



March 1, 2018

NOTICE OF MEETING – REQUEST FOR RSVPS

Members of the Joint Recycled Water Committee (City of Palo Alto/SCVWD)

Santa Clara Valley Water District:

Director Hon. Tony Estremera
Director Hon. Barbara Keegan
Director Hon. Gary Kremen, Chair

City of East Palo Alto:

Council Member Hon. Donna Rutherford

City of Mountain View:

Council Member Hon. Pat Showalter

City of Palo Alto:

Council Member Hon. Tom Dubois, Vice Chair
Council Member Hon. Cory Wolbach

Supporting Water District Staff Members:

Norma J. Camacho, Chief Executive Officer
Stan Yamamoto, District Counsel
Anthony Fulcher, Sr. Assistant District Counsel
Nina Hawk, Chief Operating Officer, Water Utility
Rick Callender, Chief of External Affairs
Katherine Oven, Deputy Operating Officer, Water Utility Capital
Garth Hall, Deputy Operating Officer, Water Supply Division
Christopher Hakes, Acting Deputy Operating Officer, Water Utility & Maintenance Division
Hossein Ashktorab, Unit Manager, Recycled & Purified Water
Charlene Sun, Treasury and Debt Manager
Luis Jaimes, Senior Project Manager
Miguel Silva, Associate Engineer (Civil)
Henry Barrientos, Associate Engineer (Civil)
Marta Lugo, Public Information Representative III
Elise Latedjou-Durand, Environmental Planner II
Toni Vye, Staff Analyst, Recycled and Purified Water

Supporting City of Mountain View Staff Member:

Gregg Hosfeldt, Assistant Public Works Director

Supporting City of Palo Alto Staff Members:

Beth D. Minor, City Clerk
Phil Bobel, Assistant Director of Public Works Department
Karin North, Manager, Watershed Protection
David Carnahan, Deputy Clerk
Jessica Brettle, Assistant City Clerk

The regular meeting of the Santa Clara Valley Water District Joint Recycled Water Committee (City of Palo Alto/SCVWD) is scheduled to be held on **Tuesday, March 6, 2018, at 1:30 p.m.**, in the **Headquarters Building Conference Room A143** located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

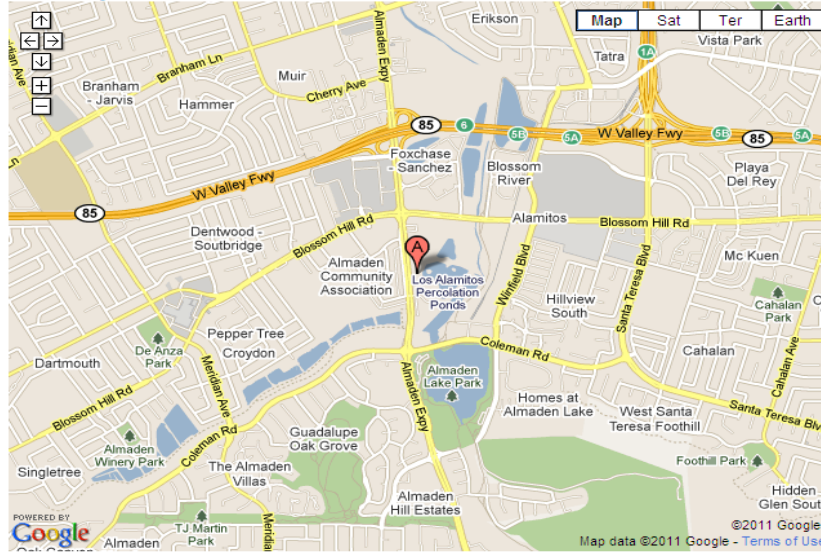
Enclosed for your convenience is a copy of the agenda and corresponding materials. Please bring these materials to the meeting with you.

Please RSVP at your earliest convenience by calling Glenna Brambill at 1-408-630-2408, or by email to gbrambill@valleywater.org, if you plan on attending the meeting.

Thank you!

Glenna Brambill
Management Analyst II
Santa Clara Valley Water District
Office of the Clerk of the Board
1-408-630-2408

**Santa Clara Valley Water District - Headquarters Building,
5700 Almaden Expressway, San Jose, CA 95118**



From Oakland:

- Take 880 South to 85 South
- Take 85 South to Almaden Expressway exit
- Turn left on Almaden Plaza Way
- Turn right (south) on Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Morgan Hill/Gilroy:

- Take 101 North to 85 North
- Take 85 North to Almaden Expressway exit
- Turn left on Almaden Expressway
- Cross Blossom Hill Road
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Sunnyvale:

- Take Highway 87 South to 85 North
- Take Highway 85 North to Almaden Expressway exit
- Turn left on Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From San Francisco:

- Take 280 South to Highway 85 South
- Take Highway 85 South to Almaden Expressway exit
- Turn left on Almaden Plaza Way
- Turn right (south) on Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Downtown San Jose:

- Take Highway 87 - Guadalupe Expressway South
- Exit on Santa Teresa Blvd.
- Turn right on Blossom Hill Road
- Turn left at Almaden Expressway
- At Via Monte (first traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Walnut Creek, Concord and East Bay areas:

- Take 680 South to 280 North
- Exit Highway 87-Guadalupe Expressway South
- Exit on Santa Teresa Blvd.
- Turn right on Blossom Hill Road
- Turn left at Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

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Joint Recycled Water Committee

- Hon. Donna Rutherford, Council Member, City of East Palo Alto
- Hon. Pat Showalter, Council Member, City of Mountain View
- Hon. Tom DuBois, Council Member, City of Palo Alto, Committee Vice Chair
- Hon. Cory Wolbach, Council Member, City of Palo Alto
- Hon. Tony Estremera, Board Member, Santa Clara Valley Water District
- Hon. Barbara Keegan, Board Member, Santa Clara Valley Water District
- Hon. Gary Kremen, Board Member, Santa Clara Valley Water District, Committee Chair

AGENDA

**JOINT RECYCLED WATER COMMITTEE
(CITY OF PALO ALTO/SCVWD)**

TUESDAY, MARCH 6, 2018

1:30 PM

**Santa Clara Valley Water District
 Headquarters Building Conference Room A143
 5700 Almaden Expressway
 San Jose, CA 95118**

Time Certain:

1:30 p.m.

