- Develop Learning Center
- San Jose Purified Water
   Project Communications
   and Outreach





## QUESTIONS





# Valley Water

Clean Water • Healthy Environment • Flood Protection

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Survey of Santa Clara County Residents
Advanced Purified Water

May 23, 2025



### **Project Context**



- Quantitative research has been conducted periodically to assess public opinion and openness to advanced purified recycled water in Santa Clara County, and to track these attitudes over time.
- Surveys have consistently shown that information about the need for a more reliable water supply and the safety and benefits of advanced purified recycled water are compelling to much of the public.
- The most recent iteration of the survey was conducted in 2024, following the California State Water Resources Control Board's December 2023 approval of new regulations for implementing direct potable reuse.
- In the wake of these new regulations, some small changes were made to this year's survey to assess support for using advanced purified recycled water to supplement the drinking water supply in a more concrete way, as well as to isolate the impact of implementation costs on support.

#### Methodology



- Survey of residents in Santa Clara County
- Conducted August 12-18, 2024
- ▶ 600 interviews; overall margin of error ±4.0 percentage points
- Respondents were contacted for phone interviews via landline and cell phone, or invited to complete the survey online via email or text
- Interviews were conducted in English, Spanish, Chinese and Vietnamese
- Where applicable, results compared with the following:

Methodology	Dates	Universe	Sample Size	Margin of Error	EMC#
Phone/Web	September 15-20, 2022	Residents	600	±4.0 percentage points	22-8697
Phone/Web	June 8-14, 2021	Registered Voters	401	±4.9 percentage points	21-8150
Phone/Web	May 12 – 19, 2020	Registered Voters	410	±4.8 percentage points	20-7663
Phone/Web	August 6 – 11, 2019	Registered Voters	400	±4.9 percentage points	19-7316
Phone	June 30 – July 2, 2018	Registered Voters	400	±4.9 percentage points	18-6892
Phone	October 24-29, 2017	Registered Voters	400	±4.9 percentage points	17-6422
Phone	January 5-17, 2017	Registered Voters	800	±3.5 percentage points	16-6214

Please note that due to rounding, some percentages may not add up to exactly 100%.

### **Key Findings**



- Even with slight changes to question framing to make the idea of using advanced purified recycled water as part of the drinking water supply less abstract, support remains largely consistent with previous years.
- However, we do see slightly lower support and stronger opposition to specific incorporation methods (indirect and direct potable reuse) compared to earlier surveys. Attitudes towards recycled water in general have also shifted to be slightly less positive.
- As expected, conveying cost information separately from other information decreases support, but further communication about the need, safety, and benefits of using APRW to supplement the drinking water supply reverses the negative impact of the cost.



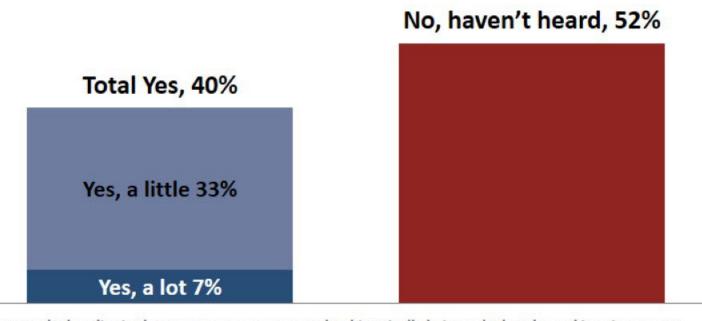
### Recycled Water Attitudes and Awareness of Water Reuse

#### **Awareness of Water Reuse**



Four-in-ten residents have heard or seen something about recycled water or water reuse recently. Awareness is shallow with most having heard or seen just a little.

Have you heard or seen anything recently about recycled water or water reuse?



