June 22, 2023

MEETING NOTICE
SANTA CLARA VALLEY WATER DISTRICT
RECYCLED WATER COMMITTEE

Members of the Recycled Water Committee:
- District 6 Director, Tony Estremera, Committee Chair
- District 3 Director, Richard Santos, Committee Vice Chair
- District 4 Director, Jim Beall, Member

Staff Support of the Recycled Water Committee:
- Rick Callender, Chief Executive Officer
- Melanie Richardson, Assistant Chief Executive Officer
- Bhavani Yerrapotu, Acting Assistant Chief Executive Officer
- Darin Taylor, Chief Financial Officer
- Aaron Baker, Chief Operating Officer, Water Utility
- Christopher Hakes, Acting Chief Operating Officer, Watersheds
- Tina Yoke, Chief Operating Officer
- Rachael Gibson, Chief of External Affairs
- Carlos Orellana, District Counsel
- Anthony Fulcher, Sr. Assistant District Counsel
- Leslie Orta, Sr. Assistant District Counsel
- Vincent Gin, Deputy Operating Officer
- Donald Rocha, Deputy Administrative Officer
- Tony Ndah, Deputy Administrative Officer
- Sam Bogale, Deputy Operating Officer
- Emmanuel Aryee, Deputy Operating Officer
- Kirsten Struve, Assistant Officer
- Lisa Bankosh, Assistant Officer
- Charlene Sun, Treasury and Debt Manager
- Hossein Ashktorab, Unit Manager, Recycled & Purified Water
- Carmen Narayanan, Financial Planning & Revenue Manager
- Metra Richert, Unit Manager, Water Supply Planning and Conservation Manager
- Lei Hong, Utility Ops & Maintenance Manager
- Sherilyn Tran, Civic Engagement Manager
- Medi Sinaki, Sr. Engineer-Recycled & Purified Water
- Girlie Jacobson, Sr. Engineer-Treatment Plant Design
- Henry Barrientos, Associate Civil Engineer
- David Tucker, Associate Engineer – Civil
- Zachary Helsley, Associate Civil Engineer
- Elise Latedjou-Durand, Senior Environmental Planner
- Ricardo Barajas, Program Administrator
- Samantha Greene, Senior Water Resource Specialist
- Lakeisha Bryant, Public Info Rep II
- Alina Hare, Staff Analyst

A Santa Clara Valley Water District special Recycled Water Committee meeting has been scheduled to occur at 10:00 a.m. on Wednesday, June 28, 2023, in the Headquarters Building Boardroom located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

Members of the public may join the meeting via Zoom Teleconference at: https://valleywater.zoom.us/j/99518153521

The meeting agenda and corresponding materials are located on our website: https://www.valleywater.org/how-we-operate/committees
Santa Clara Valley Water District
Recycled Water Committee Meeting

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

Join Zoom Teleconference:
https://valleywater.zoom.us/j/99518153521

SPECIAL MEETING
AGENDA

Wednesday, June 28, 2023
10:00 AM

During the COVID-19 restrictions, 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.

Note: The finalized 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
Recycled Water Committee

SPECIAL MEETING
AGENDA

Wednesday, June 28, 2023

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

Join Zoom Meeting:
https://valleywater.zoom.us/j/99518153521

***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 IN BOARD AND COMMITTEE MEETINGS located at 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 at a video conferenced meeting, during public comment or on any item listed on the agenda, should use the “Raise Hand” tool located in the Zoom meeting link listed on the agenda, 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. seq. 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 statement. 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 website, maintained on the World Wide Web at https://emma.msrb.org/ and 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/99518153521
Meeting ID: 995 1815 3521
Join by Phone:
1 (669) 900-9128, 99518153521#

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 Committee on any item not listed on the agenda should access the "Raise Hand" tool located in Zoom meeting link listed on the agenda. Speakers will be acknowledged by the Committee Chair in order requests are received and granted speaking access to address the Committee. Speakers comments should be limited to three minutes or as set by the Chair. The law does not permit Committee action on, or extended discussion of, any item not on the agenda except under special circumstances. If 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 Committee may take action on any item of business appearing on the posted agenda.