1. **Call to Order/Roll Call**
2. **Time Open for Public Comment on Any Item Not on the Agenda**
Comments should be limited to two minutes. If the Committee wishes to discuss a subject raised by the speaker, it can request placement on a future agenda.
3. **Approval of Minutes**
 - 3.1 Approval of Minutes – September 19, 2017, meeting
4. **Elect Chair and Vice Chair**
5. **Action Items**
 - 5.1 District Collaborative Efforts to Assess Feasibility of Water Reuse Alternatives (Hossein Ashktorab/Phil Bobel/Gregg Hosfeldt)
 - A. City of Palo Alto
 - B. City of Mountain View

Recommendation: Receive information and discuss next steps for District, City of Palo Alto and City of Mountain View.
 - 5.2 Update on Northwest County Recycled and Purified Water Efforts (Hossein Ashktorab/Phil Bobel)
 - A. Advanced Water Purification System Feasibility Study
 - B. Northwest County Recycled Water Strategic Plan

Recommendation: Receive information and discuss next steps.

5.3 Update on Countywide Water Reuse Master Plan (Luis Jaimes)
Recommendation: Receive information and discuss next steps.

5.4 Update on Reverse Osmosis Concentrate Management Project (Hossein Ashktorab)
Recommendation: Receive information and discuss next steps.

5.5 Next Meeting and Tentative Items (Garth Hall)
Recommendation: Discuss and confirm next meeting date, location, and tentative items.

6. **Clerk Review and Clarification of Committee Requests and Recommendations**
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 discussion of Item 5.

7. **Adjourn**

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 for public inspection at the Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarters Building, 5700 Almaden Expressway, San Jose, CA., 95118, at the same time that the public records are distributed or made available to the legislative body.

The Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend commission meetings. Please advise the Clerk of the Board office of any special needs by calling 1-408-630-2277.

Santa Clara Valley Water District
Clerk of the Board Unit
5700 Almaden Expressway
San José, CA 95118

Palo Alto City Hall
Office of the City Clerk
250 Hamilton Avenue
Palo Alto, CA 94301

Joint Recycled Water Committee Purpose (City of Palo Alto/SCVWD): *The City of Palo Alto and District Elected Officials Joint Recycled Water Committee was established for the purpose of developing a long-term proposal for how the District and the City of Palo Alto can work together on recycled water opportunities, to advance common interests, and to establish a collaborative process to facilitate policy discussion and sharing of technical information on recycled water issues.*



**JOINT RECYCLED WATER COMMITTEE
(CITY OF PALO ALTO/SCVWD)**

DRAFT MINUTES

**TUESDAY, SEPTEMBER 19, 2017
9:00 AM**

(Paragraph numbers coincide with agenda item numbers)

A meeting of the Joint Recycled Water Committee (Committee) was held on September 19, 2017, in the Headquarters Building Boardroom at the Santa Clara Valley Water District (SCVWD), 5700 Almaden Expressway, San Jose, California.

1. CALL TO ORDER/ROLL CALL

A meeting of the Joint Recycled Water Committee was called to order by Chair Hon. Gary Kremen at 9:02 a.m.

Committee Members in attendance were: City of Mountain View Council Member: Hon. Pat Showalter; City of Palo Alto Council Members: Hon. Tom DuBois and Hon. Cory Wolbach*; SCVWD Directors: Hon. Tony Estremera, District 6; Hon Barbara Keegan, District 2; and Hon. Gary Kremen, District 7.

SCVWD Staff members in attendance were: Hossein Ashktorab, Shrimathi Balasubramanian, Paolo Baltar, Henry Barrientos, Glenna Brambill, Anna Chun, Anthony Fulcher, Chris Hakes, Garth Hall, Zach Helsley, Luis Jaimes, Katrina Jessop, Elise Latedjou-Durand, Marta Lugo and Luisa Sangines,

City of East Palo Staff Member in attendance was: Michele Daher, City of Mountain View Staff Member in attendance was: Gregg Hosfeldt. City of Palo Alto Staff Members in attendance were: Phil Bobel, Karin North and Lena Perkins.

*City of Palo Alto Council Member Hon. Cory Wolbach arrived at 9:09 a.m.

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

There was no one present who wished to speak.

3. **APPROVAL OF MINUTES**

It was moved by Hon. Tom DuBois, seconded by Hon. Gary Kremen, and carried, unanimously to approve the minutes of the June 6, 2017, Joint Recycled Water Committee meeting, as presented.

4. **ACTION/DISCUSSION ITEMS**

4.1 UPDATE ON COLLABORATION EFFORTS TO ASSESS FEASIBILITY OF WATER REUSE ALTERNATIVES

- A. District/City of Palo Alto Memorandum of Understanding
- B. District/City of Mountain View Agreement

Mr. Hossein Ashktorab reviewed the materials as outlined in the agenda item and was available to answer questions.

Hon. Tom Dubois and Hon. Pat Showalter spoke regarding the feasibility of the water reuse alternatives.

Committee took the following action:

It was moved by Chair Gary Kremen, seconded by Hon. Tony Estremera, and carried, unanimously to approve the recommendation that the District Board of Directors authorize the Chief Executive Officer to execute the Agreement between the Santa Clara Valley Water District and the City of Mountain View for Assessing the Feasibility of Water Reuse Alternatives.

4.2 UPDATE ON NORTHWEST COUNTY RECYCLED AND PURIFIED WATER EFFORTS

- A. Advanced Water Purification System Feasibility Study
- B. Northwest County Recycled Water Strategic Plan

Mr. Hossein Ashktorab, Mr. Phil Bobel and Ms. Lena Perkins reviewed the materials as outlined in the agenda item and were available to answer questions.

Mr. Gregg Hosfeldt from the City of Mountain View and Ms. Karin North from the City of Palo Alto were also available to answer questions.

Hon. Gary Kremen, Hon. Tony Estremera, Mr. Anthony Fulcher, Hon. Tom DuBois, Hon. Cory Wolbach, Hon. Pat Showalter and Mr. Garth Hall spoke regarding northwest county recycled and purified water efforts and the strategic plan along with the purification system feasibility study.

No action was taken.