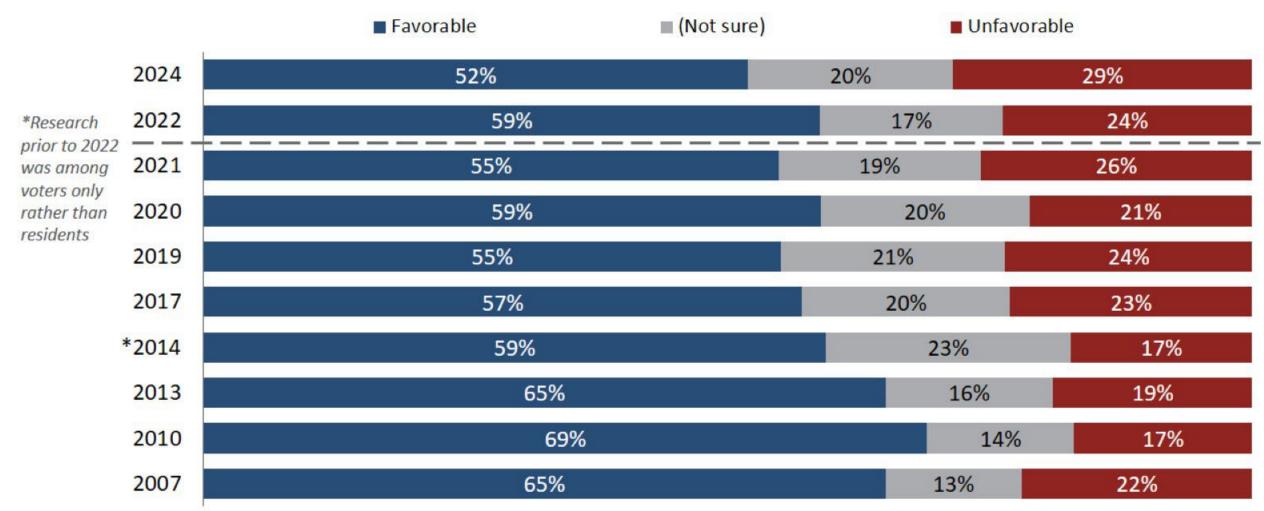
Not sure, 8%

Attachment 2

#### **Recycled Water Favorability Over Time**



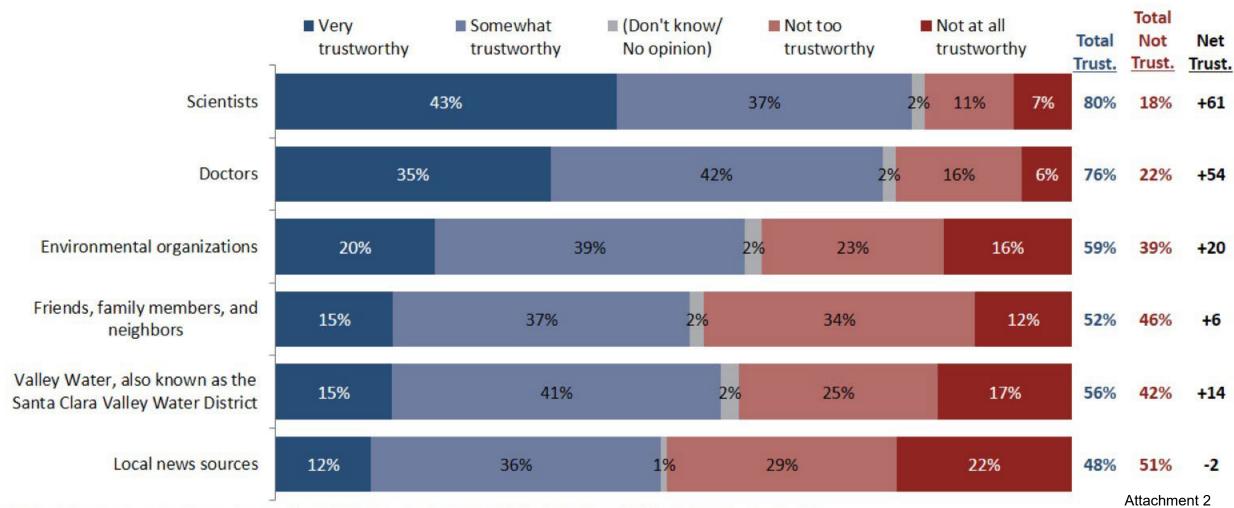
Opinions of recycled water have grown slightly less positive over time, but remain more positive than negative.



#### **Trust in People and Organizations**



Scientists and doctors in particular are seen as trustworthy sources on the topic of APRW.



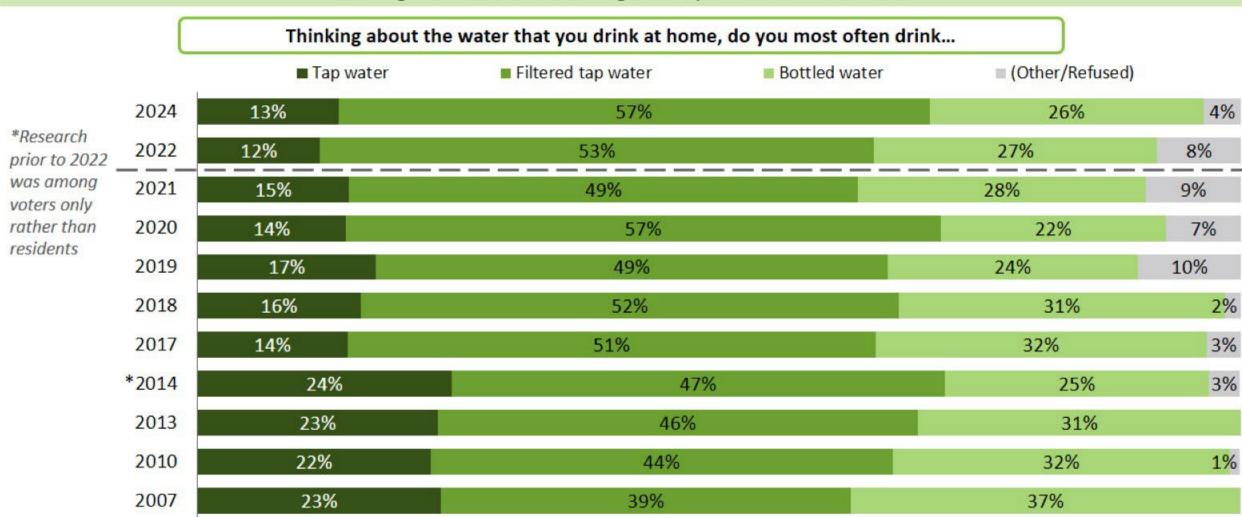
Q30-35. When it comes to advanced purified recycled water, how trustworthy do you find each of the following people and organizations?

Page 8 of 27 24-9266 Valley Water Potable Reuse Tacking Survey | 8

#### **Drinking Water Habits**



Drinking water habits remain generally consistent over time.