3. APPROVAL OF MINUTES:
3.1. Approval of May 24, 2023 Recycled Water Committee Minutes.  
Recommendation: Approve the minutes.  
Manager: Candice Kwok-Smith, 408-630-3193  
Attachments: Attachment 1: 05/24/23 RWC Meeting Minutes  
Est. Staff Time: 5 Minutes

4. REGULAR AGENDA:

4.1. Receive Purified Water Program Update including Partnerships with the Cities of San Jose and Palo Alto and Outreach Efforts on Purified Water.  
Recommendation: Receive an update and provide feedback on the following topics: 
   A. Collaboration with the City of Palo Alto and Other Partners; and  
   B. Outreach Efforts on Purified Water.  
Manager: Kirsten Struve, 408-630-3138  
Attachments: Attachment 1: City of San Jose Letter  
Est. Staff Time: 10 Minutes

4.2. Receive Recycled Water Use Update at Lake Cunningham.  
Recommendation: Receive information and provide feedback.  
Manager: Kirsten Struve, 408-630-3138  
Attachments: Attachment 1: Maps  
Est. Staff Time: 10 Minutes

4.3. Receive Urban Runoff Study with Stanford University.  
Recommendation: Receive information and provide feedback.  
Manager: Kirsten Struve, 408-630-3138  
Attachments: Attachment 1: PowerPoint  
Est. Staff Time: 15 Minutes

4.4. Receive and Discuss the 2023 Recycled Water Committee Work Plan, Upcoming Discussion Items, and Next Meeting Date.  
Recommendation: Receive information on the 2023 Recycled Water Committee Work Plan and provide feedback on upcoming discussion items and next meeting date.  
Manager: Kirsten Struve, 408-630-3138  
Attachments: Attachment 1: 2023 Revised Work Plan  
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 to Regular Meeting at 12:00 p.m., on August 23, 2023.
COMMITTEE AGENDA MEMORANDUM
Recycled Water Committee

Government Code Section 84308 Applies: Yes ☐ No ☒
(If “YES” Complete Attachment A)

SUBJECT:
Approval of May 24, 2023 Recycled Water Committee Minutes.

RECOMMENDATION:
Approve the minutes.

SUMMARY:
In accordance with the Ralph M. Brown Act, 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 to the Committee for review and approval.

Upon Committee approval, minutes transcripts are finalized and entered into Valley Water’s historical records archives and serve as historical records of the Committee’s meetings.

ATTACHMENTS:
Attachment 1: 052423 RWC Meeting Minutes

UNCLASSIFIED MANAGER:
Candice Kwok-Smith, 408-630-3193
REGULAR MEETING
WEDNESDAY, MAY 24, 2023
12:00 PM

(Paragraph numbers coincide with agenda item numbers)

1. CALL TO ORDER:

A regular meeting of the Santa Clara Valley Water District (Valley Water) Recycled Water 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.

Committee members in attendance were District 4 Director Jim Beall, District 3 Vice Chairperson Richard P. Santos, and District 6 Director Tony Estremera, Chairperson presiding, constituting a quorum of the Committee.

Staff members in attendance were: Brandon Adriano, Gina Adriano, Hossein Ashktorab, Aaron Baker, Henry Barrientos, Nasi Basiri, Lakeisha Bryant, Anthony Fulcher, Vincent Gin, Walter Gonzalez, Andrew Gschwind, Alina Hare, Zachary Helsley, Candice Kwok-Smith, Girlie Jacobson, Elise Latedjou-Durand, Jessica Lovering, Marta Lugo, Nicole Merritt, Tony Ndah, Carlos Orellana, Leslie Orta, Don Rocha, Medi Sinaki, Saira Singh, Kirsten Struve, Darin Taylor, Sherilyn Tran, David Tucker, Tina Yoke and Beckie Zisser.

Guests in attendance were: Arthine Cossey vanDuyne (WaterFunder LLC), Phillipppe Daniel (Liquisti LLC), Jan Davel (CDM Smith), Nicole Harvie (San Jose Municipal Water System), Arthur Keller (Minerva Consulting), Shilpa Mehta (City of Santa Clara - Water and Sewer Utilities), and Jeff Provenzano (City of San Jose – Water Resources).

Public in attendance was: Susan Hinton.
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 who wished to speak.

