



May 20, 2017

NOTICE OF MEETING & REQUEST FOR RSVPS

Members of the Joint Recycled Water Committee:

SCVWD Director Tony Estremera, Chairperson
SCVWD Director Gary Kremen, Vice Chairperson
SCVWD Director Barbara Keegan, Committee Member

And Supporting Staff Members:

Norma Camacho, Interim Chief Executive Officer
Stan Yamamoto, District Counsel
Anthony Fulcher, Sr. Assistant District Counsel
Jim Fiedler, Chief Operating Officer, Water Utility
Rick Callender, Deputy Administrative Officer, Government Relations
Katherine Oven, Deputy Operating Officer, Water Utility Capital
Garth Hall, Deputy Operating Officer, Water Supply Division
Angela Cheung, Deputy Operating Officer, Water Utility & Maint.
Chris Elias, Deputy Administrative Officer, Ofc/CEO Support
Hossein Ashktorab, Unit Manager, Recycled & Purified Water
Charlene Sun, Treasury and Debt Manager
Luis Jaimes, Senior Project Manager
Debra Butler, Senior Project Manager
Miguel Silva, Associate Engineer (Civil)
Henry Barrientos, Associate Engineer (Civil)
Phillippe Daniel, Contractor
Marta Lugo, Public Information Representative III
Elise Latedjou-Durand, Environmental Planner II
Toni Vye, Staff Analyst
Lin Moore, Board Admin. Assistant II

A meeting of the Santa Clara Valley Water District Recycled Water Committee will take place at **12:00 p.m., on Tuesday, May 30, 2017**, at the Santa Clara Valley Water District, **Headquarters Building, Boardroom**, 5700 Almaden Expressway, San Jose, California.

Attached for your convenience is a copy of the agenda and minutes of previous meetings. Additional materials associated with the meeting will be distributed at or before the meeting, in accordance with the Brown Act.

Please RSVP at your earliest convenience by contacting me at 408-630-2659, or by email to lmoore@valleywater.org.

Boxed lunches will be provided for Board members and presenting staff only, beginning at 11:30 a.m.

Regards,

Lin Moore

Lin Moore
Board Administrative Assistant II

Santa Clara Valley Water District
Office of Clerk of the Board

Enclosures

RECYCLED WATER COMMITTEE

Tony Estremera, Board Representative, Chairperson
Gary Kremen, Board Representative, Vice Chairperson
Barbara Keegan, Board Representative



AGENDA
RECYCLED WATER COMMITTEE
Santa Clara Valley Water District Headquarters Boardroom
5700 Almaden Expressway, San José, CA

Tuesday, May 30, 2017
12:00 PM

Time Certain:

12:00 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:** February 16, 2017.

Recommendation: Approve the minutes.

4. **Action Items:**

- 4.1 Expedited Purified Water Program Update. (K. Oven)

Recommendation: Receive information on staff's follow-up actions from the March 27, 2017 Work Study Session on the Expedited Purified Water Program and provide direction to staff.

- 4.2 Direct Potable Reuse Analysis Efforts Update. (G. Hall)

Recommendation: Receive information and discuss next steps.

- 4.3 Update on Private Activity Analysis. (D. Taylor)

Recommendation: Receive information on private activity analysis action plan and discuss next steps.

- 4.4 Legislative Update on Assembly Bill 574 (Quirk) Potable Reuse and Senate Bill 740 (Wiener) Onsite Treated Water. (R. Callender)

Recommendation: Receive updates on recycled water legislation and discuss next steps.

- 4.5 Update on Countywide Recycled and Purified Water Master Plan. (G. Hall)

Recommendation: Receive information and discuss next steps.

- 4.6 Update on City of Palo Alto, City of Mountain View, and San Francisco Public Utilities Commission/Bay Area Water Supply and Conservation Agency Collaboration Efforts. (G. Hall)

- A. District/City of Palo Alto Memorandum of Understanding
- B. City of Palo Alto Advanced Water Purification System Feasibility Study
- C. Northwest County Recycled Water Strategic Plan

(OVER)

D. San Francisco Public Utilities Commission/Bay Area Water Supply and Conservation Agency Memorandum of Understanding

- Recommendation:**
1. That the Committee recommend that the District Board of Directors (Board) Authorize the Chief Executive Officer to Execute the Memorandum of Understanding (MOU) Between the Santa Clara Valley Water District (District) and the City of Palo Alto (Palo Alto), Assessing the Feasibility of Developing Water Reuse Alternatives; and
 2. Receive information and discuss next steps (related to Items 4.6B, 4.6C, and 4.6D).

4.7 Update on Sunnyvale Memorandum of Understanding. (G. Hall)

Recommendation: Receive information and discuss next steps.

4.8 Update on South County Efforts. (G. Hall/K. Oven)

- A. Joint Water Resources Committee
- B. South County Recycled Water Pipeline Expansion

Recommendation: Receive information and discuss next steps.

4.9 Update on Outreach Opportunities for District Board of Directors to Engage with the Public and Elected Body Committees on Recycled and Purified Water Expansion Efforts. (R. Callender)

Recommendation: Receive information and discuss next steps.

5. Review Committee Workplan and Meeting Schedule.

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 4.

7. Adjourn:

Adjourn to next regularly scheduled meeting at 12:00 p.m., on August 9, 2017, in the Santa Clara Valley Water District Headquarters Boardroom, 5700 Almaden Expressway, San Jose, CA 95118.

REASONABLE EFFORTS TO ACCOMMODATE PERSONS WITH DISABILITIES WISHING TO ATTEND COMMITTEE MEETINGS WILL BE MADE. PLEASE ADVISE THE CLERK OF THE BOARD'S OFFICE OF ANY SPECIAL NEEDS BY CALLING (408) 630-2277.

Meetings of this committee will be conducted in compliance with all Brown Act requirements. 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 same time that the public records are distributed or made available to the legislative body, at the following locations:

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

Recycled Water Committee Purpose: The Committee's purpose is to develop a long-term proposal for how the District can work together with other local agencies on recycled water opportunities within the district boundaries, to establish a collaborative process to facilitate policy discussion and sharing of technical information on recycled water issues. It is the role of the Recycled Water Committee to meet with the other entities (Sunnyvale, Palo Alto, CSJ SC/TPAC) in individual meetings as required and/or necessary. The Recycled Water Committee can also meet with new entities if the need arises.

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RECYCLED WATER COMMITTEE

MINUTES

Thursday, February 16, 2017
12:00 P.M.

(Paragraph numbers coincide with agenda item numbers)

1. CALL TO ORDER/ROLL CALL.

A meeting of the Recycled Water Committee (Committee) was called to order in the Santa Clara Valley Water District (District) Administration Building, Room B108, 5750 Almaden Expressway, San Jose, California, at 12:00 p.m.

Committee members in attendance were District 2 Director B. Keegan, and District 6 Director T. Estremera, Chairperson presiding, constituting a quorum of the Committee. Staff members in attendance were H. Ashktorab, D. Butler, R. Callender, T. Mercado, L. Moore, J. Fiedler, G. Hall, K. Oven, L. Sangines, C. Sun, and M. Silva.

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

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

3. ELECTION OF CHAIR AND VICE CHAIR.

It was moved by Director Keegan, seconded by Director Estremera, and carried, to approve the 2017 Chairperson, Director Estremera, and Vice Chairperson, Director Keegan. Director Kremen was absent.

4. APPROVAL OF MINUTES.

It was moved by Director Keegan, seconded by Chairperson Estremera, and carried to approve the minutes of the November 9, 2016, meeting as presented. Director Kremen was absent.

5. ACTION ITEMS.

5.1. Update on Expedited Purified Water Program.

Ms. Katherine Oven, Deputy Operating Officer, reviewed the information on this item, per the attached Committee Agenda Memo.

Chairperson Estremera declared time open for public comment.

Mr. Stan Williams, Poseidon Water, expressed support for public-private partnerships (P3) and highlighted some benefits working with Poseidon would offer.

Mr. Doug Muirhead, Morgan Hill resident, expressed interest in receiving periodic summary updates from staff while evaluating RO alternative management techniques for a clearer understanding of the steps to the final decision/selection.

Mr. Will Hewes, Table Rock Capital, expressed support for a flexible approach where a design build start could result in a return to a P3 approach which has worked in other cities.

Ms. Kerrie Romanow and Mr. Jeff Provenzano, City of San Jose Environmental Services, expressed readiness to start reviewing studies to increase the water supply.

Chairperson Estremera acknowledged receipt of a letter from Ms. Romanow, identified as Handout 5.1-A, herein. Copies of the Handout were distributed to the Committee and made available to the public.

It was moved by Chairperson Estremera, seconded by Director Keegan, and carried to have staff bring back information on the technical studies, P3s, and alternatives to have a discussion that would yield a recommendation to bring to the Board for their consideration.

5.2. Direct Potable Reuse.

Mr. Hossein Ashktorab, Recycled Water Manager, and Ms. Luisa Sangines Uriarte, Senior Engineer, reviewed the information on this item, per the attached Committee Agenda Memo.

Ms. Romanow expressed a preference for choosing an alternative sooner, rather than later, in order to avoid frustrations.

Ms. Charlene Sun, Treasury and Debt Manger, stated that, in some cases, the need to protect tax exempt status complicates matters.

It was moved by Director Keegan, seconded by Director Estremera, and carried to have staff begin the process of preparing an IRS opinion letter and to bring back updates to the Committee until it is finalized

5.3 Recycled and Purified Water Expansion Efforts.

Mr. Ashktorab and Mr. Garth Hall, Deputy Operating Officer, reviewed the information on this item, per the attached Committee Agenda Memo.

Mr. Phil Vogel, City of Palo Alto, indicated that the Memorandum of Understanding was with their attorneys for review.

Chairperson Estremera declared time open for comments from the public.

Mr. Williams expressed confidence that his company's knowledge, leadership, and business relationships could be a resource to the District.

The Committee noted the information without formal action.

5.4. Grant Funding Opportunities.

Mr. Ashktorab reviewed information on this item, per the attached Committee Agenda Memo, and Ms. Sun responded to the Committee's questions regarding rules and regulations of the Water Infrastructure Finance and Innovation Act.

The Committee noted the information without formal action.

5.5. Independent Advisory Panel for Potable Reuse.

Ms. Sangines Uriarte reviewed the information on this item, per the attached Committee Agenda Memo.

The Committee directed staff to create more opportunities for directors to connect with the public and deliver more presentations to committees of other elected bodies; and to promote more tours of the Silicon Valley Advanced Water Purification Center and noted the information, without formal action.

5.6. Public Outreach.

Mr. Tony Mercado, Public Information Representative II, represented Mr. Rick Callender, Deputy Administrative Officer, and reviewed the information on this item, per the attached Committee Agenda Memo.

The Committee noted the information, without formal action.

5.7. Wolfe Road.

Ms. Oven reviewed the information on this item, per the attached Committee Agenda Memo.

The Committee noted the information without formal action.

6. Review Committee Work Plan and Agenda Topics for Next Meetings.

The Committee made no comments on the proposed actions for the next meeting, but added the following:

- a. Staff to bring back information on the technical studies, P3s, and alternatives to have a discussion that would yield a recommendation to bring to the Board for their consideration.
- b. Staff to begin the process of preparing an IRS opinion letter and to bring back updates to the Committee until it is finalized.
- c. Staff to create more opportunities for directors to connect with the public and deliver more presentations to committees of other elected bodies; and to promote more tours of the Silicon Valley Advanced Water Purification Center.