**79** 

<sup>\*</sup> Data from 2014 FM3 Survey



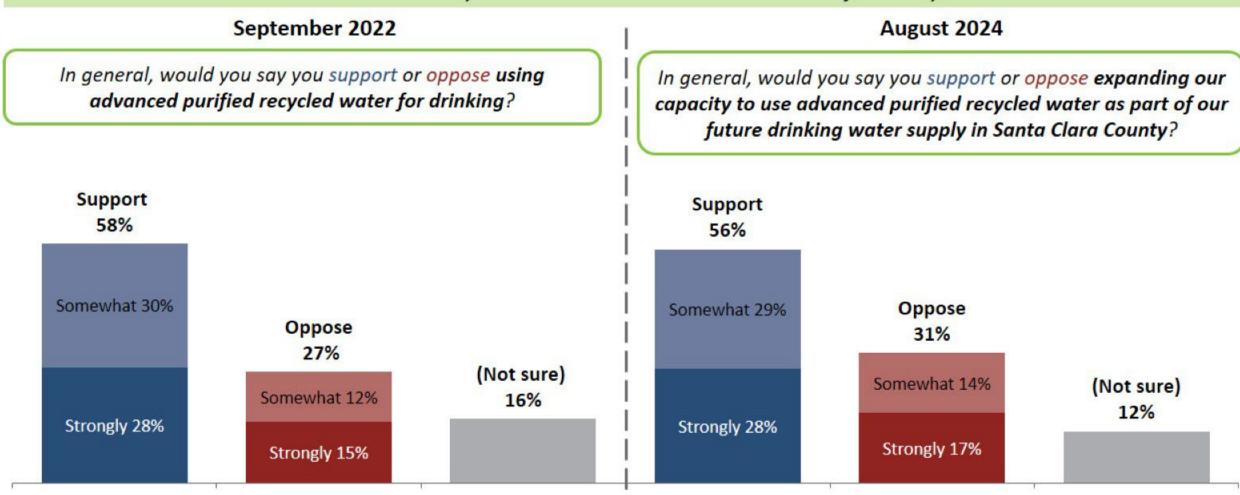
# Advanced Purified Recycled Water

Attachment 2 Page 10 of 27

#### **Initial Support for Advanced Purified Water Over Time**



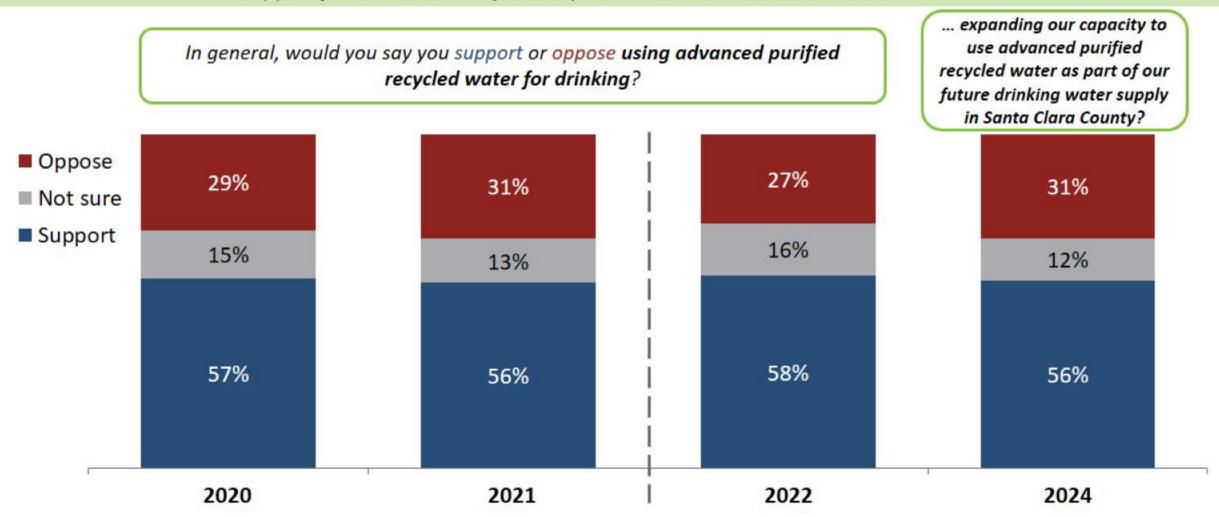
Even with a slight change in wording to make the concept more concrete, support for Advanced Purified Recycled Water remains relatively consistent both overall and in terms of intensity.



#### **Initial Support for Advanced Purified Water Over Time**



Support for Advanced Purified Recycled Water has remained stable over time.



<sup>\*</sup>Research prior to 2022 was among voters only rather than residents

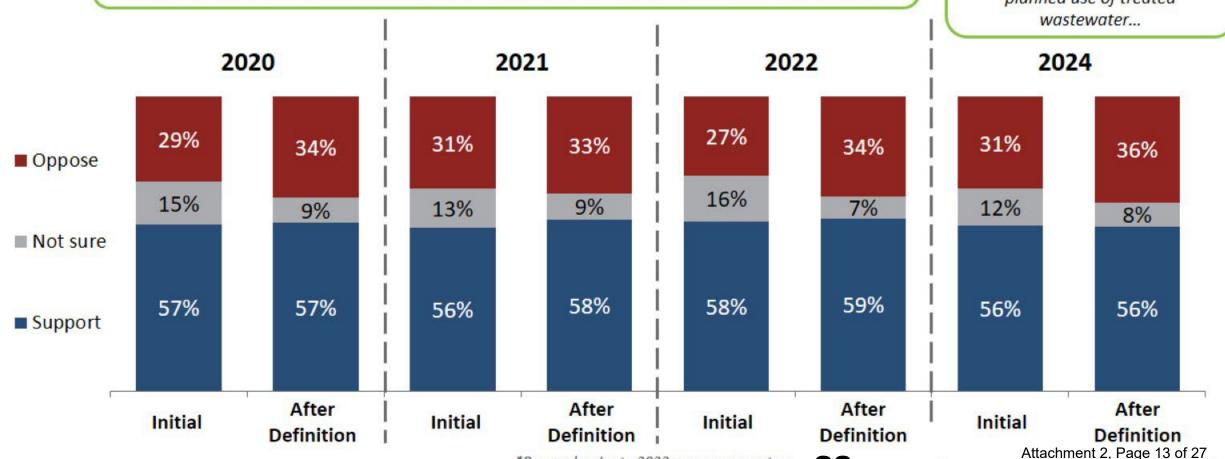
#### **Support After Definition Over Time**