3. **APPROVAL OF MINUTES:**

3.1. Approval of March 22, 2023 Recycled Water Committee Meeting Minutes.

Recommendation: Approve the minutes.

The Committee considered the attached minutes of the March 22, 2023 Committee meeting.

Public Comments: None.

It was moved by Vice Chair Santos and seconded by Director Beall, and unanimously carried that the minutes be approved.

4. **REGULAR AGENDA:**

4.1. Receive Purified Water Program Update Including Partnerships with Cities of San Jose and Palo Alto and Outreach Efforts on Purified Water.

Recommendation: Receive an update and provide feedback on the following topics:

A. Collaboration with the City of Palo Alto and other Partners; and
B. Outreach Efforts on Purified Water.

Kirsten Struve reviewed the information on this item, per the attached Committee Agenda Memo, and per the information contained in Attachments 1 and 2.

Kirsten Struve was available to answer questions.

Public Comments: None.

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

- The Committee noted that a response was received from Mayor Mahan regarding a future San Jose project and will be included in the RWC agenda packet for June 2023.
• The Committee confirmed the funding agreement for Palo Alto staff was $500,000 for 2 years which is similar to Valley Water’s agreement with the City of San Jose.
• The Committee confirmed the Palo Alto City Council has provided a draft timeline for agreements to be in the third quarter and the P3 Partners are still interested in the project.

4.2. Receive South Santa Clara County Water Reuse Collaboration Update.

Recommendation: Receive South Santa Clara County Water Reuse Collaboration Update including an update on the Technical Work Group’s (TWG) discussions and provide feedback.

David Tucker reviewed the information on this item, per the attached Committee Agenda Memo, and per the information contained in Attachment 1.

David Tucker and Kirsten Struve were available to answer questions.

Public Comments:
None.

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

• The Committee confirmed speculated projects cost for 2015 Master Plan Agreement as a little under $100 million with 40% associated with recycled water system and 60% for treatment plant upgrades.
• The Committee confirmed the 2015 Master Plan cost sharing as South County partners pay for all costs associated with the South County Regional Wastewater Authority treatment plant facility and the pipeline infrastructure is paid for by Valley Water.
• The Committee requests staff to schedule a briefing for Director Beall regarding a comparison of where South County’s water comes from regarding groundwater, recycled water, and imported water, their associated costs, and what communities are served.
• The Committee confirmed that there have been no large changes to the Agreements since the 1999 - Agreements except for integrating the Joint Water Resources Committee structure into the Agreement and the regulatory structure of water reuse.
• The Committee confirmed the cost for the South County feasibility study will be shared between Valley Water and the Cities of Gilroy and Morgan Hill (via staff hours) if the grant is awarded to Valley Water.
• The Committee confirmed that there will be another JRWPAC meeting held in Aug./Sep. 2023. As such, there’d be additional Technical Working Group (TWG) meetings to prepare and coordinate for the upcoming JRWPAC.
• The Committee wants staff to follow up on researching grant criteria elements to identify which will benefit Valley Water the most in preparation for a potential state water bond blending with the Bureau of Reclamation Grant program.

4.3. Receive Bottling Purified Demonstration Water and On-Site Purified Water Tasting at the Silicon Valley Advanced Water Purification Center Update.

Recommendation: Receive information and provide feedback on staff’s efforts to develop a project that bottles advanced purified water for demonstration and outreach purposes.

Hossein Ashktorab reviewed the information on this item, per the attached Committee Agenda Memo, and per the information in Attachment 1.

Hossein Ashktorab, David Tucker, and Kirsten Struve were available to answer questions.

Public Comments:
Susan Hinton expressed support for the use of aluminum bottles for the purified water for its uniqueness and encouragement to reuse the aluminum bottle, the use of large water bottles with paper cups advertising purified water available to try in hotels, and purified water bottles handed out at events with food while ensuring the collection of the purified water bottles were recycled, and any remaining purified water were used for plants afterwards.

Arthur Keller expressed concern about the purified water bottle packaging stating, “this bottle is made up to fifty percent recycled plastic” instead of “at least fifty percent recycled plastic.”