The Committee asked staff to reschedule the next meeting, and the Chair will call the meeting, according to the Brown Act, when that date is known.

7. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS AND RECOMMENDATIONS.

Ms. Lin Moore, Board Administrative Assistant II, read the Committee's requests.

6. ADJOURN.

Chairperson Estremera adjourned the meeting at 1:45 p.m., to the next meeting to be determined and noticed in accordance with the Brown Act.

Respectfully submitted,

Lin Moore
Board Administrative Assistant II

Approved:



Committee: Recycled Water Committee
Meeting Date: 05/30/2017
Agenda Item No.: 4.1
Unclassified
Manager: K. Oven
Email: Koven@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Expedited Purified Water Program Update

RECOMMENDED ACTION:

Receive information on staff's follow-up actions from the March 27, 2017 Work Study Session on the Expedited Purified Water Program and provide direction to staff.

SUMMARY:

On March 27, 2017, a Board Work Study Session was held on the Dual Track Procurement for the Expedited Purified Water Program (Program). The Board heard presentations on project delivery experiences from four public agencies in California—Orange County Water District and the cities of San Jose, Rialto, and Stockton. The Board directed staff to schedule another Work Study Session and specifically requested to arrange for a presentation from the San Diego County Water Authority. The Board also posed several questions to staff to prepare for the next Work Study Session for the Board's further discussion and consideration in choosing a progressive design-build (PDB) or a design-build-finance-operate-maintain (P3) project delivery method for the Program.

The purpose of this Program update is to provide the Committee with staff's progress in addressing the following issues, and to receive direction on any further information the Committee believes should be presented to the full Board:

1. Financial: Does the District have sufficient capacity to publicly fund all the major capital programs under consideration? Would the District's bond rating be at risk?
2. P3 Delivery Approach: Concern expressed over "progressive" element in proposed P3.
3. Cost: How do we meaningfully compare the two delivery method alternatives?
4. Workload: What staffing levels are required under PDB vs. P3?

Staff's work to date is summarized in Attachment 1.

Program Background

On March 12, 2015, the Board directed staff to proceed with expediting the expansion of purified water production for the purposes of recharging the groundwater basin to reduce the danger of subsidence from a multi-year drought. As the drought continued through calendar year 2016, staff pursued various engineering studies to develop a Purified Water Program (Program) and investigated alternative project delivery methods that could reduce the cost and schedule of constructing expanded water purification facilities.

At the July 28, 2015 Board meeting, the Board directed staff to proceed with a Request for Qualifications (RFQ) process for Program delivery, and to pursue a dual track procurement for both a Progressive Design-Build (PDB) and a Public-Private Partnership (P3) delivery method.

Dual Track Procurement Process

At the January 12, 2016 Board meeting, the Board received staff's Report on Preliminary Evaluation of Program Delivery Methods for the Program and affirmed proceeding with dual track solicitation for Statements of Qualification for both a PDB project delivery and a P3 project delivery.

Staff released a dual track Request for Qualifications (RFQ) on January 15, 2016. Statements of Qualification (SOQs) were due in mid-April 2016. The District received five (5) SOQs for the P3 approach, five (5) SOQs for a PDB of the Silicon Valley Advanced Water Purification Center (SVAWPC) expansion, and four (4) SOQs for a PDB of a pipeline to convey purified water to the Los Gatos Recharge Ponds (Los Gatos Pipeline).

The SOQs were evaluated and shortlists for each group of SOQs were published in June 2016.

Prior to the release of the RFQs in mid-January 2016, staff released a questionnaire to interested proposers regarding the RFQ/RFP process. A key response from several interested parties was a recommendation that the District choose one delivery method prior to proceeding with the Request for Proposal (RFP) stage of the Program.

Board Recycled Water Committee Activities

Staff has presented updates on various aspects of Program development to the Board's Recycled Water Committee (Committee) at their March 1, May 12, July 6, July 19, September 7, November 9, 2016 and February 16, 2017 meetings. At the July 6, 2016 Committee meeting, the Committee directed staff to proceed with facilitating a Board decision on a project delivery method for the Program prior to issuing an RFP.

On July 19, 2016, the Committee members traveled to Carlsbad, California to meet with staff and Board Chair of the San Diego County Water Authority (SDCWA) to learn about SDCWA's contracting and project development experience. Most of their projects have been delivered design-bid-build, similar to the District. For their surface water treatment facility, they employed a design-build-operate-maintain procurement due to schedule pressures and their limited water treatment operations and maintenance experience. For the Carlsbad Desalination Facility, they entered into exclusive negotiations with a P3 entity to design, construct, finance, operate and maintain the 50,000 acre-feet/year Facility. A tour of the facility was also provided. A copy of the presentation made to the Recycled Water Committee at its visit with the San Diego County Water Authority on July 19, 2016 was provided to the Board in the March 27, 2017 agenda package.

Board Activities

At the September 20, 2016 Board Work Study Session on the dual track procurement process, the Board received details about the two delivery methods, and considered staff's recommendation to pursue a PDB delivery method for the Purified Water Program.

The Board determined that, prior to choosing an alternative delivery method, it wanted to hear directly from other agencies that had considered and/or used various procurement methods.

On March 27, 2017 representatives from four California agencies (Orange County Water District and the cities of Rialto, San Jose, and Stockton) presented their experiences with traditional and alternative project delivery methods to the Board and responded to questions. A representative from the San Diego County Water Authority was invited, but was not able to attend this Work Study Session.

ATTACHMENT(S):

Attachment 1. PowerPoint presentation.

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4.1 Expedited Purified Water Program Update



March 27, 2017 Board Work Study Session: Main Points for Follow-up

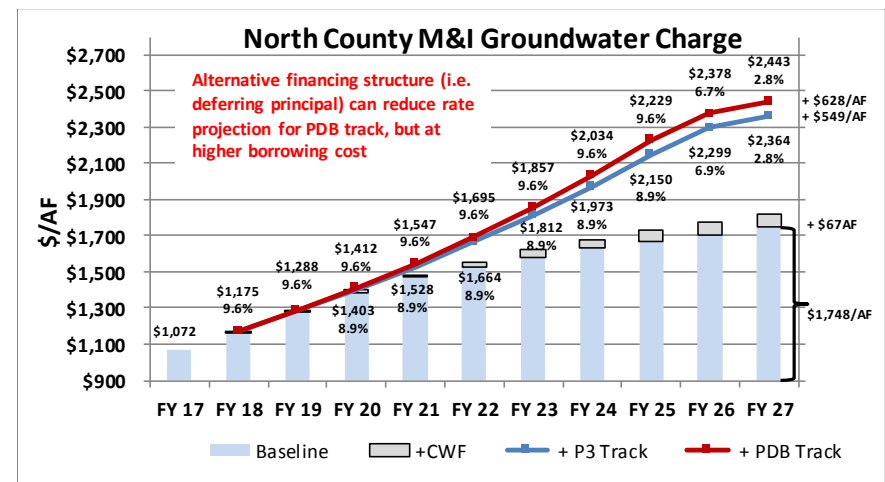
1. **Financial:** Does the District have sufficient capacity to publicly fund all the major capital programs under consideration? Would the District's bond rating be at risk?
2. **P3 Delivery Approach:** Concern expressed over “progressive” element in proposed P3.
3. **Cost:** How do we meaningfully compare the two delivery method alternatives?
4. **Workload:** What staffing levels required under PDB vs. P3?

March 27, 2017 Board Work Study Session: Main Points for Follow-up

1. **Financial:** Does the District have sufficient capacity to publicly fund all the major capital programs under consideration? Would the District's bond rating be at risk?
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District's Financial Capacity

- Capacity to fund capital expenditures under consideration (e.g., Water Fix, Storage projects, Dam Safety program, Purified Program), is subject to Board actions to raise water rates.
- Available means to dampen pace of increasing rates:
 - Scheduling of investments (e.g., Purified Program is now phased)
 - Grant funding
 - Alternate financing:
 - State Revolving Fund
 - Private financing
 - Deferring principal on PDB
- Excellent bond ratings currently: Moody's and Fitch assigned Aa1 and AA+ ratings in March 2017



Purified Water Program: Impact on Credit Rating

- **Depends on current and future financial management.**
 - **Debt service coverage levels**
 - **Reserve levels**
 - **Available water supply**
 - **Diversity of revenues**
 - **Liquidity**
- **Rating agencies silent on choice of project delivery method.**
- **Purified Water Program viewed as credit positive subject to affordability.**

March 27, 2017 Board Work Study Session: Main Points for Follow-up

1. **Financial:** Does the District have sufficient capacity to publicly fund all the major capital programs under consideration? Would the District's bond rating be at risk?
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P3 Delivery Approach

- “Progressive” form of P3 uncommon.
- Staff recommendation (if Board chooses P3): *Develop 30% design package and specific operational requirements, then proceed with procurement*
- **Advantages**
 - Uses established precedent
 - Increases competition
 - Market pricing of risk
 - Firm pricing structure
- **Disadvantages**
 - Time and cost for developing independent 30% design
 - Higher cost of P3 proposal preparation

March 27, 2017 Board Work Study Session: Main Points for Follow-up

1. **Financial:** Does the District have sufficient capacity to publicly fund all the major capital programs under consideration? Would the District's bond rating be at risk?
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P3 vs. PDB Cost Comparison

Cost comparison methods:

- 1. Value for Money analysis – Estimate project life value of P3 and value of risks transferred**
- 2. District benchmark – Compare P3 RFP bids with District's estimate of 30-year Net Present Value**
- 3. Schedule – P3 vs PDB timing**

Cost Comparison #2 – P3 Bid Parameters

Cost Element	District Benchmark	P3 Proposal
Construction Cost	Taken from independent engineer's 30% design	Based on 30% design & District RFP
Other Upfront Costs	Estimated by District	Capital budget including all fees and reserves
Financing Rate	Debt spread-to-high-grade municipal index (MMD) to be calculated based on prior 30 day average for 30-year AA rated TE bonds	Respondent commits to: <ol style="list-style-type: none"> 1. Debt/equity ratio 2. Equity cash return 3. Debt spread-to-low-investment-grade muni index to be calculated based on prior 30 day average for 30-year BBB rated private activity bonds 4. Any WIFIA or other state/federal loan benefit shall be passed-through to the District
Operations and maintenance	District cost estimates for: <ul style="list-style-type: none"> • Full operations • Standby mode • Partial operations 	Annual charge for each operating mode, based on RFP requirements

TOTAL:

**District Benchmark
30-year NPV Cost**

**Annual Service Payment and
30-year NPV Cost**

Cost Comparison #3: Schedule Factors

- 1. Program is contingent on securing:**
 - a. Treated wastewater volume**
 - b. RO concentrate management method**
 - c. Sufficient land**

- 2. Decision on delivery method**

- 3. If choose P3, should 30% design start in advance of CSJ MOU completion?**

Comparison of Delivery Method Schedules

Predecessors: Purified Program Plan and San Jose MOU



March 27, 2017 Board Work Study Session: Main Points for Follow-up

1. **Financial:** Does the District have sufficient capacity to publicly fund all the major capital programs under consideration? Would the District's bond rating be at risk?
2. **P3 Delivery Approach:** Concern expressed over “progressive” element in proposed P3.
3. **Cost:** How do we meaningfully compare the two delivery method alternatives?
4. **Workload:** What staffing levels required under PDB vs. P3?