Similar to recent years, defining APRW does not significantly alter support, but solidifies opposition slightly.

Using advanced purified recycled water for drinking means the planned use of treated wastewater that has gone through advanced purification to supplement a drinking water supply and is monitored to ensure that it meets public health standards for drinking water quality.

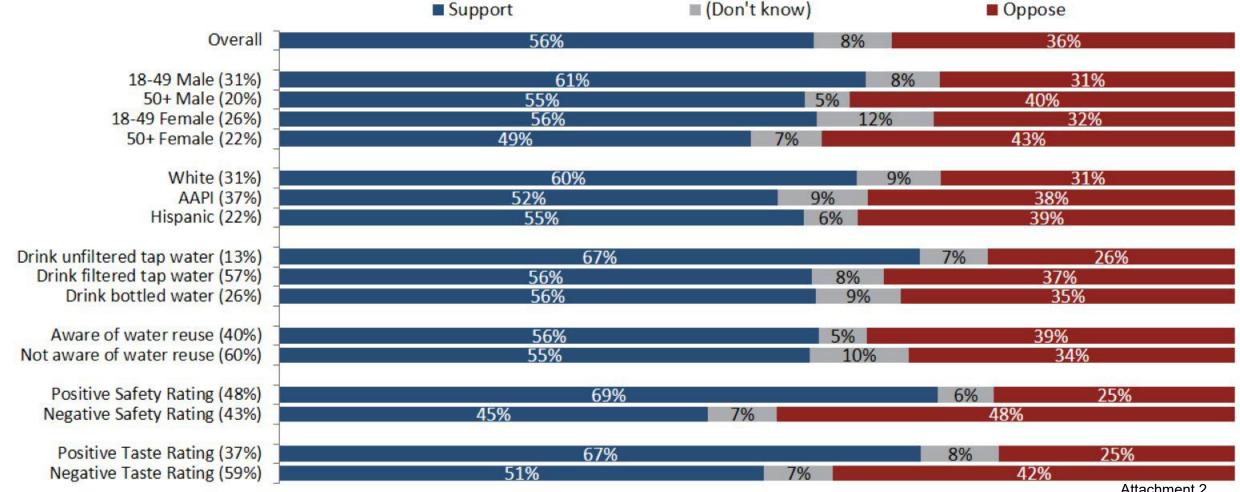
Using advanced purified recycled water as part of our future drinking water supply means the planned use of treated wastewater...



### Support After Definition – by Subgroups



A majority across many demographic groups supports expanding capacity to use APRW after hearing the definition. Those who rate tap water negatively on safety are divided.





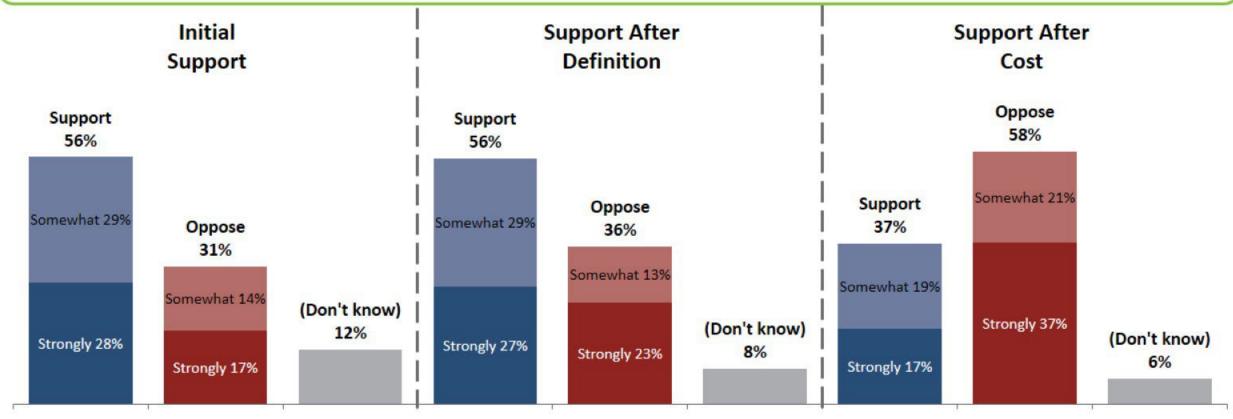
### Additional Information About Advanced Purified Water

#### **Support After Cost**



Opposition nearly doubles after residents learn about the increased cost to households of APRW.

Expanding our capacity to use advanced purified recycled water as part of our future drinking water supply would require expanding or building new facilities for water purification, which is estimated to increase water rates for an average household by \$15 to \$20 per month by 2028.