4.3 UPDATE ON COUNTYWIDE WATER REUSE (RECYCLED AND PURIFIED WATER) MASTER PLAN

Mr. Luis Jaimes reviewed the materials as outlined in the agenda item.

No action was taken.

4.4 UPDATE ON REVERSE OSMOSIS CONCENTRATE MANAGEMENT PROJECT

Ms. Luisa Sangines reviewed the materials as outlined in the agenda item and was available to answer questions.

Hon. Gary Kremen, Mr. Garth Hall, Mr. Hossein Ashktorab and Hon. Pat Showalter spoke on the reverse osmosis concentrate management project.

No action was taken.

4.5 RECYCLED AND PURIFIED WATER OUTREACH EFFORTS (MARTA LUGO)

Ms. Marta Lugo reviewed the materials as outlined in the agenda item and was available to answer questions.

Hon. Gary Kremen and Hon. Tom DuBois spoke regarding recycled and purified water outreach efforts.

No action was taken.

4.6 NEXT MEETING AND TENTATIVE ITEMS (HOSSEIN ASHKTORAB)

Mr. Hossein Ashktorab reviewed the materials as outlined in the agenda item.

The Committee agreed the next meeting should be early 2018 (late January or early February) so the Joint Recycled Water meeting in November could take place and then they could discuss the outcome of that meeting. The Committee will receive an invite once the date is scheduled.

No action was taken.

6. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS AND RECOMMENDATIONS

Board Committee Liaison Ms. Glenna Brambill reported there was one action for consideration.

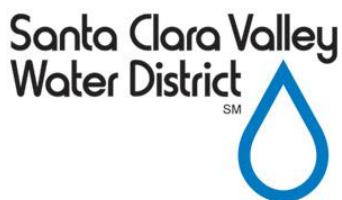
Agenda Item 4.1: The Committee approved the recommendation that the Santa Clara Valley Water District (District) Board of Directors authorize the Chief Executive Officer to execute the Agreement between the District and the City of Mountain View for assessing the feasibility of water reuse alternatives.

7. ADJOURNMENT

Chair Hon. Gary Kremen adjourned the meeting at 10:53 a.m. to those attending the optional tour.

Glenna Brambill
Board Committee Liaison
Office of the Clerk of the Board

Approved:



Committee: Joint Recycled Water
(City of Palo Alto/SCVWD)
Meeting Date: 03/06/18
Agenda Item No.: 4
Unclassified Manager: Michele King
Email: mking@valleywater.org
Est. Staff Time: 10 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Election of 2018 Committee Chair and Vice-Chair

RECOMMENDED ACTION:

Elect the 2018 Chair and Vice-Chair

SUMMARY:

Per the Board Resolution, the duties of the Chair and Vice-Chair are as follows:

The officers of each Committee shall be a Chairperson and Vice-Chairperson, both of whom shall be members of that Committee. The Chairperson and Vice-Chairperson shall be elected by the Committee, each for a term of one year commencing on January 1 and ending on December 31 and for no more than two consecutive terms. The Committee shall elect its officers at the first meeting of the calendar year. All officers shall hold over in their respective offices after their term of office has expired until their successors have been elected and have assumed office.

The Chairperson shall preside at all meetings of the Committee, and he or she shall perform other such duties as the Committee may prescribe consistent with the purpose of the Committee.

The Vice-Chairperson shall perform the duties of the Chairperson in the absence or incapacity of the Chairperson. In case of the unexpected vacancy of the Chairperson, the Vice-Chairperson shall perform such duties as are imposed upon the Chairperson until such time as a new Chairperson is elected by the Committee.

Should the office of Chairperson or Vice-Chairperson become vacant during the term of such office, the Committee shall elect a successor from its membership at the earliest meeting at which such election would be practicable, and such election shall be for the unexpired term of such office.

Should the Chairperson and Vice-Chairperson know in advance that they will both be absent from a meeting, the Chair may appoint a Chairperson Pro-tempore to preside over that meeting. In the event of an unanticipated absence of both the Chairperson and Vice-Chairperson, the Committee may elect a Chairperson Pro-tempore to preside over the meeting in their absence.

BACKGROUND:

The District Act provides for the creation of advisory boards, committees, or commissions by resolution to serve at the pleasure of the Board.

Accordingly, the Board has established Advisory Committees, which bring respective expertise and community interest, to advise the Board, when requested, in a capacity as defined: prepare Board policy alternatives and provide comment on activities in the implementation of the District's mission for Board consideration. In keeping with the Board's broader focus, Advisory Committees will not direct the implementation of District programs and projects, other than to receive information and provide comment.

Further, in accordance with Governance Process Policy-3, when requested by the Board, the Advisory Committees may help the Board produce the link between the District and the public through information sharing to the communities they represent.

The Board may also establish Ad-hoc Committees to serve in a capacity as defined by the Board and will be used sparingly.

ATTACHMENT(S):

None



Committee: Joint Recycled Water
(City of Palo Alto/SCVWD)
Meeting Date: 03/06/18
Agenda Item No.: 5.1
Unclassified Manager: Garth Hall
Email: ghall@valleywater.org
Est. Staff Time: 20 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Update on Collaboration Efforts for Water Reuse Alternatives in Northwest County
A. District, City of Palo Alto and City of Mountain View Collaborative Agreement

RECOMMENDED ACTION:

Receive information and discuss next steps for District and Cities of Palo Alto and Mountain View Collaborative Agreement;

SUMMARY:

The purpose of this agenda item is to provide the Joint Recycled Water Committee (Committee) with updates on the partnerships under development with the City of Palo Alto (Palo Alto) and the City of Mountain View (Mountain View). District staff has negotiated a Memorandum of Understanding (MOU) with Palo Alto which became effective on August 28, 2017. In addition, District staff negotiated a separate Agreement with Mountain View, effective October 11, 2017. Both the MOU and Agreement will assess the feasibility to develop potable water reuse options in northwestern Santa Clara County (Northwest County).