Workload Considerations

- **Additional staffing required under both delivery methods**
- **Staff benchmarking with peer utilities**
 - **San Jose Wastewater Program**
 - **SFPUC**
 - **Water System Improvement Program**
 - **Sewer System Improvement Program**
 - **Sacramento Regional County Sanitation District's EchoWater Program**

March 27, 2017 Board Work Study Session: Main Points for Follow-up

1. **Financial:** Does the District have sufficient capacity to publicly fund all the major capital programs under consideration? Would the District's bond rating be at risk?
2. **P3 Delivery Approach:** Concern expressed over “progressive” element in proposed P3.
3. **Cost:** How do we meaningfully compare the two delivery method alternatives?
4. **Workload:** What staffing levels required under PDB vs. P3?

Are there any other issues?

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Committee: Recycled Water Committee
Meeting Date: 05/30/2017
Agenda Item No.: 4.2
Unclassified
Manager: G. Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Direct Potable Reuse Analysis Efforts Update.

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

At the February 16, 2017, Recycled Water Committee (Committee) meeting, the Committee received information on staff's evaluation of the technical and economic feasibility of direct potable reuse (DPR). Two of the technical issues under evaluation are:

1. Treatability of raw water blended with purified water at the drinking water treatment plants; and
2. Conveyance capacity of the Central Pipeline and whether it can accommodate the combination of South Bay Aqueduct flow and purified water flow.

Staff continues to evaluate both indirect potable reuse (IPR) and DPR configurations involving delivery of purified water to Los Gatos recharge ponds and augmentation of raw water deliveries to Penitencia and Rinconada Water Treatment Plants.

Regarding the treatability of raw water blended with purified water at the drinking water treatment plants, one of the key issues is to verify whether there are sufficient State Water Project (SWP) supplies available to achieve a target blend ratio with the purified water suitable for treatment at the District's drinking water facilities. Our literature search indicates that treatment is feasible when raw water is supplemented with purified water at blends up to 50 percent of purified water. From a California regulatory standpoint, currently there are no regulations in place for DPR. However, case studies indicate that a blend up to 50 percent was permitted by Texas regulatory agencies for raw water augmentation in Wichita Falls, Texas. Staff plans to examine different blend scenarios of SWP water and purified water.

Another question is whether the conveyance capacity of the Central Pipeline can adequately accommodate flows from the South Bay Aqueduct and the purified water plant at different blend ratios. The Central Pipeline would be the conduit to deliver the blended water to Rinconada Water Treatment Plant and Los Gatos recharge ponds. Staff plans to perform hydraulic modeling to verify Central Pipeline capacity for these blended flows.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

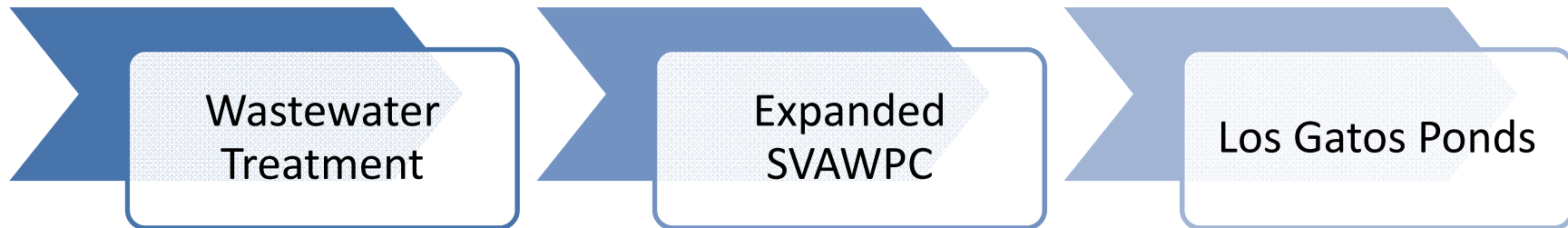
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4.2 Direct Potable Reuse Analysis Efforts Update

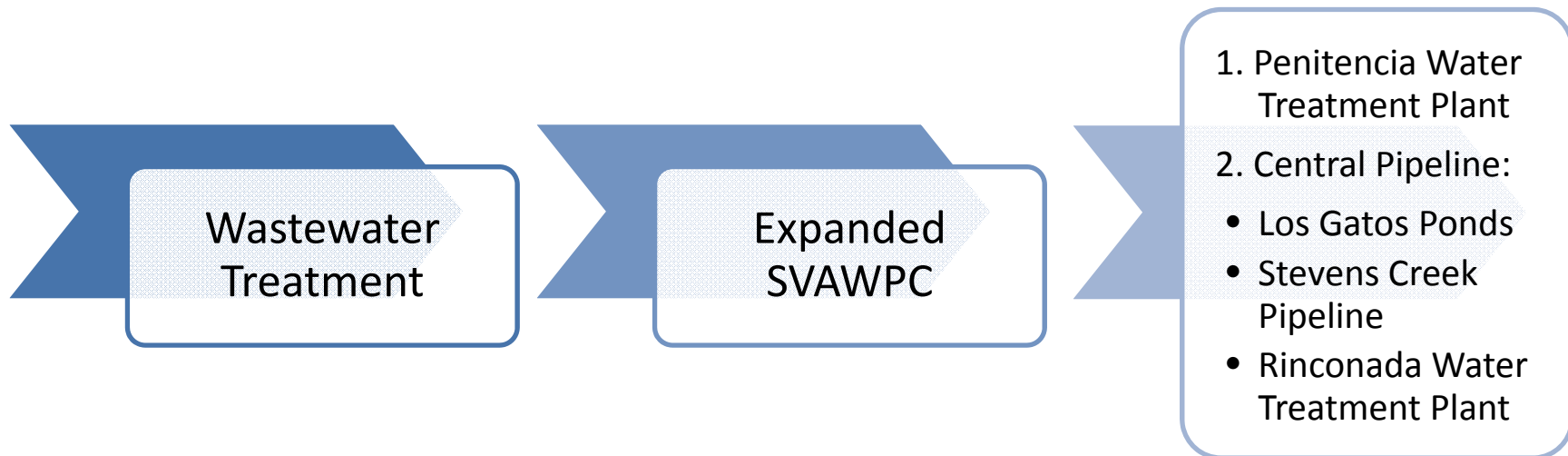


4.2 Potential Potable Reuse Alternatives

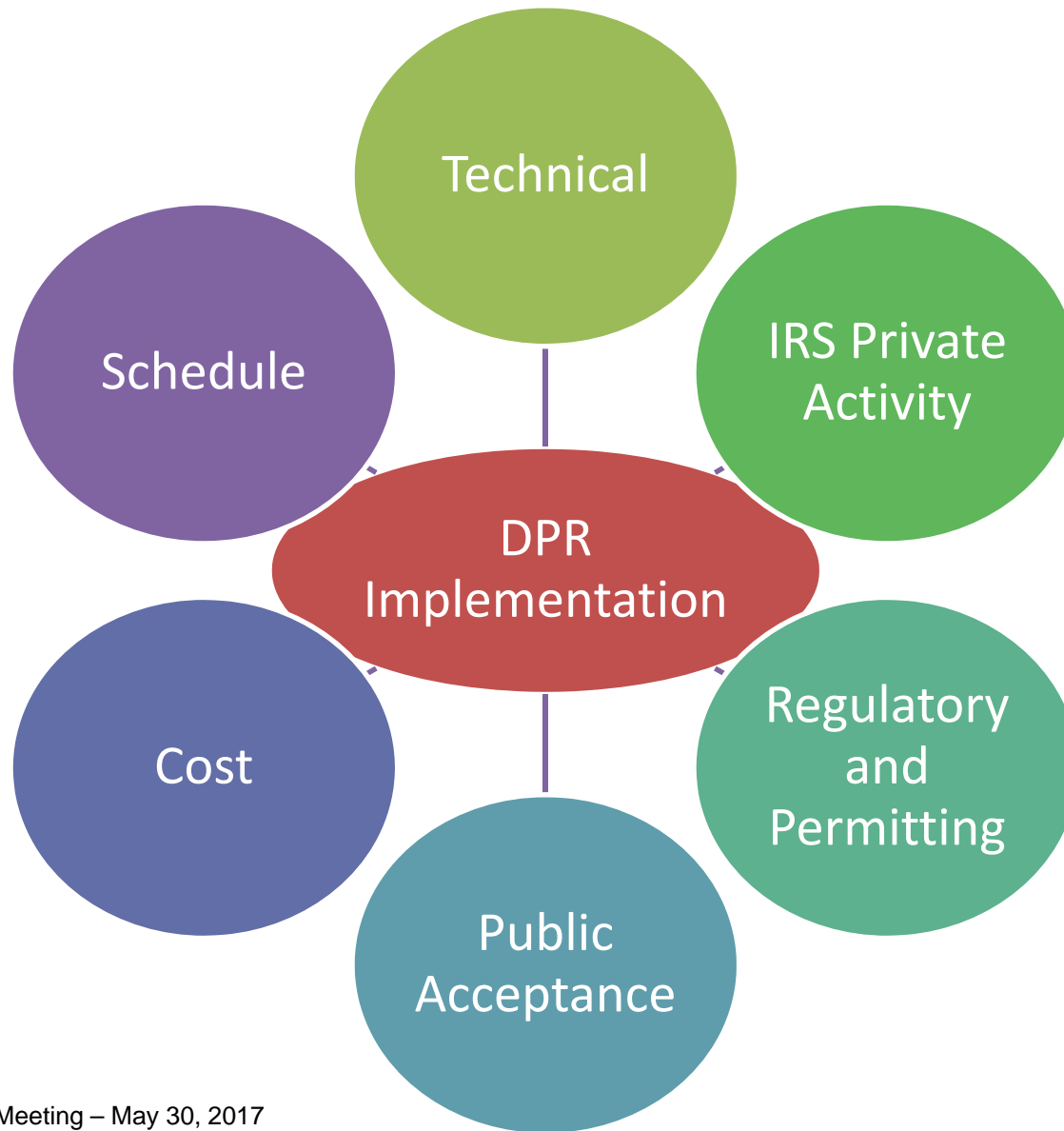
IPR



DPR/IPR



4.2 DPR Feasibility Analysis



4.2 Technical Analysis Update

1. Blending raw water with purified water

- Available imported water allocation
- Literature review
 - Feasible up to 50% purified water
- Regulatory considerations
 - No California regulations
 - Up to 50% in Texas



2. Capacity of Central Pipeline

- Hydraulic modeling of conveyance capacity

3. DPR Coalition of California Water Utilities

- Develop common framework for implementation of DPR in California



DPR Facilities in Wichita Falls, TX
Images: WaterReuse

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Committee: Recycled Water Committee
 Meeting Date: 05/30/2017
 Agenda Item No.: 4.3
 Unclassified
 Manager: D. Taylor
 Email: dtaylor@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Update on Private Activity Analysis.

RECOMMENDED ACTION:

Receive information on private activity analysis action plan and discuss next steps.