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

• The Committee noted the challenges of using alternatives in place of plastic bottles including limited available bottlers for a once-a-year event for 1,000 gallons of 8-ounce bottles, the importance of having a bottle that is clear to see the purified water and ensuring safety with bottle transportation.

• The Committee requested staff to follow up with the bottler company regarding the purified water bottle packaging comment from Arthur Keller.


Recommendation: Receive information and provide feedback.
Zachary Helsley reviewed the information on this item, per the attached Committee Agenda Memo, and per the information in Attachment 1.

Zachary Helsley, Kirsten Struve, and David Tucker were available to answer questions.

Public Comments: None.

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

- The Committee confirmed the current wastewater status of the following treatment plants: South County diverts available wastewater to Valley Water for wholesale distribution with more wastewater during the winter months available, changing wastewater availability in Palo Alto, plant expansion ongoing in Sunnyvale, and good potential for wastewater from San Jose/Santa Clara.

4.5. Receive the Joint Recycled Water Policy Advisory Committee (City of San Jose/Valley Water/City of Santa Clara) Meeting of April 13, 2023 Update.

Recommendation: Receive information regarding the April 13, 2023 Joint Recycled Water Policy Advisory Committee (City of San Jose/Valley Water/City of Santa Clara) meeting, and provide feedback.

Kirsten Struve reviewed the information on this item, per the attached Committee Agenda Memo.

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

- The Committee requested staff to follow up with scheduling the next JRWPAC in August or September 2023.


Recommendation: Receive information on the 7th meeting of the Independent Advisory Panel for evaluation of the Santa Clara Valley Water District’s Purified Water Program and related efforts update.

Medi Sinaki reviewed the information on this item, per the attached Committee Agenda Memo, and per the information contained in Attachment 1.

Medi Sinaki and Kirsten Struve were available to answer questions.
Public Comments:
None.

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

- The Committee confirmed that the San Jose/Santa Clara facility can be increased to 10 million gallons per day without expanding the footprint and discussed the need to find approved uses for additional water due to the wait for direct potable reuse regulations.
- The Committee requested staff to continue to follow up with the independent advisory panel to obtain overall Master Plan strategic long-term options for recycling and purifying water.

4.7. Receive and Discuss the 2023 Recycled Water Committee Work Plan, Upcoming Discussion Items, and Next Meeting Date.

Recommendation: Receive information on the 2023 Recycled Water Committee Work Plan and provide feedback on upcoming discussions items and next meeting date.

The Committee considered this Item without a staff presentation.

Public Comments:
None.

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

- The Committee noted the Urban Runoff Study with Stanford University to be addressed at the RWC June 2023 meeting.
- The Committee noted staff is working on scheduling a Joint Recycled Water Committee meeting with the Cities of Palo Alto, East Palo Alto, and Mountain View.
- The Committee requested staff to research the potential upcoming state water bond to ensure Valley Water can get a fair share of the grant funding and report back at the RWC August 2023 meeting.

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.

None.
6. Adjourn:

6.1. Adjourn to Regular Meeting at 12:00 p.m. on June 28, 2023.

Chairperson Estremera adjourned the meeting at 1:40 p.m., to the regular meeting at 12:00 p.m. on June 28, 2023, which was subsequently rescheduled to a special meeting at 10:00 a.m. on June 28, 2023.

Nicole Merritt  
Assistant Deputy Clerk II

Date Approved:
SUBJECT: Receive Purified Water Program Update including Partnerships with the Cities of San Jose and Palo Alto and Outreach Efforts on Purified Water.

RECOMMENDATION: Receive an update and provide feedback on the following topics:
   A. Collaboration with the City of Palo Alto and Other Partners; and
   B. Outreach Efforts on Purified Water.

SUMMARY:
A. Collaboration with the City of Palo Alto and Other Partners

Santa Clara Valley Water District (Valley Water) continues to meet with the City of Palo Alto (Palo Alto) staff to finalize agreements for the proposed future purification facility in Palo Alto, including a lease agreement for the former Los Altos Treatment Plant site and an Operations and Maintenance Agreement. Staff meets every two weeks with Palo Alto's Planning Department.