Based on direction from the Committee to expedite development of a collaborative agreement between the District, and cities of Palo Alto and Mountain View, staff from the three agencies met several times since October 2017, and more recently on February 6, 2018, to discuss next steps to complete the collaborative agreement in 2018. The initial meetings, focused on the parties' key drivers including the District's desire for a committed volume of treated wastewater (potentially 10 MGD), securing land for a future Advanced Water Purification Facility and collaboration for Reverse Osmosis Concentrate Management. Staff will be further evaluating any potential CEQA issues regarding commitments to volume of treated wastewater, securing land, and collaboration for Reverse Osmosis Concentrate Management. In turn, Palo Alto and Mountain View would like the District to fund a portion of the 1-2 MGD Advanced Water Purification System (identified as part of the jointly funded District/Palo Alto Advanced Water Purification System Feasibility Study (Feasibility Study)).

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

5.1 Collaboration Efforts for Water Reuse Alternatives



5.1 Palo Alto Collaboration Effort

Item	Schedule/Milestones
Collaborative Agreement Between the District, Palo Alto and Mountain View	Draft Agreement by end of 2018



Committee: Joint Recycled Water
(City of Palo Alto/SCVWD)
Meeting Date: 03/06/18
Agenda Item No.: 5.2
Unclassified Manager: Garth Hall
Email: ghall@valleywater.org
Est. Staff Time: 20 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Update on Northwest County Recycled and Purified Water Planning
A. Advanced Water Purification System Feasibility Study
B. Northwest County Recycled Water Strategic Plan

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

This agenda item provides updated information on the City of Palo Alto Advanced Water Purification System Feasibility Study and ongoing work for the Northwest County Recycled Water Strategic Plan.

A. City of Palo Alto Advanced Water Purification System Feasibility Study

The Feasibility Study determined how to improve recycled water quality from the Regional Water Quality Control Plant (RWQCP) in Palo Alto. Following the completion of the Feasibility Study in April 2017, District and Palo Alto staff authorized the consultant to complete a White Paper to evaluate the feasibility of utilizing a parcel of land adjacent to the RWQCP for the construction of a 6 to 10 MGD Advanced Water Purification System (AWPS) and a Preliminary Design Report (PDR) for a 1-2 MGD AWPS. The White Paper was finalized on October 10, 2017 and the PDR was finalized on December 15, 2017. This information will be evaluated as part of the Countywide Water Reuse Master Plan, including the identification of a future 6-10 MGD AWPS.

B. Northwest County Recycled Water Strategic Plan

The Northwest County Recycled Water Strategic Plan (Strategic Plan) includes recycled water preliminary planning studies for the expansion of recycled water to Stanford Research Park, and customers in Los Altos, Los Altos Hills, Mountain View, East Palo Alto, and Menlo Park. The Strategic Plan also includes a groundwater assessment in Northwest County to better understand groundwater conditions and the potential for potable reuse in the area. More recently the consultant submitted the Business Plan and Preliminary Design Report for the Phase III expansion to the Stanford Research Park area. As part of the Funding Strategy, Palo Alto submitted a grant application to the Clean Water State Revolving Fund for the 1 to 2 MGD AWPF in January of this year. In addition, Palo Alto submitted a Crosswalk Memo for the 1 mgd AWPF, which is needed to get a determination of feasibility from United States Bureau of Reclamation (Title XVI). District and Palo Alto staff continue to collaborate on these tasks and we expect to finalize the Strategic Plan by March 2019.

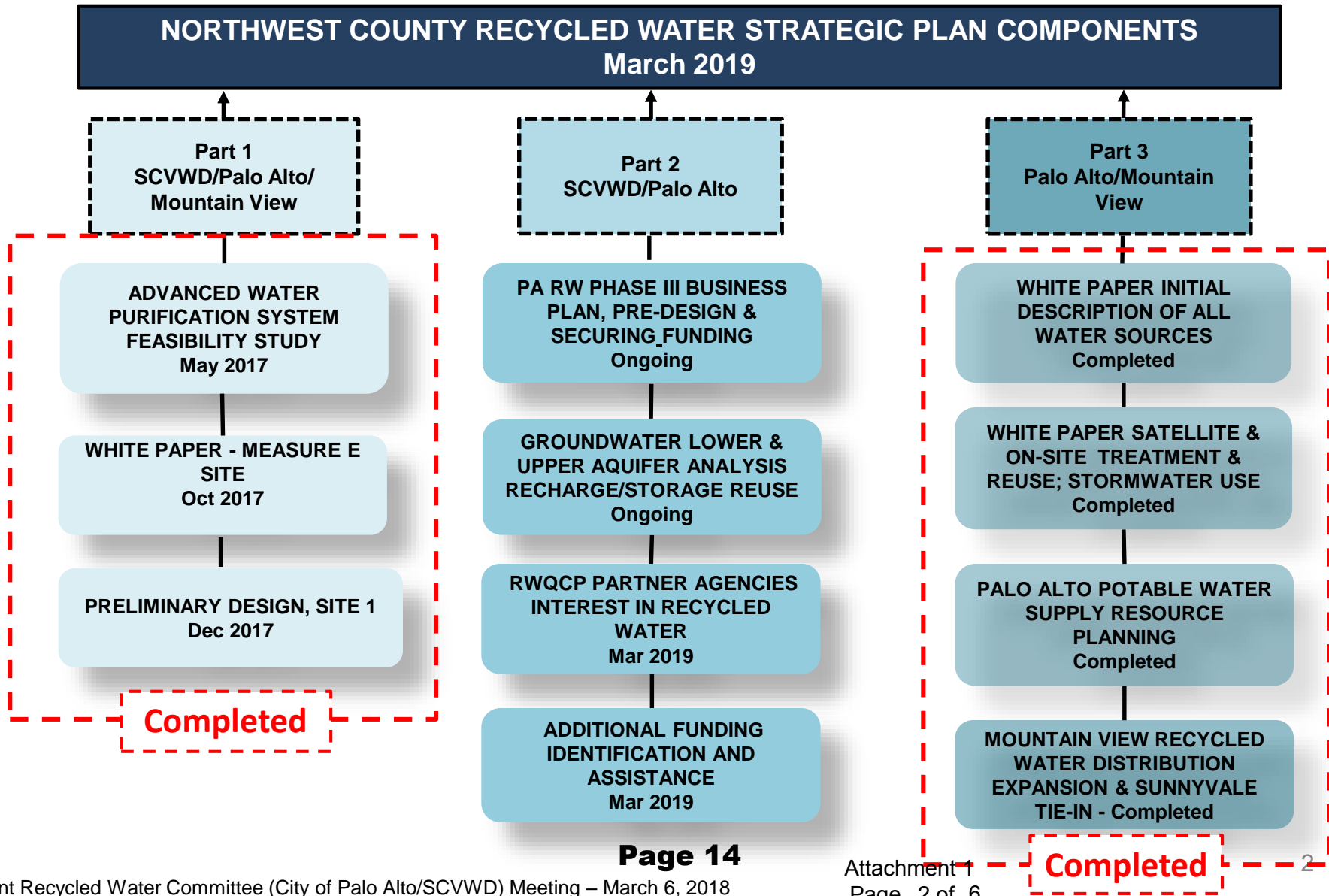
ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