#### Messages



Messages describing the need for APRW due to the potential for water shortages and a drier climate are the most compelling messaging themes tested.

[Drought] Droughts in California are becoming more frequent and severe. We will have wet years, but in the long run it's getting hotter and drier, and our sources of water, like the Sierra snowpack, are diminishing. We must invest in drought-proof sources like advanced purified recycled water now so we can meet our water supply needs in the future.

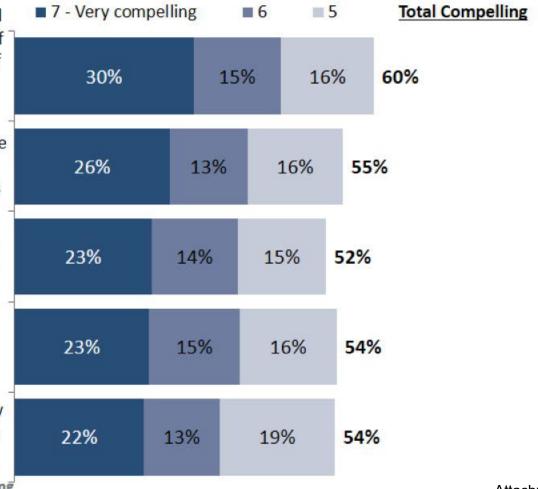
[Water Shortage] Cities across the United States are facing water crises, with some even having to shut off water to some residents due to shortages. Investing in advanced purified recycled water in Santa Clara County will provide our residents with a reliable supply of clean water so we don't risk running out.

[Climate Change] Reusing water protects our water supply from the impacts of climate change, ensuring a local and renewable source of water to maintain our quality of life whether we're in a wet or dry year.

[Purer Than Bottled Water] The advanced recycled water purification process produces water that is purer than most bottled water.

[Other Areas] Advanced purified recycled water is already being used successfully to produce clean and safe drinking water in other areas, including Monterey, Los Angeles, and Orange Counties.

Q16-25. For each statement, please tell me how compelling it is as a reason to support expanding our capacity to use advanced purified recycled water as part of our future drinking water supply. Please use a scale from 1 to 7, where 1 means not at all compelling and 7 means a very compelling.



### Messages (cont.)



**Total Compelling** 

Messages describing the APRW technology and keeping the community on the technological edge are seen as less compelling.

[Grants] There are significant state and federal grants available now to address water supply. Our community should take advantage of this opportunity by investing in new ways to make sure we have enough water for the future.

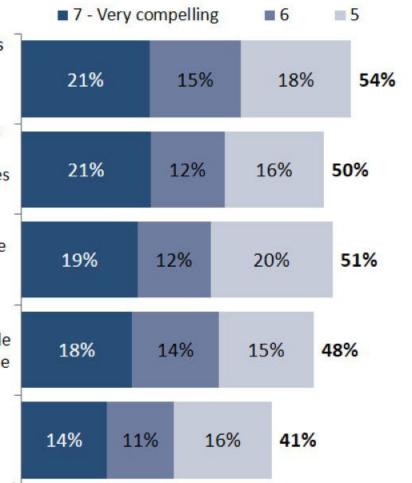
[Medical Community Endorsement] Based on the numerous scientific studies on advanced purified recycled water, the local medical community endorses advanced purified recycled water as a safe drinking water source for our families and communities.

[Safety] Advanced purified recycled water uses proven technologies to produce the safest, highest-quality drinking water.

[Leading Edge] Investing in advanced purified recycled water will keep Silicon Valley on the leading edge when it comes to making sure we have a safe, reliable drinking water supply, and avoid the need for more costly investments down the road.

[Purification Methods] Methods regularly used to purify advanced recycled water include microfiltration, reverse osmosis, and ultraviolet light. The purification process involves more treatment than desalinating ocean water.

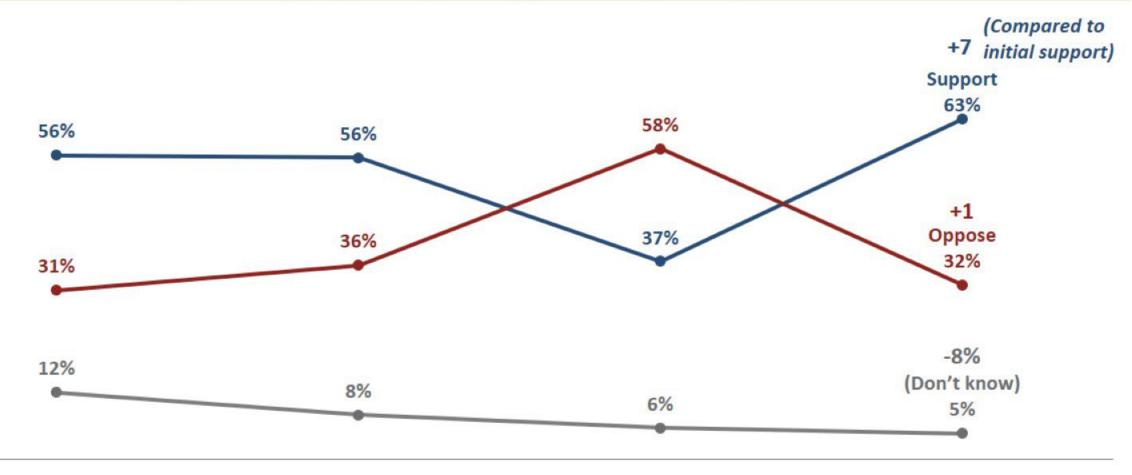
Q16-25. For each statement, please tell me how compelling it is as a reason to support expanding our capacity to use advanced purified recycled water as part of our future drinking water supply. Please use a scale from 1 to 7, where 1 means not at all compelling and 7 means a very compelling.