SUMMARY:

At the February 16, 2017, Recycled Water Committee (Committee) meeting, the Committee supported staff’s intent to evaluate the technical and economic feasibility of direct potable reuse (DPR) and initiate the legal analysis to ensure compliance with the Internal Revenue Code requirements for financing public facilities necessary to implement DPR with tax-exempt debt obligations. After consultation with bond and tax counsel (Stradling Yocca Carlson & Rauth), staff recommends the following plan of action:

Phase	Description	Time Estimate (months)	Legal Cost Estimate*	
			Amount	Hours
Phase 1 – Information Gathering	Bond Counsel fact finding with District staff on DPR design, operation and integration with existing tax exempt financed facilities	1	District: \$15K	District: 26
Phase 2 – Draft Private Letter Ruling (PLR)	Bond Counsel confers with Internal Revenue Service (IRS) informally and prepares initial draft of private letter ruling in cooperation with District staff	1 - 2	District: \$17.5K	District: 30
Phase 3 – Collaborate with City of San José	Coordinate review of private letter ruling with the City of San José (CSJ), including CSJ bond counsel	2 - 3	District: \$12.5K CSJ: \$TBD	District: 20 CSJ: TBD
Phase 4 – Submit PLR to IRS and receive guidance	Bond Counsel submits private letter ruling to IRS for review, respond to questions, and receive guidance	5 - 9	District: \$12.5K IRS: \$30K	District: 20
	Total Estimate	9 – 15	District: \$57.5K IRS: \$30K CSJ: \$TBD	95

*Legal costs are preliminary estimates only for bond and tax counsel to work with District staff to develop the private letter for submission to the IRS; actual costs will depend on actual hours worked charged at \$575 per hour for District legal counsel and the CSJ legal counsel rates to be confirmed by CSJ. TBD = To Be Determined.

SUBJECT: Update on Private Activity Analysis.

05/30/2017

BACKGROUND:

Section 141 of the U.S. Internal Revenue Code is the primary Federal Tax Law Provision relating to the private use of facilities financed with tax-exempt bonds proceeds. In addition, regulations issued in 1997 and 2002 and referred to as the private use regulations provide significant guidance on the application of Section 141 to “output” facilities (which the Program is likely to be). For interest on an issue of municipal obligations to be excluded from gross income, no more than 10 percent of the proceeds of the issue (5 percent for 501(c)(3) bonds) may be used in the trade or business of a nongovernmental person and secured by an interest either in property used in a nongovernmental person’s trade or business or in payments in respect of such property. Among other things, the terms of contracts for sale of potable water sold directly to municipal and private water retailers must be reviewed to determine whether a facility is used in the trade or business of a nongovernmental person.

To examine whether DPR may be considered public use, and thereby exempt from private activity limitations imposed by the IRS, staff will work with bond and tax counsel to establish an allocation methodology to distribute all DPR to serve public agencies only, such as meeting public retailer demand and any environmental releases, among other future public uses. This methodology will be described in the private letter ruling request to be submitted to the IRS for formal guidance. Upon receiving a positive guidance, the District may finance the Expedited Purified Water Program with tax-exempt governmental bonds or private activity bonds under a public-private partnership project delivery method structured in conformance with the IRS qualified management contract rules. Additionally, a positive IRS guidance will also protect the tax-exempt status of the San José-Santa Clara Regional Wastewater Facility. However, should the IRS reject the proposed allocation methodology, DPR may not be a viable option for the District to pursue so long as both the District and the CSJ have tax-exempt governmental bonds outstanding or plan to issue such bonds to finance its capital improvement plan.

ATTACHMENT(S):

None.



Committee: Recycled Water Committee
Meeting Date: 05/30/2017
Agenda Item No.: 4.4
Unclassified
Manager: R. Callender
Email: rcallender@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Legislative Update on Assembly Bill 574 (Quirk) Potable Reuse and Senate Bill 740 (Wiener) Onsite Treated Water.

RECOMMENDED ACTION:

Receive updates on recycled water legislation and discuss next steps.

SUMMARY:

AB 574 (Quirk) Potable Reuse

District Position: The Board adopted a "Support" position at the April 25, 2017, Board meeting.

Status: Assembly Appropriations Committee.

Bill Summary: AB 574 would amend California law regarding the potable reuse of recycled water by changing regulatory definitions to clarify where in the process the recycled water is being added to the water sources used. Specifically, this legislation removes the existing statutory terms of "direct potable reuse," "indirect potable reuse for groundwater recharge," and "surface water augmentation," replacing them with the following:

- a) Groundwater augmentation;
- b) Reservoir augmentation;
- c) Raw water augmentation; and
- d) Treated water augmentation.

The bill would require the State Water Resources Control Board (State Water Board) to establish a framework for the regulation of potable reuse projects by June 1, 2018. The State Water Board would be required to take into consideration the recommendations made in the report provided to the legislature on December 30, 2016, "Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse," which found that the development of direct potable reuse regulations is feasible.

Finally, the bill would require the adoption of uniform water recycling criteria for potable reuse through raw water augmentation, by December 31, 2021, and would allow the State Water Board to extend this date if the research recommended in the feasibility report has not been completed.

SB 740 (Wiener) Onsite Treated Water

District Position: Staff plans to present staff this bill to the Board at it's May 23, 2017 meeting with a recommended position.

SUBJECT: Legislative Update on Assembly Bill 574 (Quirk) Potable Reuse and Senate Bill 740 (Wiener) Onsite Treated Water. 05/30/2017

Status: Senate Appropriations Committee

Bill Summary: SB 740 would require the State Water Board, in consultation with other state agencies, to promulgate regulations by December 1, 2018, for a comprehensive risk based framework that would provide local agencies a program to develop oversight and management for onsite water reuse, for non-potable use.

The bill would require the framework to be flexible to adapt to new water sources, end uses, and advances in approaches and methodologies to estimate the risk of onsite water treatment to public health.

The bill would provide local agencies the decision-making authority to decide whether to adopt the practices set forth in the framework.

SB 740 was heard in the Senate Environmental Quality Committee on April 17, 2017, where several issues were raised with the bill by the committee consultant. The bill was passed out of the committee with the understanding that the concerns raised would be addressed by Senator Wiener before the bill is heard in the Senate Appropriations Committee.

The amendments requested by the committee consultant included:

- Replacing the term “framework,” with “regulation” as framework does not have a regulatory meaning.
- Clarify that the regulations would be pursued in compliance with the Administrative Procedures Act.
- Clarify that the regulations would be protective of public health and the environment.
- Require the State Water Board to develop regulations for local permitting programs to approve this type of onsite water reuse.
- Limit the regulations to exclude single-family homes.

ATTACHMENT(S):

Attachment 1: AB 574 (Quirk) Potable Reuse (A-04-18-2017)

Attachment 2: SB 740 (Wiener) Onsite Treated Water (A-03-23-2017)

AMENDED IN ASSEMBLY APRIL 18, 2017

AMENDED IN ASSEMBLY MARCH 23, 2017

CALIFORNIA LEGISLATURE—2017–18 REGULAR SESSION

ASSEMBLY BILL

No. 574

Introduced by Assembly Member Quirk

February 14, 2017

An act to amend Sections 13560 and 13561 of, to amend the heading of Chapter 7.3 (commencing with Section 13560) of Division 7 of, and to add Sections 13560.5 and 13561.2 to, the Water Code, relating to water.

LEGISLATIVE COUNSEL'S DIGEST

AB 574, as amended, Quirk. Potable reuse.

Existing law establishes the State Water Resources Control Board and the California regional water quality control boards as the principal state agencies with authority over matters relating to water quality. Existing law required the State Department of Public Health to, on or before December 31, 2013, adopt uniform water recycling criteria for indirect potable reuse for groundwater recharge. Existing law also required the department to develop and adopt uniform water recycling criteria for surface water augmentation, as defined, by December 31, 2016, if a specified expert panel found that the criteria would adequately protect public health, and required the department to investigate the feasibility of developing uniform water recycling criteria for direct potable reuse and to provide a final report on that investigation to the Legislature by December 31, 2016. Existing law defined the terms “direct potable reuse,” “indirect potable reuse for groundwater recharge,” and “surface water augmentation” for these purposes. Existing law

transferred these powers and responsibilities to the State Water Resources Control Board on July 1, 2014.

This bill would remove certain references to “direct potable reuse,” “indirect potable reuse for groundwater recharge,” and “surface water augmentation,” and would instead specify the four different types of potable reuse projects as “groundwater augmentation,” “reservoir augmentation,” “raw water augmentation,” and “treated *drinking* water augmentation.”

The bill would require the state board, on or before December 31, 2021, to adopt uniform water recycling criteria for potable reuse through raw water augmentation, as specified, and would allow the board to extend this date if certain criteria is met. The bill would permit the state board to adopt the uniform water recycling criteria as emergency regulations, as specified.

This bill would make certain findings and declarations relating to potable reuse, including a finding that the state board, on or before June 1, 2018, should establish a framework for the regulation of potable reuse projects.

Vote: majority. Appropriation: no. Fiscal committee: yes.
 State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. The heading of Chapter 7.3 (commencing with
 2 Section 13560) of Division 7 of the Water Code is amended to
 3 read:

4
 5 CHAPTER 7.3. POTABLE REUSE
 6

7 SEC. 2. Section 13560 of the Water Code is amended to read:
 8 13560. The Legislature finds and declares the following:

9 (a) In February 2009, the state board unanimously adopted, as
 10 Resolution No. 2009-0011, an updated water recycling policy,
 11 which includes the goal of increasing the use of recycled water in
 12 the state over 2002 levels by at least 1,000,000 acre-feet per year
 13 by 2020 and by at least 2,000,000 acre-feet per year by 2030.

14 (b) Section 13521 requires the department to establish uniform
 15 statewide recycling criteria for each varying type of use of recycled
 16 water where the use involves the protection of public health.

1 (c) Achievement of the state’s goals depends on the timely
2 development of uniform statewide recycling criteria for potable
3 water reuse and of a clear pathway for approval of potable reuse
4 projects.

5 (d) This chapter is not intended to delay, invalidate, or reverse
6 any study or project, or development of regulations by the
7 department, the state board, or the regional boards regarding the
8 use of recycled water for potable reuse.

9 (e) This chapter shall not be construed to delay, invalidate, or
10 reverse the state board’s ongoing review of projects consistent
11 with Section 116551 of the Health and Safety Code.

12 (f) The water recycling goals of 700,000 acre-feet of water per
13 year by the year 2000 and 1,000,000 acre-feet of water per year
14 by the year 2010, established in Section 13577, have not been met.

15 (g) It is the intent of the Legislature to encourage the
16 development of potable reuse to mitigate the impact of long-term
17 drought and climate change.

18 (h) A 2014 report by the WaterReuse Research Foundation, “The
19 Opportunities and Economics of Direct Potable Reuse” found that
20 potable reuse could provide up to 1.1 million acre-feet per year of
21 new drinking water supplies for California.

22 (i) The state board adopted uniform water recycling criteria for
23 the replenishment of groundwater basins in June 2014 and is
24 developing uniform water recycling criteria for the augmentation
25 of surface water reservoirs pursuant to Section 13562.

26 (j) The state board report to the Legislature, “Investigation on
27 the Feasibility of Developing Uniform Water Recycling Criteria
28 for Direct Potable Reuse,” found that it is feasible to develop
29 uniform water recycling criteria for direct potable reuse that is
30 protective of public health.