5.2 Update on Northwest County Recycled and Purified Water Efforts



5.2 Northwest County Recycled and Purified Water Efforts



5.2 Northwest County Recycled and Purified Water Efforts

Part 1

Advanced Water Purification System (AWPS) Feasibility Study and Preliminary Design

Items Successfully Completed	Date
Final AWPS Report	May 2017
White Paper on Measure E Site	October 2017
Preliminary Design Report	December 2017

5.2 Northwest County Recycled and Purified Water Efforts

Part 1 *Advanced Water Purification System (AWPS) Feasibility Study and Preliminary Design*

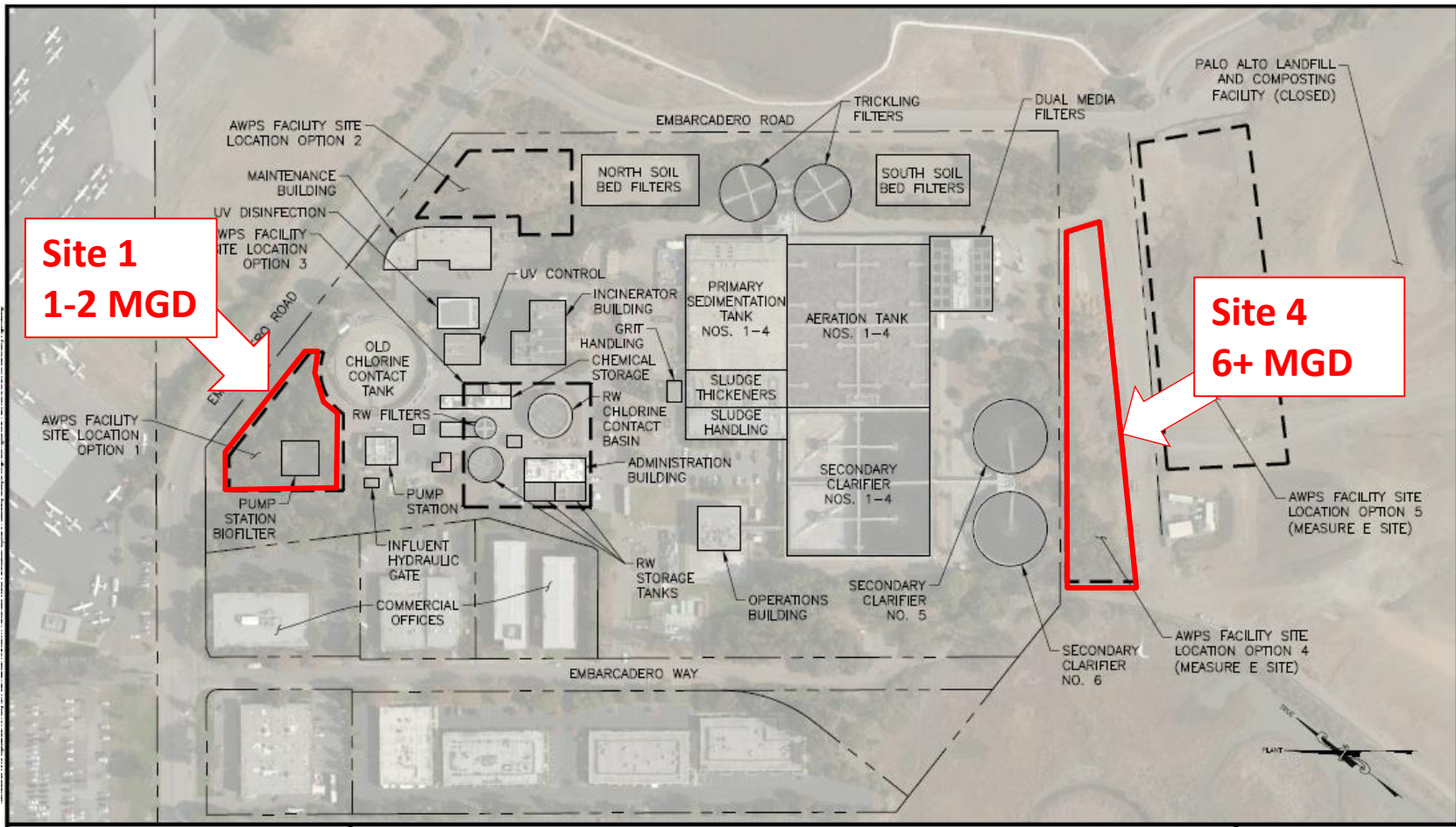
Item	1.125 MGD AWPS Cost	2.25 MGD AWPS Additional Cost
Estimated Bid Price	\$13,904,000	\$3,659,000
CEQA, Permitting	\$175k to \$325k	---
Design, Construction Management and Inspection	\$1,668,000	\$439,000
Cost Estimate^{1,2}	\$15,897,000	\$4,098,000

Notes

1. For total costs, the high end of this cost range is assumed
2. AACE Class 3 Cost Estimate Total (-20% to +30%)

5.2 Northwest County Recycled and Purified Water Efforts

Part 1 Advanced Water Purification System (AWPS) Feasibility Study



5.2 Northwest County Recycled and Purified Water Efforts

Part 2

Northwest County Recycled Water Strategic Plan

Item	Date
Business Plan and Preliminary Design Report for Phase III	November/December 2017
Groundwater Assessment Report and IPR Evaluation	Ongoing
External Funding:	
• 1.125 MGD AWPS. SRF Application	January 19, 2018.
• 1.125 to 6+ MGD AWPS Title XVI Cross Walk Memo	Late February 2018



Committee: Joint Recycled Water
(City of Palo Alto/SCVWD)
Meeting Date: 03/06/18
Agenda Item No.: 5.3
Unclassified Manager: Garth Hall
Email: ghall@valleywater.org
Est. Staff Time: 20 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Update on Countywide Water Reuse (Recycled and Purified Water) Master Plan.