On June 5, 2023, the Palo Alto City Council held a pre-screening study session for the Purified Water Project as part of their regular development review process. The staff presentation provided an overview of the project, the need for a Comprehensive Plan Amendment, and a timeline. Councilmembers were supportive of the facilities while expressing some concern about the Project HomeKey, a new modular interim housing shelter that is being codeveloped by the City of Palo Alto and LifeMoves. Valley Water staff are working with the Project HomeKey design team to ensure good coordination and will be mindful to design our facility to be a good neighbor.

In addition, a Joint Recycled Water Committee with the Cities of Palo Alto, East Palo Alto, and Mountain View was held on June 12, 2023 with a similar presentation on the Regional Purification Project as well as an update on the local facility being developed by the City of Palo Alto.
The US Bureau of Reclamation (USBR) announced that the next funding opportunity for the Large-Scale Water Recycling Program will come out around late July. Valley Water is preparing a feasibility study to be eligible for funding and getting ready to apply as soon as it is announced.

Collaboration with cities and entities along the pipeline route are continuing as are discussions with the Cities of San José and Santa Clara regarding a future project in San José. Mayor Mahan’s response to the Chair’s letter is attached (Attachment A). Staff from the cities and Valley Water are meeting to develop a collaborative potable reuse project.

B. Outreach Efforts for Purified Water Program

Since the last update, staff continues to host public and private tours at the Purification Center. In the month of May, staff hosted seven tours reaching 100 members of the public. Tour groups included Cross Connections, University of San Francisco, National Charity League, and collaboration tours with the cities of San Jose and Campbell public libraries.

Recently, staff provided a tour for Valley Water’s Water 101 Academy, which is a leadership academy made up of 21 members of the public appointed by Valley Water Board members. The participants go through a three-month long leadership academy to learn about Valley Water and how it operates, from our budgeting to our various infrastructure projects, including the Purified Water Project. This year’s academy participants included three local elected officials, Palo Alto Mayor Lydia Kou, Cupertino City Councilmember Kitty Moore, and Morgan Hill City Councilmember Yvonne Martinez Beltran. All three elected officials toured the Purification Center.

Staff is also working on updating signage at the Purification Center to keep the information current and to create a more engaging experience for visitors. Staff is working with the Graphics team to draft designs that will be presented to the committee at a future meeting.

ATTACHMENTS:
Attachment 1: City of San Jose Letter

UNCLASSIFIED MANAGER:
Kirsten Struve, 408-630-3138
May 11, 2023

SCVWD Board of Directors
5750 Almaden Expressway
San Jose, CA 95118

Dear Valley Water Board of Directors,

The City of San Jose and Valley Water have a long history of productive collaboration. While drought conditions have temporarily improved thanks to a pluvial winter, our region is hardly out of the woods when it comes to the security of existing and future water needs. Continued collaboration through the Joint Recycled Water Policy Advisory Committee (JRWPAC) is vital in the face of growing needs and diminishing supplies. By 2050, the Bay Area is forecasted to tally 1.4 million new jobs and a similar amount of new households. As the economic driver of the region, San Jose and the South Bay will accommodate many of these new residents. While this record growth may seem relatively far off, we must bolster and enhance our water infrastructure for our existing residents and prepare for newcomers to Silicon Valley. I appreciate our shared spirit of collaboration and look forward to continued engagement in the coming years.

To that end, I am excited to see the expansion of the Silicon Valley Advanced Water Purification Center (SVAWPC). The majority of Santa Clara County residents support improvements to recycling strategies, including the utilization of advanced treatment technology to purify recycled water for direct potable reuse. Every drop of water must be stretched to its maximum potential, and SVAWPC is leading the way on this priority. The City of San Jose will continue its support of the JRWPAC and participate in future conservations regarding the potential expansion of SVAWPC’s recycling capabilities, including opportunities to leverage Valley Water funding for expansion efforts. I’m fully supportive of continued collaboration and look forward to further conversations around our shared goals and the future of SVAWPC’s success.

Sincerely,

Matt Mahan
Mayor
City of San José
SUBJECT:
Receive Recycled Water Use Update at Lake Cunningham.

RECOMMENDATION:
Receive information and provide feedback.