31 (k) The state board report to the Legislature stated that the state
32 board should develop a common framework across various types
33 of direct potable reuse projects to help avoid discontinuities in the
34 risk assessment and then sequentially develop uniform water
35 recycling criteria.

36 SEC. 3. Section 13560.5 is added to the Water Code, to read:

37 13560.5. The Legislature finds and declares that on or before
38 June 1, 2018, the state board should establish a framework for the
39 regulation of potable reuse projects. When establishing the
40 framework, the state board should include all of the following:

1 (a) The consideration of recommendations provided in the state
2 board’s “Investigation on the Feasibility of Developing Uniform
3 Water Recycling Criteria for Direct Potable Reuse.”

4 (b) A schedule for completing the recommended research
5 described in “Investigation on the Feasibility of Developing
6 Uniform Water Recycling Criteria for Direct Potable Reuse.”

7 (c) A regulatory framework for potable reuse projects that will
8 be protective of public health.

9 (d) A process and timeline for updating, if necessary, uniform
10 water recycling criteria for potable reuse through reservoir
11 augmentation.

12 SEC. 4. Section 13561 of the Water Code is amended to read:
13 13561. For purposes of this chapter, the following terms have
14 the following meanings:

15 (a) “Department” or “state board” means the State Water
16 Resources Control Board.

17 (b) “Potable reuse” means the planned use of municipal
18 wastewater that has gone through multiple barrier treatment
19 processes to produce or supplement a drinking water supply that
20 has at least an equivalent level of public health protection as other
21 sources of water supply permitted under the California Safe
22 Drinking Water Act (Chapter 4 (commencing with Section 116270)
23 of Part 12 of Division 104 of the Health and Safety Code). A
24 potable reuse project is any one of the following:

25 (1) “Groundwater augmentation” means the planned placement
26 of recycled water for replenishment of a groundwater basin or an
27 aquifer that has been designated as the source of water supply for
28 a public water system, as defined in Section 116275 of the Health
29 and Safety Code.

30 (2) “Reservoir augmentation” means the planned placement of
31 recycled water into a raw surface water reservoir used as a source
32 of domestic drinking water supply for a public water system, as
33 defined in Section 116275 of the Health and Safety Code. ~~Code,~~ *Code,*
34 *or into a constructed system conveying water to such a reservoir.*

35 (3) “Raw water augmentation” means the planned placement
36 of recycled water into a system of pipelines or aqueducts that
37 deliver raw water to a drinking water treatment ~~plan~~ *plant* that
38 provides water to a public water system, as defined in Section
39 116275 of the Health and Safety Code.

1 (4) “Treated *drinking* water augmentation” means the planned
2 placement of recycled water into the water distribution system of
3 a public water system, as defined in Section 116275 of the Health
4 and Safety Code.

5 (c) “Uniform water recycling criteria” has the same meaning
6 as in Section 13521.

7 SEC. 5. Section 13561.2 is added to the Water Code, to read:

8 13561.2. (a) (1) On or before December 31, 2021, the state
9 board shall adopt uniform water recycling criteria for potable reuse
10 through raw water augmentation. The state board shall develop
11 the uniform water recycling criteria *for potable reuse through raw*
12 *water augmentation* after soliciting stakeholder input from water
13 agencies, wastewater agencies, local public health officers,
14 environmental organizations, environmental justice organizations,
15 public health nongovernmental organizations, and the business
16 community.

17 (2) If the state board finds that the recommended research
18 described in subdivision (b) of Section 13560.5 is insufficient to
19 adopt the uniform water recycling criteria by December 31, 2021,
20 the state board may, by June 30, 2021, extend the uniform water
21 recycling criteria deadline by up to 18 months.

22 (3) If the state board finds that it needs longer than the date
23 specified in paragraph (2), the state board shall do both of the
24 following:

25 (A) Consult with an independent expert review panel to
26 determine why the additional 18-month extension cannot be met.
27 The review panel shall also make the following determinations:

28 (i) The outstanding tasks necessary for the state board to
29 complete the uniform water recycling criteria.

30 (ii) A revised completion date for the state board to complete
31 the uniform water recycling criteria.

32 (B) No later than December 31, 2021, submit to the Legislature
33 the findings and determinations made by the independent expert
34 review panel under subparagraph (A).

35 (b) Nothing in this section shall prohibit the state board from
36 using its existing authority to permit potable reuse projects pursuant
37 to Section 116550 of the Health and Safety Code before the
38 adoption of uniform recycling criteria pursuant to this section.

39 (c) Regulations adopted by the state board pursuant to this
40 section, and any amendment thereto, shall be adopted as emergency

1 regulations in accordance with Chapter 3.5 (commencing with
2 Section 11340) of Part 1 of Division 3 of Title 2 of the Government
3 Code. The adoption of these regulations is an emergency and shall
4 be considered by the Office of Administrative Law as necessary
5 for the immediate preservation of the public peace, health, safety,
6 and general welfare. Notwithstanding Chapter 3.5 (commencing
7 with Section 11340) of Part 1 of Division 3 of Title 2 of the
8 Government Code, any emergency regulations adopted by the state
9 board shall remain in effect until revised by the state board. Before
10 adopting the regulations under this section, the state board shall
11 allow for public comment and hearing. The state board shall
12 provide an opportunity for public review and comment on the
13 proposed regulations for at least 60 days and shall consider public
14 comments before adopting the regulations.

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AMENDED IN SENATE MARCH 23, 2017

SENATE BILL

No. 740

Introduced by Senator Wiener

February 17, 2017

An act to add Article 8 (commencing with Section 13558) to Chapter 7 of Division 7 of the Water Code, relating to water quality.

LEGISLATIVE COUNSEL'S DIGEST

SB 740, as amended, Wiener. Onsite treated water.

Existing law requires the State Water Resources Control Board to establish uniform statewide recycling criteria for each varying type of use of recycled water where the use involves the protection of public health.

This bill ~~would~~ *would, on or before December 1, 2018*, require the state board, in consultation with other state agencies, to adopt regulations, as specified, for a comprehensive risk-based framework to assist local jurisdictions in developing ~~a program for the~~ oversight and management ~~of programs for~~ onsite treatment of water for nonpotable use. The bill would require the ~~regulations framework~~ *regulations framework* to be flexible to adapt to new water sources, end uses, and advances in approaches and methodologies to estimate the risk of onsite water treatment to public health. *The bill would specify that a local jurisdiction is not required to adopt the practices set forth in the framework.*

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. Article 8 (commencing with Section 13558) is
2 added to Chapter 7 of Division 7 of the Water Code, to read:

3
4 Article 8. Onsite ~~Treated~~ *Nonpotable Water System Guidelines*

5
6 13558. (a) ~~The~~ *(1) On or before December 1, 2018, the state*
7 *board, in consultation with other state agencies agencies, including,*
8 *but not limited to, the State Department of Public Health and the*
9 *California Building Standards Commission, shall adopt regulations*
10 *for a comprehensive risk-based framework to assist local*
11 *jurisdictions, including, but not limited to, a city, county, or special*
12 *district, in developing a program for the oversight and management*
13 *of programs that will be protective of public health for onsite*
14 *treatment of water for nonpotable use. The regulations framework*
15 *shall address, but are is not limited to, all of the following:*

16 ~~(1)~~
17 (A) ~~Types of water sources.~~ *sources, including graywater,*
18 *rainwater, stormwater, blackwater, condensate, and foundation*
19 *drainage.*

20 ~~(2)~~
21 (B) *Performance-based log reduction targets for the treatment*
22 *of pathogens, categorized by water source.*

23 ~~(3)~~
24 (C) *Authorized end uses for treated water sources.*

25 ~~(4)~~
26 (D) *Management and monitoring practices.*

27 ~~(5)~~
28 (E) *Permitting and reporting practices.*

29 (2) *The framework shall not address untreated graywater*
30 *systems that are used exclusively for subsurface irrigation, which*
31 *are regulated by Chapter 16 (commencing with Section 1601.0)*
32 *of the California Plumbing Code (Part 5 of Title 24 of the*
33 *California Code of Regulations).*

34 (b) ~~The regulations framework~~ *established pursuant to*
35 *subdivision (a) shall be flexible to adapt to new water sources, end*
36 *uses, and advances in approaches and methodologies to estimate*
37 *the risk, if any, of onsite water treatment to public health.*

- 1 (c) *A local jurisdiction is not required to adopt the practices*
- 2 *set forth in the framework adopted pursuant to subdivision (a).*

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Committee: Recycled Water Committee
Meeting Date: 05/30/2017
Agenda Item No.: 4.5
Unclassified
Manager: G. Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

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

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

The purpose of this agenda item is to provide an update to the Recycled Water Committee (Committee) on the Countywide Recycled and Purified Water Master Plan (Master Plan).

Since the November 2016 Committee update, District staff hosted the second stakeholder workshop on January 27, 2017, that brought together leadership from local producers, wholesalers, retailers, environmental groups, and stakeholders of water reuse systems to develop a vision statement and identify key components for the Master Plan. The workshop consisted of facilitated exercises focusing on visioning, opportunities, and challenges analysis. Participants from thirteen agencies provided feedback on ten proposed components of the Master Plan, including, stakeholder engagement, governance, regional planning and integration, water treatment and contributing sewersheds, economics and funding, water quantity and quality, environmental permitting and regulations, public perception and engagement, infrastructure and land, and schedule. Attending organizations were also asked to assign a representative from their agency to participate in a Technical Working Group, which will support development of the technical efforts of the Master Plan.

Additionally, staff developed a request for proposal (RFP) to support development of the Master Plan. The scope of services includes hydraulic modeling and economic analysis to assess feasible alternatives. The RFP was published on March 9, 2017. Staff is working through the procurement process and the selection of a consultant is expected to be completed by July 2017.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

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4.5 Update on Countywide Recycled and Purified Water Master Plan



4.5 Master Plan Stakeholder Meeting - January



- 20 participants representing 13 agencies
- Developed a vision statement and identified key components of the Master Plan
- Began formation of a Technical Working Group

4.5 RFP Summary – Preliminary Scope of Services

Define goals
and objectives

Baseline
analysis

Conceptual
alternatives

Feasible
alternatives

Recommended
alternatives

Funding
analysis

Master plan
report

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Committee: Recycled Water Committee
Meeting Date: 05/30/2017
Agenda Item No.: 4.6
Unclassified
Manager: G. Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Update on City of Palo Alto, City of Mountain View, and San Francisco Public Utilities Commission/Bay Area Water Supply and Conservation Agency Collaboration Efforts. (G. Hall)

- A. District/City of Palo Alto Memorandum of Understanding
- B. City of Palo Alto Advanced Water Purification System Feasibility Study
- C. Northwest County Recycled Water Strategic Plan
- D. San Francisco Public Utilities Commission/Bay Area Water Supply and Conservation Agency Memorandum of Understanding

RECOMMENDED ACTION:

1. That the Committee recommend that the District Board of Directors (Board) Authorize the Chief Executive Officer to Execute the Memorandum of Understanding (MOU) Between the Santa Clara Valley Water District (District) and the City of Palo Alto (Palo Alto), Assessing the Feasibility of Developing Water Reuse Alternatives; and
2. Receive information and discuss next steps (related to Items 4.6B, 4.6C, and 4.6D).