#### **Support After Additional Information**



Even with the steep decline in support after providing cost information separately, additional information has a very positive impact on support for APRW, with support climbing to nearly two-thirds.



Initial Support

Support After Definition

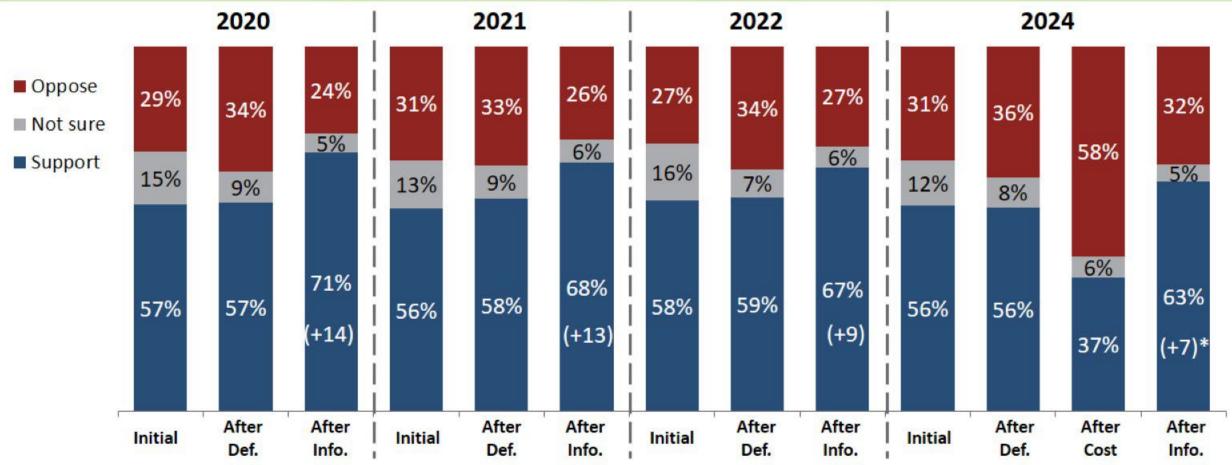
Support After Cost

Support After Additional Information Attachment 2

#### **Support After Additional Information**



Even with the decline in support after providing cost information separately, additional information leads to a similar, albeit slightly smaller increase in support as compared to previous years.



\*Increase in support shown from initial to after information ask. In 2020, information included an estimated cost of \$5-10 per month. In 2021 and 2022, information included an estimated cost of \$10-15 per month.

Q26. Given everything you've heard, would you say you support or oppose expanding our capacity to use advanced purified recycled water as part of our future drinking water supply in Santa Clara County?

\*Research prior to 2022 was among voters only rather than residents Attachment 2 Page 20 of 27

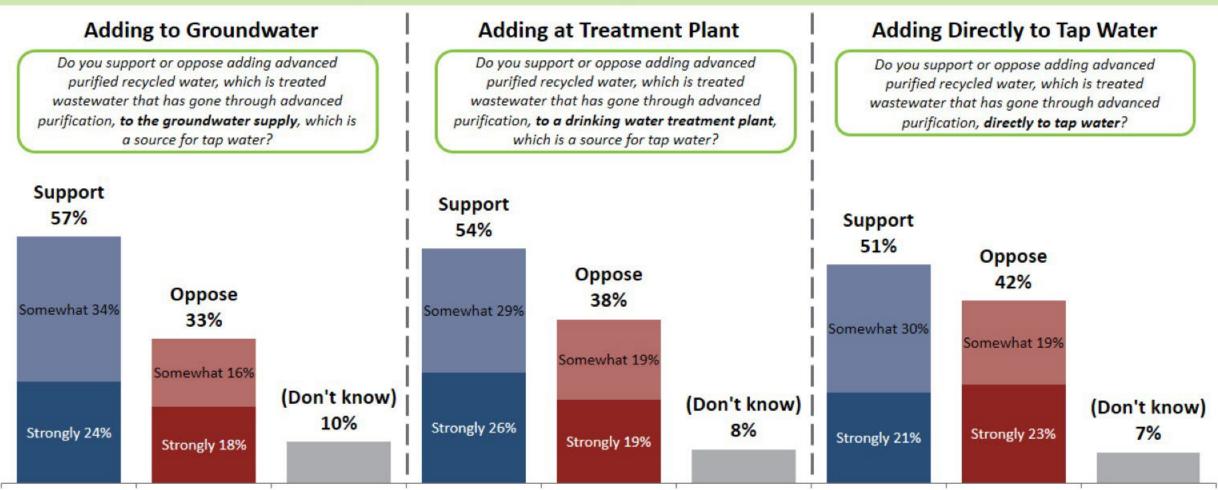


### **Incorporation Methods**

#### **Incorporation Methods**



Support for APRW decreases as the incorporation method gets less far removed from the tap, but is above a simple majority for both direct and indirect potable reuse methods.