SUMMARY:
At the request of the Recycled Water Committee (RWC), Valley Water staff prepared the following information related to the history and operation of the City of San Jose’s recreational park, Lake Cunningham. Specifically, the RWC requested staff 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. In May 2022 the City of San Jose completed the Lake Cunningham Shoreline and Water Quality Study - Baseline Conditions and Treatment Measures Draft Report. The report evaluated the water quality challenges and proposed several possible solutions. Valley Water staff has reviewed the information in the 2022 Study and evaluated the viability of using recycled water to mitigate water quality issues 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 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, and replace a 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 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. In addition, since SBWR owns the distribution line Valley Water would have to develop a Memorandum of Understanding and eventually agreements to obtain this water supply. However, past attempts to use recycled water to augment natural water bodies did not move forward due to concerns about water temperature and the potential presence of emerging contaminants. Given the stagnant nature of the water in the Lake and the potential presence of constituent of concern in recycled water, 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.
ATTACHMENTS:
Attachment 1: Maps

UNCLASSIFIED MANAGER:
Kirsten Struve, 408-630-3138
Recycled Water Committee
June 28th, 2023

4.3 – Recycled Water Use at Lake Cunningham

Attachment 1: Maps

1 – Pipeline Additions from SBWR Master Plan
2 – Lake Cunningham Flood Detention
3 – Lake Cunningham Flood Zone
4 – Lower Silver Creek Watershed Boundary
Figure 4-6: Pipeline Additions and Zone 2 Modification

Notes:

a. These pipeline improvements represent one alternative for maintaining existing Zone 2 pressure to existing customers. Other alternatives like small onsite pump stations owned by customers should be evaluated.
Cunningham Flood Detention Project

Proposed Improvements

Legend
- Floodwall
- Levee
- Areas that flood
- Area not flooded
Receive Urban Runoff Study with Stanford University.

RECOMMENDATION:
Receive information and provide feedback.

SUMMARY:
In August 2018 Valley Water in partnership with Stanford University, initiated a two-phased project to evaluate alternatives for stormwater capture for water reuse purposes and considerations for feasibility and cost analysis, specifically analyzing whether it would be feasible to use Coyote Creek storm flows as an additional water source.

In September 2022, the project team (Stanford and Valley Water) led by Stanford presented preliminary findings from the November 2021 through July 2022 Coyote Creek water quality sampling to the Recycled Water Committee (RWC). Since then, the team has conducted two additional rounds of sampling for a total of eight sampling events. Water quality parameters analyzed include conventional, organic, and emerging constituents from the National Primary Drinking Water Regulations (NPDWR) and the Priority Pollutant List. Many of these constituents were not detected in Coyote Creek or were present at levels far below safe drinking water standards. The results indicate presence of perfluorochemicals PFOS and PFOA, which may require additional analysis and consideration regarding potential treatment and use for recharge. This report provides an update on the additional sampling conducted.

Moving forward, Valley Water Staff and Stanford University project team members will synthesize findings from the sampling at Coyote Creek to further evaluate water quality and seasonality and consider these results in the context of potential treatment needs for stormwater (e.g., creek storm flow) to further explore the feasibility of capture and reuse. Special interest is placed on wet weather flows and how water quality compares to dry weather conditions.

Stanford Team members have pursued academic discussions with some of the regulatory agencies...
such as the Regional Water Quality Control Board. These have yielded encouraging feedback on the ecological feasibility of centralized stormwater capture, which sets the stage for future investigation of issues related to regulations, laws, and water rights pertinent to aquatic and other wildlife resources. However, given the complex nature of the regulatory and environmental implications, further discussions and developing a better understanding of the associated issues are needed.

**ATTACHMENTS:**
Attachment 1: PowerPoint

**UNCLASSIFIED MANAGER:**
Kirsten Struve, 408-630-3138
Stormwater Capture, Treatment, & Recharge

Recycled Water Committee
June 28, 2023

Bridget C. Gile & Richard G. Luthy
Stanford University
Phase I: Can stormwater contribute to water supply?

• Coyote Creek could contribute ~10,000 AFY to water supply
• Centralized stormwater capture, treatment & recharge offers significant quantities compared to other stormwater use options
Phase II: What potential challenges must be addressed to utilize runoff for water supply?