SUMMARY:

The purpose of this agenda item is to provide the Recycled Water Committee (Committee) with updates on a partnership under development with Palo Alto/City of Mountain View (Mountain View) and a joint study with San Francisco Public Utilities Commission (SFPUC)/Bay Area Water Supply and Conservation Agency (BAWSCA). District staff has negotiated an MOU with Palo Alto (Attachment 2), which will assess the feasibility and potential funding to develop potable water reuse options in Santa Clara County. Attachment 1 summarizes key components of the MOU.

This agenda item also provides updated information about a proposed MOU between the District and Mountain View, ongoing work for the Northwest County Recycled Water Strategic Plan (Strategic Plan), and updated information on the MOU with SFPUC/BAWSCA.

A. District/Palo Alto and District/Mountain View Memorandum of Understanding

The proposed MOU between the District/Palo Alto (Attachment 2) describes the Parties' commitments to identify the requirements, issues, activities, resources, costs, and funding necessary to implement potable and non-potable water reuse options. The terms of this MOU cover important assumptions and considerations such as source water availability, permitting, reverse osmosis concentrate management, land requirements, and governance. Palo Alto is not currently discussing or planning to discuss effluent transfers with other agencies outside of the

SUBJECT: Update on City of Palo Alto, City of Mountain View, and San Francisco Public Utilities Commission/Bay Area Water Supply and Conservation Agency Collaboration Efforts.

5/30/2017

Palo Alto Regional Water Quality Control Plant (RWQCP) partner agencies during the term of this MOU. Terms of the draft MOU were presented to the Joint Recycled Water Committee of elected officials from Palo Alto and Mountain View on September 27, 2016.

In development of this District/Palo Alto MOU, staff from all three agencies determined that a separate MOU between the District and Mountain View would be necessary to better address the agencies' different concerns and commitments. The District and Mountain View are currently negotiating terms of a separate MOU. Staff expects to have a final MOU ready to present to this Committee by August 6, 2017.

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

The Advanced Water Purification Feasibility Study (Feasibility Study) will determine how to improve recycled water quality from the RWQCP. Deliverables in this effort include: an evaluation of the different treatment options to reduce total dissolved solids concentrations; treatment facility layout options within the existing RWQCP property; and additional storage and instrumentation needed to blend purified water with tertiary treated recycled water.

The Feasibility Study consultant submitted the Final Feasibility Study Report on April 4, 2017, outlining possible locations for the microfiltration, reverse osmosis, and concentrate treatment systems at the RWQCP. Staff from the District, Palo Alto and Mountain View have reviewed the submittals and are currently reviewing next steps, which include a 10 percent design document.

C. Northwest County Recycled Water Strategic Plan

The Strategic Plan includes the expansion of recycled water from Palo Alto RWQCP to recycled water customers in Stanford, Los Altos, Los Altos Hills, Mountain View, East Palo Alto, and Menlo Park. Key deliverables include: a financial plan, preliminary design, funding strategies, and a study of groundwater in Northwest County. The purpose of the groundwater study is to compile baseline information on localized aquifer conditions including sources and quantities of recharge, groundwater pumping and water quality. This information will be used to evaluate the feasibility for indirect potable reuse of advanced treated recycled water.

The Strategic Plan consultant is on track and has submitted several workplans for the major components including Phase III expansion to Stanford Research Park, Potable Reuse Feasibility, and External Funding strategies. The findings from the Strategic Plan will provide the basis for key elements of the District/Palo Alto and District/Mountain View MOUs.

D. San Francisco Public Utilities Commission/Bay Area Water Supply and Conservation Agency Memorandum of Understanding

SFPUC and District staff prepared an MOU for SFPUC and BAWSCA to participate in a Feasibility Study to evaluate alternatives to improve regional water supply reliability. The key items of the Feasibility Study include: defining objectives; analyzing constraints; identifying conceptual alternatives; and deciding on next steps. On March 28, 2017, the Board approved execution of the District/SFPUC/BAWSCA MOU. District staff is working to obtain consultant services to conduct the technical analyses outlined in the MOU. Attachment 1 summarizes the status of collaboration efforts with SFPUC/BAWSCA.

SUBJECT: Update on City of Palo Alto, City of Mountain View, and San Francisco Public Utilities Commission/Bay Area Water Supply and Conservation Agency Collaboration Efforts.

5/30/2017

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

Attachment 2: Copy of District/Palo Alto Draft MOU

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4.6 Update on Palo Alto, Mountain View, and SFPUC/BAWSCA Collaboration



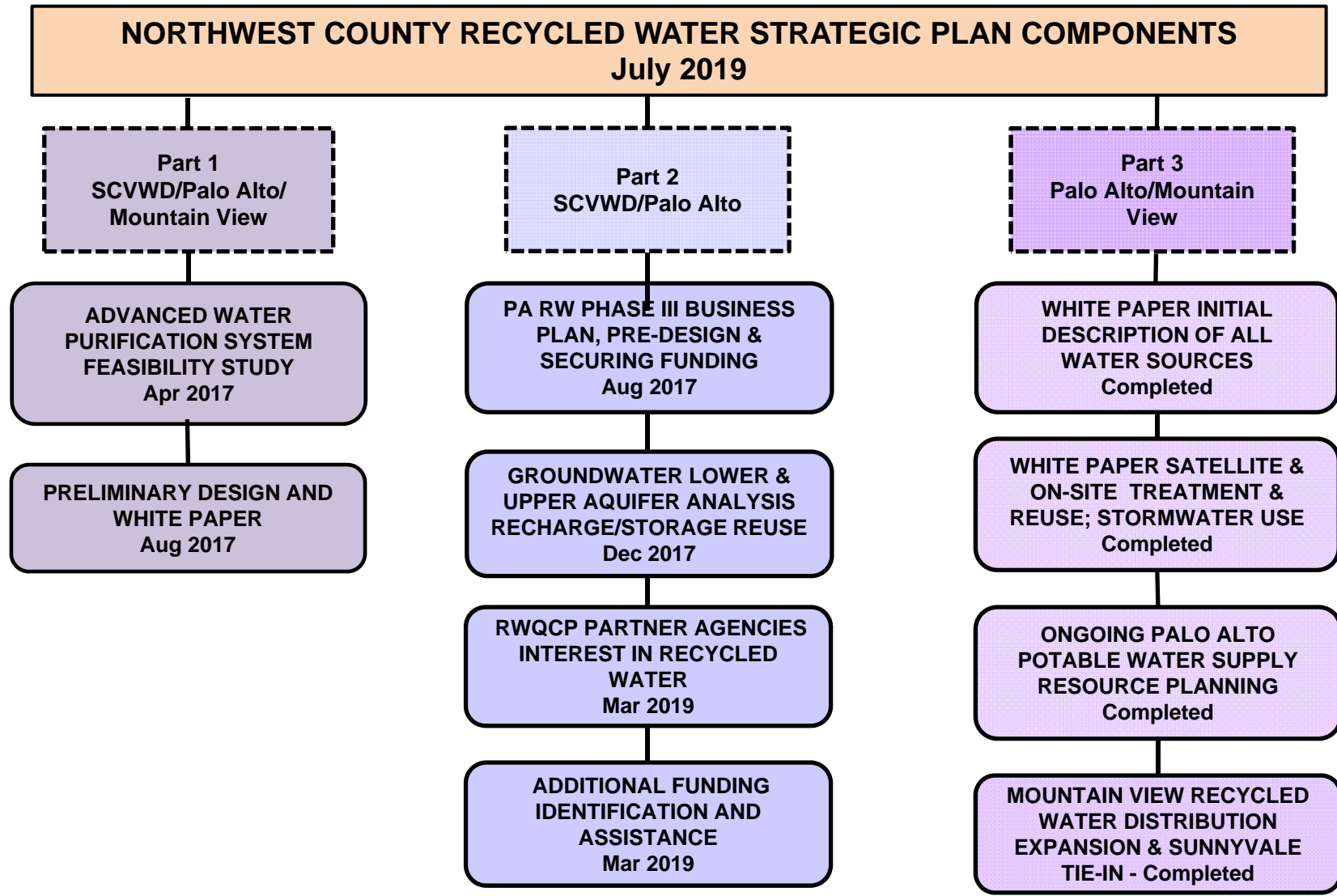
4.6 Palo Alto Memorandum of Understanding

Item	Palo Alto MOU Terms of Agreement (Assumptions)
Land	<ul style="list-style-type: none"> • Investigate possible locations
Source Water and Quality	<ul style="list-style-type: none"> • Evaluate opportunities for District to obtain up to 10 MGD of treated wastewater
Effluent Commitment	<ul style="list-style-type: none"> • Palo Alto is not discussing or planning to discuss effluent transfers with other agencies outside its RWQCP partner agencies during the term of the MOU
RO Concentrate	<ul style="list-style-type: none"> • Engineered wetlands, existing ponds, or San Francisco Bay
Governance	<ul style="list-style-type: none"> • Joint Recycled Water Committee • Technical Advisory Committee
Potential Impacts	<ul style="list-style-type: none"> • Reduced flow to the Bay

4.6 Mountain View Collaboration Effort

Item	Schedule/Milestones
MOU Status	<ul style="list-style-type: none">Mountain View and District staff continue negotiations
Present Draft MOU to Recycled Water Committee	<ul style="list-style-type: none">August 6, 2017
MOU Approval/Execution by District Board and Sunnyvale City Council	<ul style="list-style-type: none">August/September 2017

4.6 Northwest County Recycled and Purified Water Efforts



4.6 Northwest County Recycled and Purified Water Efforts

Part 1

Advanced Water Purification System Feasibility Study and Preliminary Design

- **Consultant:**
 - MNS Engineering

- **Submittals:**
 - District, Palo Alto, and Mountain View Staff reviewed all submittals.
 - Final Report Submitted on April 4, 2017

- **Next steps:**
 - Preliminary 10% Design and White Paper - August 2017
 - White Paper on Site 4 Feasibility - August 2017

4.6 Northwest County Recycled and Purified Water Efforts

Part 1

Advanced Water Purification System Feasibility Study and Preliminary Design

Key Outcomes

Treatment Technology Evaluation To Reduce TDS

- Electro-dialysis Reversal
- Forward Osmosis
- **Reverse Osmosis**

Treatment System Alternatives and Build-Out Capacity

- **Site 1: 2.25 MGD**
- Site 2: <1.125 MGD
- Site 3: 4.5 MGD
- **Site 4: 6.75 MGD**
- Site 5: 4.5 MGD