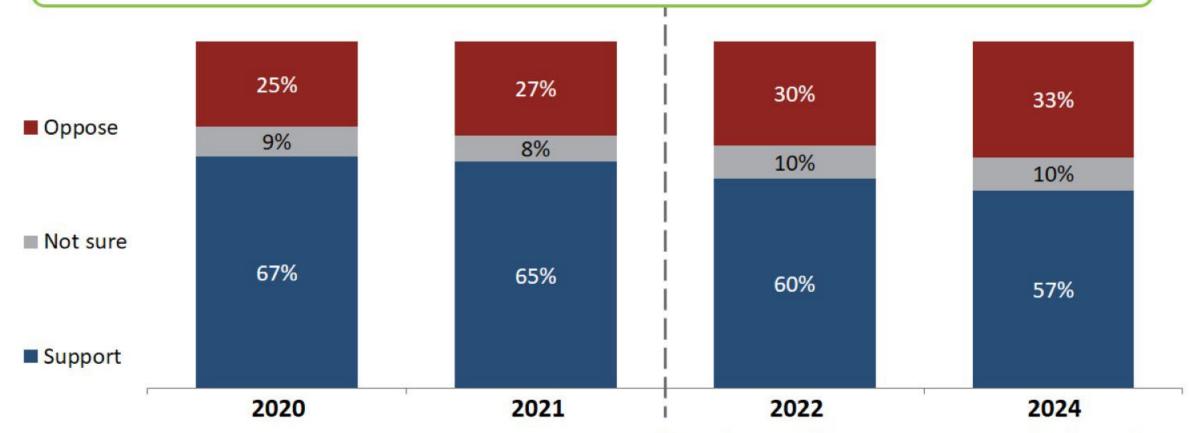


### **Groundwater Incorporation**



Support for APRW being added to the groundwater supply has trended slightly downward over time.

Do you support or oppose adding advanced purified recycled water, which is treated wastewater that has gone through advanced purification, **to the groundwater supply**, which is a source for tap water?

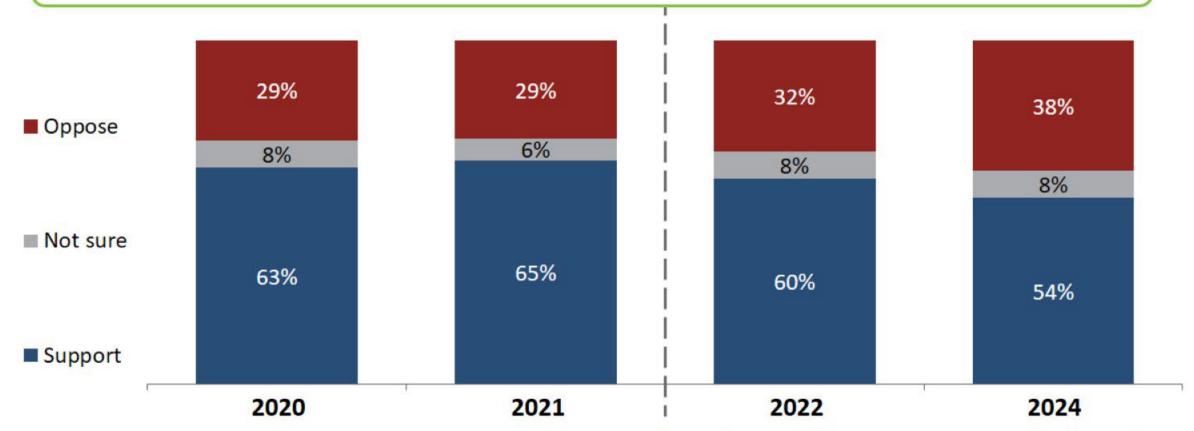


### **Treatment Plant Incorporation**



Support for incorporation at the treatment plant has fallen somewhat, but remains above a majority.

Do you support or oppose adding advanced purified recycled water, which is treated wastewater that has gone through advanced purification, to a drinking water treatment plant, which is a source for tap water?

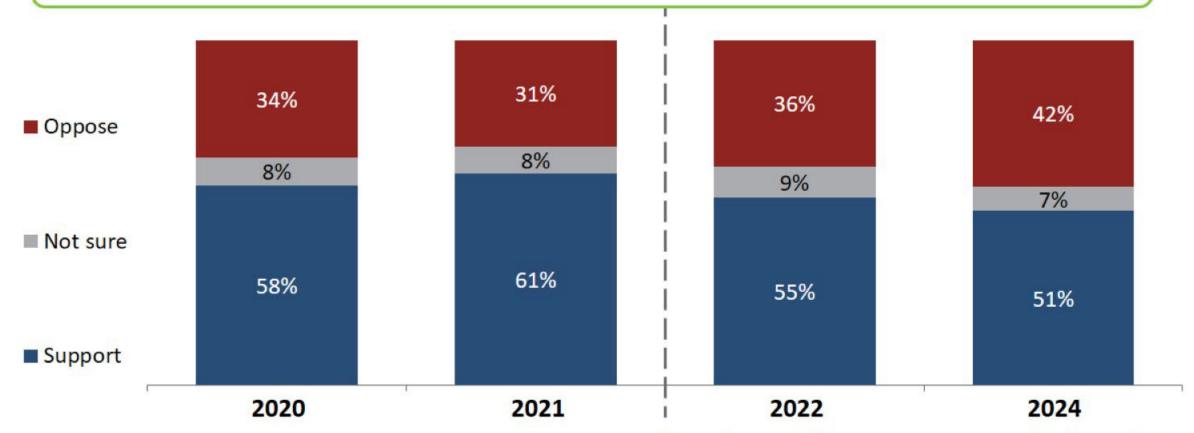


#### **Tap Water Incorporation**



About half support APRW being added directly to tap water, with higher opposition than we've seen in previous years.

Do you support or oppose adding advanced purified recycled water, which is treated wastewater that has gone through advanced purification, **directly to tap water**?