- Water Quality
- Ecological Flows
- Treatment Trains and Infrastructure needs
Phase II: Water Quality

• Conducted 8 sampling events since Nov. 2021

• Types of contaminants tested:
  • Basic water quality parameters
  • Organic compounds
  • Pesticides and herbicides
  • Heavy metals
  • Perfluorochemicals

Sample collection (March 2, 2023)
Water Quality: Preliminary Findings

- **Heavy metal constituents** - 7 detected at very low levels
- **Trace organics** - a few compounds detected at low levels
- **PFAS compounds detected**
  - PFOS: up to 18 ppt
  - PFOA: up to 24 ppt
- Some level of treatment might be required

September 22, 2022
Phase II: Preliminary Step for the Ecological Flows

- Stanford Team initiated discussions with resource management professionals
- Concept met with interest and encouragement
- Recognition that stormwater capture offers unique co-benefits
• Stanford Team
  • Shared findings from ecological discussions through fish flows memo

• VW and Stanford
  • Potentially investigate timing and amount of flow diversions
Summary of Potential Next Steps

• Synthesize water quality findings across all sampling events
• Bench scale testing of synthetic stormwater to remove PFAS
• Further investigation of recharge quality to avoid negative impact on groundwater
• Continue exploring implications of regulatory, environmental, and water rights
• Evaluation of infrastructure needs (e.g., conveyance, treatment trains, etc.)
Valley Water
Clean Water • Healthy Environment • Flood Protection
COMMITTEE AGENDA MEMORANDUM
Recycled Water Committee

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

SUBJECT:
Receive and Discuss the 2023 Recycled Water Committee Work Plan, Upcoming Discussion Items, and Next Meeting Date.

RECOMMENDATION:
Receive information on the 2023 Recycled Water Committee Work Plan and provide feedback on upcoming discussion items and next meeting date.

SUMMARY:
Under direction of the Clerk, Work Plans are used by all Board Committees to increase Committee efficiency, provide increased public notice of intended Committee discussions, and enable improved follow-up by staff. Work Plans are dynamic documents managed by Committee Chairs and are subject to change.

At the February 22, 2023 meeting, the Committee approved the 2023 work plan that has agenda items necessary for the continuation of the recycled water projects. An updated 2023 work plan (Attachment 1) proposes changes for the remaining meetings in the year.

Staff solicits Committee feedback on any additional timeline information for holding discussions on the assigned Work Plan items, and confirmation of the next meeting date on June 28, 2023.

ATTACHMENTS:
Attachment 1: 2023 Revised Work Plan

UNCLASSIFIED MANAGER:
Kirsten Struve, 408-630-3138
## PROPOSED RWC 2023 WORK PLAN

<table>
<thead>
<tr>
<th>Task</th>
<th>Agenda Item</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
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<th>November</th>
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<td>FY 23 Tactic 1: Advance the Purified Water Program by releasing an RFP for at least one locally-sponsored.</td>
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<td>Update on Purified Water Program including Partnership with Cities of San Jose and Palo Alto.</td>
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<td>FY 23 Tactic 2: Implement the Countywide Water Reuse Master Plan.</td>
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<td>Implement the Countywide Water Reuse Master Plan (Core Plan)</td>
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<td>Joint Mtg Prep/Debrief - Joint Recycled Water Policy Advisory Committee</td>
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<td>FY 23 Tactic 4: Develop a Comprehensive Water Reuse Agreement for South County to advance water reuse</td>
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<td>6.1</td>
<td>Continue collaboration on the Silicon Valley Advanced Water Purification Center including building a strong collaborative relationship with the San Jose-Santa Clara Regional Wastewater Facility to expand the facility.</td>
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<td>6.2</td>
<td>Regional discussion on options: Feasibility analysis of Recycled Water Exchange with Contra Costa Water District and Central Contra Costa Sanitary District and feasibility of desalination.</td>
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<td>Update on Bottling Purified and water tasting station at the SVAWPC.</td>
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<td>Urban Runoff Study with Stanford University.</td>
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<td>Potential Amount of Wastewater for Water Reuse.</td>
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*Blue strikes - items added on updated work plan*
*Red strikes - items deleted from current work plan*
**Being updated/removed in FY23 Board Work Plan**