Next Steps

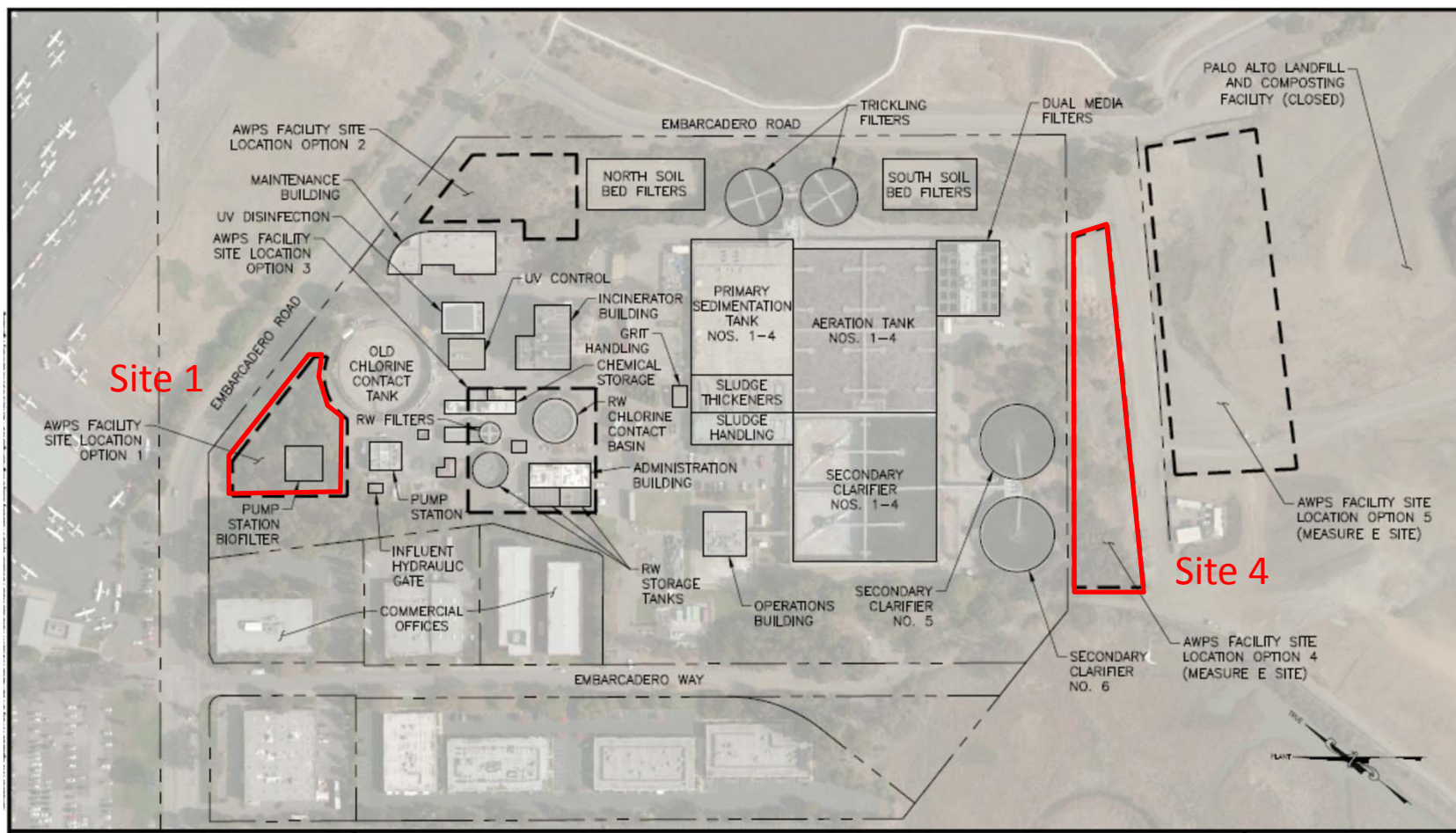
- Preliminary Design Document for **Site 1**
- White Paper on **Site 4** Feasibility

4.6 Northwest County Recycled and Purified Water Efforts

Part 1

Advanced Water Purification System Feasibility Study and Preliminary Design

Treatment System Site Alternatives



4.6 Northwest County Recycled and Purified Water Efforts

Part 2

Northwest County Recycled Water Strategic Plan

- **Consultant:**
 - Woodard & Curran (Formerly RMC)

- **Workplans Submitted To Date:**
 - Phase III Expansion to Stanford Research Park

 - IPR Feasibility (GW Assessment, etc.)

 - External Funding Strategy

- **Contract Completion:**
 - Planned July 2019

4.6 Northwest County Recycled and Purified Water Efforts

Part 2

Northwest County Recycled Water Strategic Plan

Key Objectives

- **Phase III Expansion:**
Expand existing recycled water pipeline to South Palo Alto and Stanford Research Park
- **Northwest Groundwater Study:**
Conduct study to evaluate potable reuse feasibility (including localized aquifer conditions, sources and quantities of recharge, pumping, and water quality)
- **Potable Reuse Study:**
Evaluate feasibility for Indirect Potable Reuse (IPR) of advanced treated recycled water
- **Expand Recycled Water to Partner Agencies:**
Evaluate the expansion of recycled water to Los Altos, Los Altos Hills, Mountain View, East Palo Alto, and Menlo Park

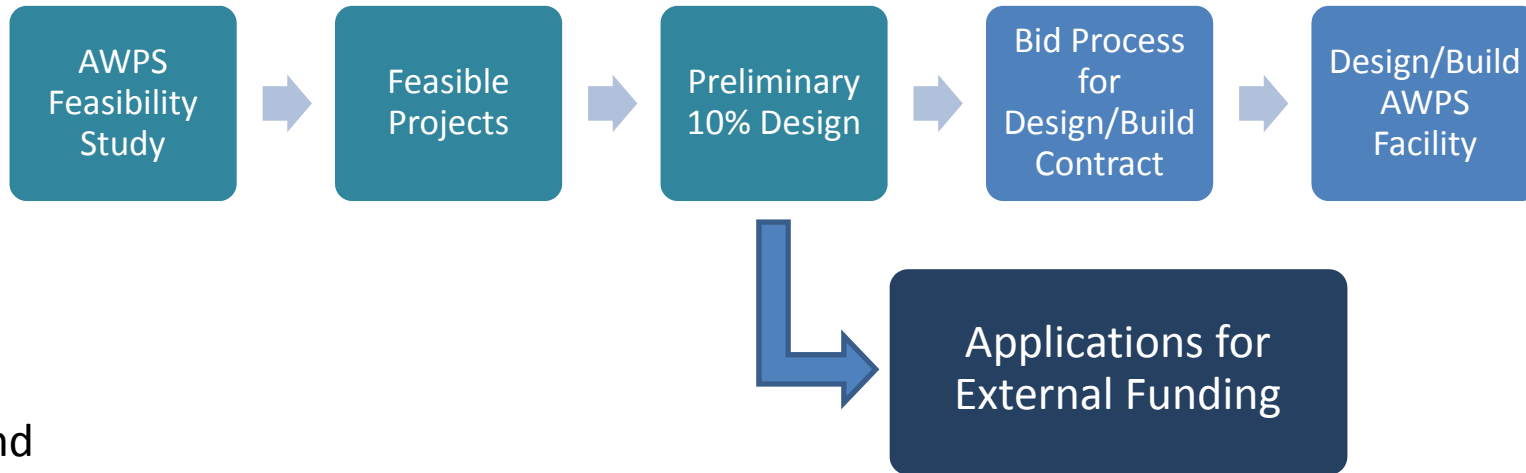
The above efforts also include consultant assistance with regulatory support and public outreach

4.6 Northwest County Recycled and Purified Water Efforts

Part 2

Northwest County Recycled Water Strategic Plan

Task 5 - External Funding Strategy



Legend

- Advanced Water Purification System (AWPS) Feasibility Study Contract
- No Existing Contract
- Northwest County Recycled Water Strategic Plan Contract

4.6 SFPUC /BAWSCA MOU Update

Item	Schedule/Milestones
MOU Approval Status	<ul style="list-style-type: none">• District Board approved MOU on March 28, 2017
MOU Coordination	<ul style="list-style-type: none">• Secure consultant support – June 2017• Hold kickoff meeting with SFPUC/BAWSCA – July 2017
MOU Activities and Studies	<ul style="list-style-type: none">• 2018

4.6 Staff Recommendation

1. That the Committee recommend that the District Board of Directors Authorize the Chief Executive Officer to Execute the Memorandum of Understanding Between the Santa Clara Valley Water District and the City of Palo Alto, Assessing the Feasibility of Developing Water Reuse Alternatives

STAFF PROPOSED

Memorandum of Understanding Between the Santa Clara Valley Water District and the City of Palo Alto, Assessing the Feasibility of Developing Water Reuse Alternatives

This Memorandum of Understanding (“MOU”) is made and entered into this ____ day of _____, 2017, by and between the City of Palo Alto (“Palo Alto”), a chartered municipal corporation and the Santa Clara Valley Water District (“District”), a special district created by Legislature of the State of California. Palo Alto and the District hereinafter may be referred to individually as “Party” or collectively as “Parties.”

RECITALS

- A. The Parties desire to undertake efforts to develop certain plans and studies related to exploring opportunities to work together or with other governmental agencies to expand the production and use of recycled and purified water within Santa Clara County; and
- B. The Parties understand that effective long-range planning requires a diverse water supply that supplements variable rainfall and imported water supplies, and that recycled and purified water are important components of Santa Clara County’s water supply portfolio, and
- C. As a result of over four years of drought conditions throughout California, the District’s local and imported supplies have been limited, and substantial customer water use reduction was required to avoid severe groundwater depletion; and
- D. Palo Alto owns and operates a Regional Water Quality Control Plant (“RWQCP”, or “Palo Alto Non-Potable Recycled Water System”) that supplies an average flow of one million gallons per day MGD of tertiary treated recycled water meeting California’s Title 22 requirements to existing customers within its service area for non-potable reuse, and manages a recycled water program; and
- E. The RWQCP treats wastewater not only for the City of Palo Alto, but also for the Cities of Los Altos, Los Altos Hills and Mountain View as well as for Stanford University and the East Palo Alto Sanitary District (“RWQCP Partners”); and
- F. The District is investigating the feasibility of developing up to 45,000 acre-feet per year (“AFY”) of purified water by the year 2025. The first phase of implementation focuses on developing 20,000 AFY of purified water through a phased expansion of the Silicon Valley Advanced Water Purification Center (“SVAWPC”) and construction of a conveyance pipeline to the Los Gatos recharge system. Subsequent phases of implementation may include further expansion of the SVAWPC and/or projects in Palo Alto, and neighboring cities. Timing and implementation of subsequent phases will be contingent upon the District’s updated determination of water supply need, further economic analysis, and determinations of technical and regulatory feasibility; and
- G. The District and Palo Alto have collaborated to expand recycled water since the 1970’s; and

STAFF PROPOSED

- H. The District and Palo Alto have been working together to evaluate plans for Palo Alto to provide the District with treated wastewater so that the District could further treat that water to meet indirect potable reuse (“IPR”) and potentially direct potable reuse (“DPR”) requirements, and subsequently convey purified water to groundwater recharge sites for infiltration, injection into aquifers that serve as supply sources for potable water, and potentially, once approved by the California State Water Resources Control Board (“SWRCB”), for use in DPR projects; and
- I. The District is interested in building, owning and operating an Advanced Water Purification Facility (“AWPF”) within the vicinity of the Palo Alto RWQCP and desires to define the project, roles, responsibilities, and activities of an investigation to potentially design, construct and operate an AWPF project; and
- J. Palo Alto and the District are currently updating the 1992 Palo Alto Recycled Water Master Plan, also known as the Northwest County Recycled Water Strategic Plan (“Strategic Plan”). The Strategic Plan includes improvements and expansion of RWQCP facilities and an evaluation of recharge and reuse for future IPR, and has a longer implementation schedule than the District’s proposed schedule for building and operating a District-owned AWPF; and
- K. The Parties intend to collaborate to evaluate additional options with the Cities of Mountain View, Sunnyvale and San Jose, such as conveying purified water from the District’s AWPF, as described in recital H above. The Parties also intend to evaluate the feasibility of the conveyance of recycled water effluent from the Palo Alto’s RWQCP to the City of Sunnyvale’s Water Pollution Control Plant (“WPCP”), and/or conveyance to an expanded SVAWPC; and
- L. The Parties desire to collaborate and engage the Cities of Mountain View, Sunnyvale, San Jose, and Santa Clara to develop a separate multi-agency MOU to explore the feasibility of building said items identified in Recital J.