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

On January 23, 2018, the District Board approved an Agreement with Brown & Caldwell Inc. for consultant services to support the development of the Countywide Water Reuse Master Plan (Countywide Master Plan). Staff issued a Notice-To-Proceed to the consultant on January 25, 2018. The Countywide Master Plan will include treated wastewater availability for each producer; propose system integration strategies/interties; prepare updates to the South Bay Water Recycling (SBWR) Master Plan; and develop a residuals management plan, a regulatory framework, recommended project alternatives, a governance framework, and a master plan report.

Extensive stakeholder engagement has been conducted as part of the Countywide Master Plan development and focused on the following groups: (1) Project Partnership Group – includes staff level representatives from District and partner agencies, including the cities of Palo Alto and Mountain View; (2) Stakeholder Task Force - includes recycled water users, water suppliers, environmental non-governmental organizations, business interests, regulatory agencies, and other interested parties; (3) Executive Leadership Group – includes executive-level representatives from key agencies; (4) Board Recycled Water Committees (Recycled Water Committee, Joint RWC SCVWD/Sunnyvale, Joint RWC SCVWD/Palo Alto, Joint Recycled Water Policy Advisory Committee SCVWD/San José/Santa Clara, and the Joint Water Resources Committee SCVWD/SCRWA/Gilroy/Morgan Hill); (5) Regulators –includes California Division of Drinking Water and the San Francisco Bay Regional Water Quality Control Board (SFRWQCB); and (6) Independent Advisory Panel from the National Water Reuse Institute which includes nationally recognized water reuse experts.

In calendar year 2018, the project team will be developing various work products which staff estimates will result in a draft master plan by December 2018. These include baseline/gap analysis, hydraulic modeling, and development of conceptual alternatives, and rating criteria. These activities will be guided by feedback received from the stakeholder engagement process. Completion of the final master plan is planned for June 2019.

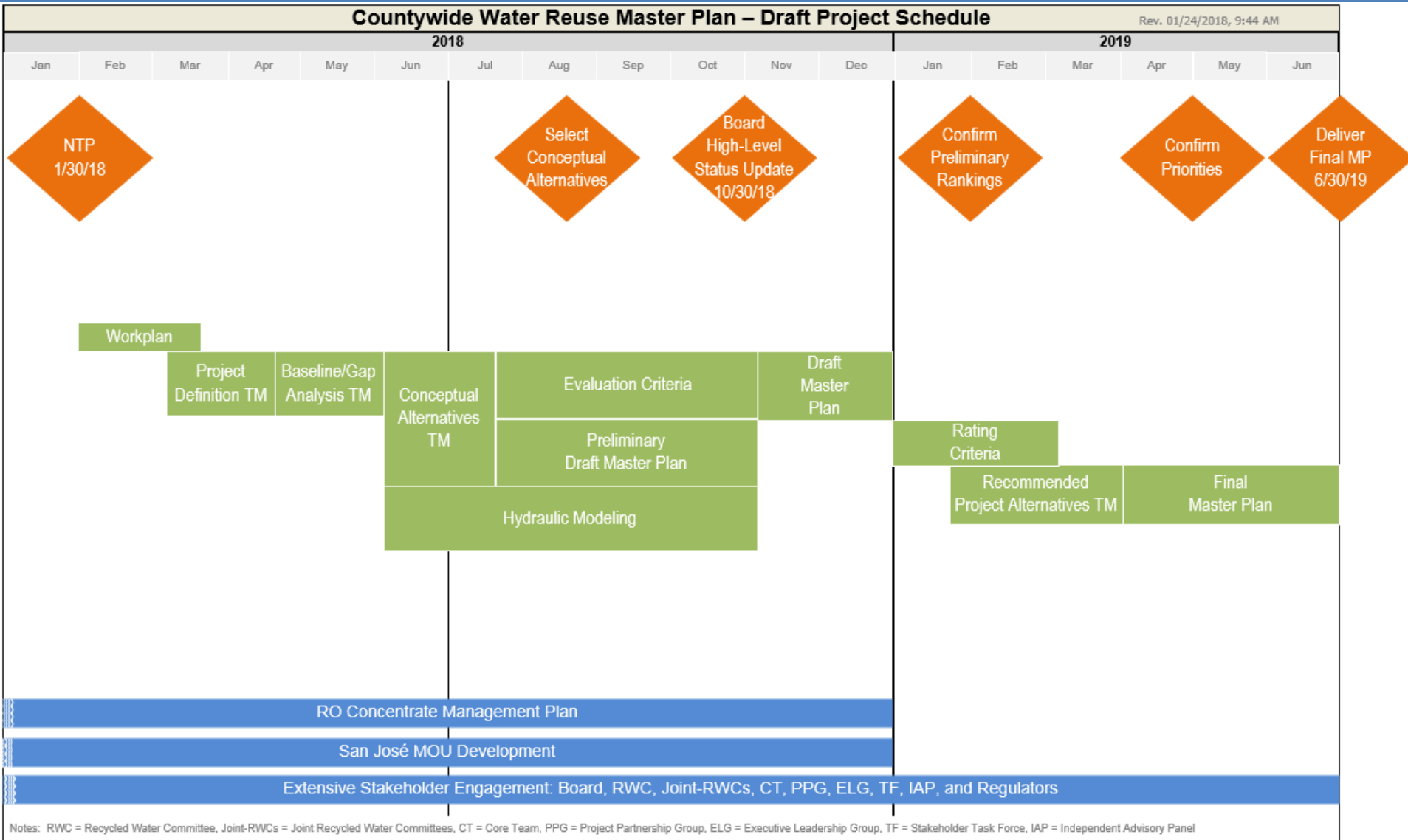
ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