#### Conclusions



- Not surprisingly, information about the estimated average monthly cost decreases support for incorporating advanced purified recycled water into the drinking water supply.
- However, as we have seen in previous years, communicating the need for alternative water sources and the safety and purity of advanced purified recycled water is effective at bringing many on board.
- We have seen a slight increase in negativity towards recycled water in general as well as different incorporation methods, but majorities remain supportive of both indirect and direct potable reuse.
- There continue to be differences in support for advanced purified recycled water based on residents' own trust and comfort level with drinking tap water.



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#### Santa Clara Valley Water District



File No.: 25-0434 Agenda Date: 5/23/2025

Item No.: 4.4.

#### 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 Update on the Recycled Water Use at Data Centers in the Cities of San Jose and Santa Clara.

#### RECOMMENDATION:

Receive an update on recycled water use at data center in the Cities of San Jose and Santa Clara.

#### SUMMARY:

Santa Clara County hosts about 110 data centers, most of which are concentrated in the cities of Santa Clara (57) and San José (42). In North San José, three proposed data centers are currently in the planning stage, and once operational, the anticipated recycled water demand is approximately 3,500 acre-feet-per-year. The Cities of San José and Santa Clara co-own the Regional Wastewater Facility, which collaborates with Valley Water on the Silicon Valley Advanced Water Purification Center. Recycled water, blended with purified water is supplied via the South Bay Water Recycling Program to customers in San José, Santa Clara and Milpitas.

The City of Santa Clara has enacted Article IV Chapter 13.15 in its municipal code, mandating recycled water usage at these types of facilities. As a result, the majority of Santa Clara's data centers use recycled water.

The City of San José has adopted the Energy and Water Building Performance Ordinance (BPO) as part of its Climate Smart San José program to help achieve greenhouse gas emission reduction and water conservation goals, including requiring owners of nonresidential and multifamily buildings to track their energy and water use. Buildings are required to meet energy and water efficiency standards on a rolling five-year basis, or perform improvements if standards are not met.

In addition to recycled water to reduce potable water use, data centers have implemented advanced cooling technologies with low water use, such as adiabatic systems, chip-level and closed-loop liquid cooling systems. Currently, ten new data centers are proposed within the county, and these facilities are anticipated to have low potable water demands due to the required recycled water usage and the adoption of advanced cooling technologies.

**Agenda Date:** 5/23/2025 **Item No.:** 4.4. File No.: 25-0434

#### **ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:**

This is an informational item and is not subject to environmental justice analysis.

#### **ATTACHMENTS**:

Attachment 1: PowerPoint

#### **UNCLASSIFIED MANAGER:**

Kirsten Struve, 408-630-3138





# Data Center Water Use in Santa Clara County Recycled Water and Cooling Technology Trends







### **Data Centers in Santa Clara County**

In total, Santa Clara County hosts 110 data centers.

• Santa Clara: 57 data centers

• San Jose: 42 data centers

• **Sunnyvale:** 6 data centers

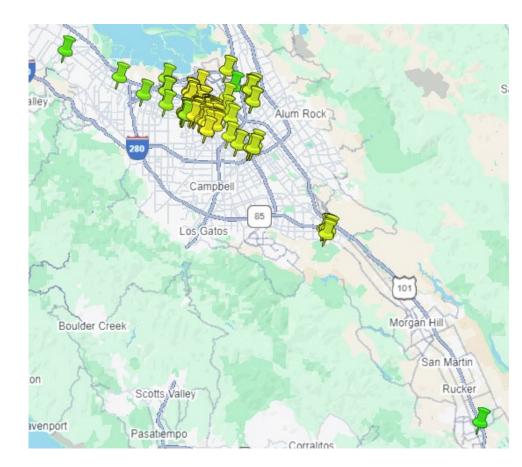
• **Gilroy:** 1 data center

Mountain View: 2 data centers

• Milpitas: 1 data center

• Palo Alto: 1 data center

Includes existing and proposed data centers. There are a total of 102 unique addresses and a total of 125 that were found. The duplicate address may represent colocations, the listing of both an old and new data center, etc.



Source: Recycled and Purified Water Unit https://www.datacentermap.com/usa/california/ & https://www.datacenters.com/



### Recycled Water Use for Cooling

3

- San José and Santa Clara co-own the Regional Wastewater Facility
- Partnership with Valley Water: Silicon Valley Advanced Water
   Purification Center
- Recycled water blended and delivered via South Bay Water Recycling Program to customers in San José, Santa Clara and Milpitas



### **Local Ordinances Supporting Reuse**

- Santa Clara: Mandates recycled water use at data centers (Municipal Code 13.15)
  - → Most Santa Clara's data centers use recycled water
- San José: Energy and Water Building Performance Ordinance (BPO)
  - Part of Climate Smart San José
  - Requires nonresidential buildings to track water and energy use
  - CSJ does not have a local ordinance for internal/ cooling RW use. However, the city code does specify RW for irrigation



### **Advanced Cooling and New Facilities**

5

- Data centers are adopting low water use cooling systems:
  - Chip-level cooling
  - Closed-loop liquid systems
- 10 new data centers proposed in the county
- Expected to have low potable water demand due to recycled water use and new technology



#### Summary

- Santa Clara County is home to a growing and water-conscious data center industry
- Recycled water mandates and partnerships are helping reduce potable water use
- Emerging technology and planning policies support sustainable water use in development



## QUESTIONS



Attachment 1 Page 7 of 7

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