5.3 Update on Countywide Water Reuse (Recycled and Purified) Master Plan



5.3 Countywide Water Reuse Master Plan



5.3 Stakeholder Engagement

Group	Description
Project Partner Group	Staff from District and Partner Agencies
Stakeholder Task Force	Includes recycled water users, water suppliers, environmental non-governmental organizations, business interests, regulatory agencies, and other interested parties
Executive Leadership Group	Executive-level representatives from key agencies including: SCVWD, City of San Jose, City of Palo Alto, City of Sunnyvale and SCRWA
Board Recycled Water Committees	SCVWD/Palo Alto, Joint Recycled Water Policy Advisory Committee Recycled Water Committee, Joint RWC SCVWD/Sunnyvale, Joint RWC SCVWD/San José/Santa Clara, and the Joint Water Resources Committee SCVWD/SCRWA/Gilroy/Morgan Hill
Regulators	SWRCB Division of Drinking Water San Francisco Bay Regional Water Quality Control Board
Independent Advisory Panel	Panel of nationally recognized reuse experts from the National Water Reuse Institute to guide the District's potable reuse efforts

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Committee: Joint Recycled Water
(City of Palo Alto/SCVWD)
Meeting Date: 03/06/18
Agenda Item No.: 5.4
Unclassified Manager: Garth Hall
Email: ghall@valleywater.org
Est. Staff Time: 20 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Update on Reverse Osmosis Concentrate Management Project

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

District staff in collaboration with its partners, including the Cities of Palo Alto and Mountain View continue working on Reverse Osmosis Concentrate Management (ROCM) strategies to ensure a feasible solution to ROCM for its potable reuse projects. Staff have been evaluating project deliverables, milestones, and timelines; collaborative research efforts on Engineered Treatment Cells (ETC) with academia; pilot system and modeling recommendations from regulatory agencies; and opportunities to consolidate and extend project deliverables, tasks and timelines. Staff has also coordinated the pilot study activities with municipal partners, academic researchers, and state and federal regulatory agencies to address their feedback, questions and recommendations for improvement to the ETC pilot.

In November 2017, District Staff with consultant support and representatives from the City of San José met with staff from Regional Water Quality Control Board (RWQCB) and EPA at the RWQCB offices in Oakland to discuss the ROC Management project. The purpose of the meeting was to obtain EPA and RWQCB feedback regarding the evaluation of short-listed ROC management options for the South Bay dischargers; discuss the feasibility and timing of permitting for ROC management alternatives; coordinate with 2019 South Bay discharger permit development and adoption; and discuss applicability of treatment wetlands for ROC management.

During this meeting, RWQCB indicated that modeling studies of the lower region of South San Francisco Bay should be conducted to predict the effect of ROC on the Bay under various scenarios (such as blending and separate outfalls). Additional modeling studies in the South Bay could provide valuable information regarding the applicability of possible permitting strategies (including blending, mixing zones, mixing dynamics, and outfall location). If necessary, RWQCB staff said they would support a regulatory change rather than technological treatment. RWQCB will continue working with District and South Bay Dischargers to evaluate collaborative and individual regulatory solutions to promote ecologically sound and cost-effective ROC management.

On June 14, 2017, District staff hosted the first stakeholder ROC Management Project workshop (Workshop No. 1) called "Project Objectives, Challenges, and Drivers". Information on this workshop was presented at the August 9, 2017 Recycled Water Committee meeting. On October 17, 2017, the District hosted the second stakeholder ROC Management Project workshop (Workshop No. 2) titled "Initial Screening and Multi-Criteria Analysis (MCA) Shortlisting of ROC Management Options.". At Workshop No. 2 the participants reviewed 120 possible ROC management options, assessed 588 unique evaluations using MCA, and supported shortlisting to 17 recommended options for further examination.

The project team is now conducting a more in-depth evaluation of the shortlisted ROC management options to further refine the list down to a single preferred ROC management plan or strategy for each of the advanced water treatment facilities under consideration. The project team has already drafted detailed reports documenting the process by which the preferred options were selected. These reports discuss the establishment of project requirements and the conceptual design basis for discussion; a review of existing dilution modeling, mass balance assessments, and toxicity studies to facilitate the selection of viable alternatives; the development of problem definitions, business drivers and MCA to assist with ranking options; and, the summation of viable alternatives investigated, the results of assessments, description of alternatives, and the presentation of shortlisted options for further feasibility analysis.

The remaining two workshops (No. 3 and No. 4) will present the results of collaborative studies with the University of California at Berkeley and Stanford University on the economic and technical feasibility of ROC treatment by ETC - which simulate a natural wetland, as well as a final project report with detailed alternatives review and preferred management options per site

Research endeavors to date have included bench-scale studies to assess dose of oxidants, oxidant efficacy in degrading targeted pollutants, photosynthetic respiration functionality, and algal growth and survival in ROC. The ETC became operational in July 2017 and underwent a period of biological maturation. Preliminary water quality monitoring of the operating treatment cells has occurred for a suite of Constituents/Chemicals of Emerging Concern (CECs) and other ancillary parameters including nutrients, metals, organic contaminants and toxicity. Staff are currently assessing the results and initiating system upgrades in response to the initial activation phase of the research.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

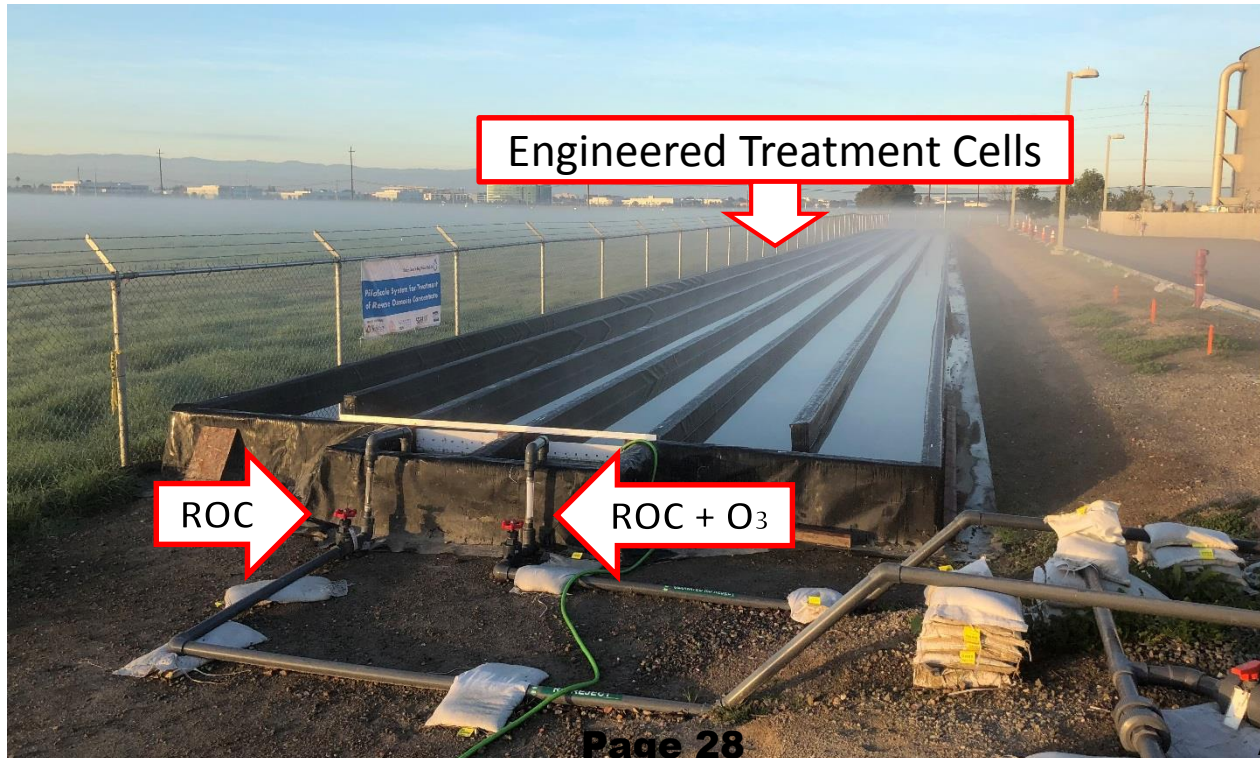
5.4 Update on Reverse Osmosis Concentrate Management Project



5.4 Reverse Osmosis Concentrate Management

Project Achievements to Date:

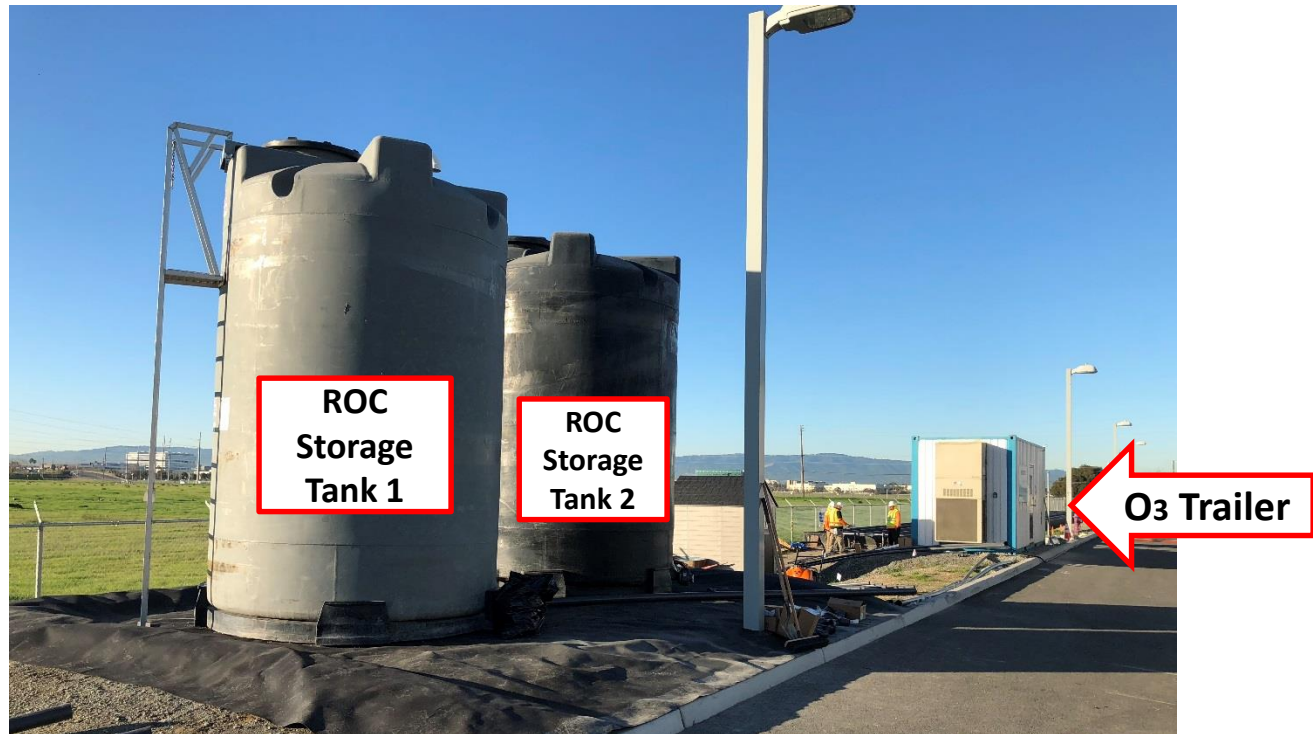
- Five sampling events
- Collected over 1,400 water quality samples
- Conducted two rounds of toxicity testing
- Two stakeholder workshops
- Meeting with regulators



5.4 Reverse Osmosis Concentrate Management

Pilot Improvements:

- Installation of two 5,000 gallon tanks and appurtenances.
- Additional water quality analysis.
- Instrumentation and control upgrades.



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Committee:	Joint Recycled Water (City of Palo Alto/SCVWD)
Meeting Date:	03/06/18
Agenda Item No.:	5.5
Unclassified Manager:	Garth Hall
Email:	ghall@valleywater.org
Est. Staff Time:	10 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Next Meeting and Tentative Items

RECOMMENDED ACTION:

Discuss and confirm next meeting date, location, and tentative items.

SUMMARY:

Consider and select dates for remaining 2018 calendar year.

ATTACHMENT(S):

None.