NOW, THEREFORE, IN CONSIDERATION OF THE FOREGOING AND THE MUTUAL PROMISES HEREINAFTER PROVIDED, THE PARTIES AGREE AS FOLLOWS:

1. **PURPOSE AND SCOPE OF MOU.** This MOU is intended to broadly describe the Parties’ commitments to study the feasibility of: (i) the District’s plan to construct and operate an Advanced Water Purification Facility; (ii) water recharge and reuse alternatives identified in the Northwest County Recycled Water Strategic Plan; and (iii) future development of Palo Alto’s Non-Potable Recycled Water System. Those alternatives shall be referred to collectively in this MOU as the “Water Reuse Alternatives”. The MOU is not intended to formalize a commitment by the Parties to implement any of the Water Reuse Alternatives, but the commitment by the Parties does extend to identify the requirements, issues, activities, resources, costs, and financing necessary to implement any of the Water Reuse Alternatives.

STAFF PROPOSED

2. **RESPONSIBILITIES OF PARTIES.** Each Party will designate a project manager and identify additional staff contacts, and provide necessary resources to advance the work set forth in this MOU.
3. **DISTRICT'S NEW FACILITIES.** After investigating whether to implement any of the Water Reuse Alternatives, if the District decides to implement any of them, it understands that the cost of planning, designing, financing, constructing and operating any facilities comprising the Water Reuse Alternatives is to be borne by the District, unless the Parties execute a signed agreement to jointly fund any of those costs.
4. **IDENTIFYING SITES RECEIVING THE ADVANCED TREATED RECYCLED WATER.** As part of its investigation, the District will identify land sites suitable for using purified water for groundwater infiltration, injection, and/or future facility connections suitable for implementation of direct potable reuse.
5. **ASSUMPTIONS RELATED TO IMPLEMENTING WATER REUSE ALTERNATIVES.** The Parties understand that the assumptions listed in (a) – (f) of this Section 5 are not intended to impose obligations onto either Party, but instead are assumptions the Parties will take into consideration as they investigate whether to implement any of the Water Reuse Alternatives. The Parties intend to address issues regarding commitments of source water, reverse osmosis (“RO”) concentrate management, land rights, and other matters related to pursuing any of the Water Reuse Alternatives in a comprehensive agreement to be negotiated by the Parties in the future. In the meantime, for the purposes of this MOU, the Parties assume, without obligation, that:
 - a. In conjunction with its participation in and funding of the Strategic Plan, the District will evaluate opportunities for transfer by the RWQCP Partners to the District of up to 10 MGD of RWQCP effluent to be used for countywide expansion of recycled and purified water. Palo Alto acknowledges the District as the primary water wholesaler within the County and looks to the District to lead this planning effort.
 - b. Palo Alto may enter into agreements with any RWQCP Partner to provide transfers of any effluent to which that RWQCP Partner has a contractual share. The District acknowledges that RWQCP Partners may develop specific plans for use of their contractual shares of RWQCP effluent. Palo Alto is not currently discussing or planning to discuss, during the term of this MOU, other effluent transfers.
 - c. If circumstances beyond the control of Palo Alto adversely impact the quality or volume of source water, Palo Alto may temporarily limit the amount of source water made available to the District, but Palo Alto will use best efforts to reestablish the availability of source water;
 - d. Palo Alto is not liable for any costs or damages resulting from a temporary interruption in service or limitation of source water due to decreased influent flows, operation difficulties, or an inability of the Palo Alto RWQCP to meet NPDES requirements;

STAFF PROPOSED

- e. Any treated wastewater provided by Palo Alto to the District will require negotiations between the District and Palo Alto. Terms and conditions for acquisition of treated wastewater will be included in an agreement to be negotiated by the Parties in the future.
- f. Palo Alto does not have sufficient information to determine whether requirements will be established by State and Federal regulatory agencies for the minimum discharge flow rates of treated effluent from the Palo Alto RWQCP to its outfall, which is connected to the San Francisco Bay, in order to meet fish, wildlife and other environmental requirements. Palo Alto, in collaboration with the District, will attempt to determine whether such requirements are intended to be established by relevant regulatory agencies, and both Parties will share any relevant findings between them.

6. JOINT EVALUATION OF POTENTIAL DISTRICT ROLE IN PALO ALTO'S NON-POTABLE RECYCLED WATER SYSTEM.

- a. The Parties agree to collaborate in determining how best to continue to serve Palo Alto's existing customers in the future, and how the costs should be shared and related to developing any Water Reuse Alternative that involves changes to the Palo Alto Non-Potable Recycled Water System.
- b. The Parties will continue to collaborate in exploring the future development of Palo Alto Non-Potable Recycled Water System for delivering recycled water to customers in Santa Clara County and in determining the service requirements for potential new recycled water customers to be connected to that system.
- c. The Parties will evaluate (i) continuation of the ownership, operation, and maintenance of the distribution component of Palo Alto's recycled water system, or (ii) acquisition of Palo Alto Non-Potable Recycled Water System by the District with the subsequent transfer of responsibilities for supplying and operating it by the District. The Parties shall mutually agree to a timeframe for this evaluation.

7. DEVELOPMENT OF A RESIDUALS MANAGEMENT PLAN.

- a. If District desires to implement any of the Water Reuse Alternatives that result in the generation of RO concentrate, the Parties will develop a residuals management plan describing the management of treatment residuals ("Residuals Management Plan"). In the development of this Residuals Management Plan, it is assumed that the District or its contractors will be responsible for processing and managing treatment residuals, including RO concentrate. District will work with Palo Alto to identify opportunities to discharge or process treatment residuals, including conveyance systems to potentially bring RO concentrate from other locations to Palo Alto for treatment, discharge facilities, and receiving sites such as engineered wetlands, ponds or the San Francisco Bay. The Residuals Management Plan will identify the composition, quantity, and point of connection that will apply to the treatment residuals.
- b. The Residuals Management Plan shall also describe a process for the treatment and disposal of solid waste produced by the AWWPF, and the conveyance of that treated solid waste to the

STAFF PROPOSED

Palo Alto RWQCP, if the Parties decide to do so. The District will be responsible for treating and conveying solid waste generated by the AWPf. Palo Alto will continue to be responsible for managing its existing solid waste and operating the Palo Alto RWQCP's solid waste disposal system.

8. DEVELOPMENT OF A PERMITTING PLAN.

- a. District and Palo Alto will collaborate in developing a permitting acquisition plan ("Permitting Plan"). The Permitting Plan shall identify the permits necessary for any of the Water Reuse Alternatives that the District decides to implement. It shall also describe each Party's responsibility for pursuing such permits, including the preparation and filing of any and all applications necessary to secure the permits.
- b. The Parties agree to investigate potential environmental issues associated with reduced Palo Alto RWQCP effluent discharge into the San Francisco Bay due to Palo Alto's potential delivery of treated wastewater to the District to implement any of the Water Reuse Alternatives.

9. DEVELOPMENT OF A WATER QUALITY MONITORING PLAN.

The Parties agree to develop a Water Quality Monitoring Plan to conduct sampling and laboratory analyses as necessary to monitor and determine water quality related to any of the Water Reuse Alternatives that the District decides to implement. In the plan, Palo Alto will be responsible for sampling and laboratory analyses of source water supplied by the Palo Alto RWQCP while District will be responsible for sampling and laboratory analyses of water being processed within and by any AWPf implemented by District. The Parties will share water quality and processing data associated with District's operation of an AWPf.

10. LAND AND LEASE OPTION AGREEMENT.

For the Water Reuse Alternatives that involve development of an AWPf, District will investigate possible locations for siting such AWPf. Palo Alto will provide the District with information regarding permits and rights of way acquisition, including reasonable access to sites, records, and other information relevant to District's site investigations.

11. CALIFORNIA ENVIRONMENTAL QUALITY ACT ("CEQA") COMPLIANCE.

The Parties agree that the planning and feasibility studies contemplated in this MOU are exempt from CEQA requirements pursuant to Section 15262 of CEQA guidelines that exempt projects involving only feasibility or planning studies for future actions which have not been approved, adopted or funded. Depending on the Water Reuse Alternative selected, if any, the Parties will determine who will serve as CEQA lead agency. District and Palo Alto will collaborate in preparation of the CEQA document.

12. COST SHARING.

Activities undertaken by either Party in furtherance of this MOU shall be at that Party's sole cost and expense, unless otherwise agreed to in writing by the Parties.

13. GRANTS AND EXTERNAL LOANS.

District and Palo Alto will collaborate to identify and evaluate possible state and federal grants for the planning, designing or constructing a Water Reuse Alternative including, but not limited to, transmission facilities for recycled

STAFF PROPOSED

water, sites for groundwater infiltration and injection, residuals and RO concentrate management facilities, and other related improvements to Palo Alto's existing Title 22 non-potable recycled water system. For funding opportunities that are deemed reasonably feasible, the Parties will work together in preparation and support of grant and loan applications and if successful in negotiation of financing agreements.

14. **TERM AND TERMINATION.** The term of this MOU commences on the Effective Date and expires on the earlier of: December 31, 2020, or the date the Parties execute the comprehensive agreement referenced in Section 5 of this MOU.

15. **GOVERNANCE COORDINATION.**

- a. District and Palo Alto staff will continue to inform the District-Palo Alto Joint Recycled Water Committee, including providing timely updates on concepts, proposals, issues, requirements, work progress, schedules, budgets, and work products on all aspects of Water Reuse Alternatives affecting both Parties.
- b. District and Palo Alto will establish a Technical Advisory Committee (TAC) comprised of the District's Chief Executive Officer and Palo Alto's City Manager, or their designees (collectively the Executive Managers), and other experts and individuals, as mutually agreed to by the Executive Managers to review work products and make recommendations to the District and Palo Alto.

16. **AUTHORITY.** Each Party represents that the persons who execute this MOU have the authority to do so on behalf of the organization they represent. No other authority is granted as part of this MOU.

17. **NOTICES.** All notices or instruments required to be given or delivered by law or this MOU shall be in writing and shall be effective upon receipt thereof and shall be by personal service or delivered by depositing the same in any United States Post Office, registered or certified mail, postage prepaid, addressed to:

If to Palo Alto:	James Keene Palo Alto City Manager 250 Hamilton Avenue Palo Alto, CA 94301
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If to District:	Norma J. Camacho Interim Chief Executive Officer Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118
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Any Party may change its address for receiving notices by giving written notice of such change to the other Party in accordance with this section.

STAFF PROPOSED

18. **WAIVER.** Nothing contained in this MOU will be construed as a waiver of any immunities or defenses that a Party may have under applicable provisions of law. This provision will survive expiration or termination of this MOU.
19. **AMBIGUITY.** The Parties acknowledge that this is a negotiated agreement, that they have had the opportunity to have this MOU reviewed by their respective legal counsel, and that the terms and conditions of this MOU are not to be construed against any Party on the basis of such Party's draftsmanship thereof.
20. **MUTUAL INDEMNIFICATION.** In lieu of and notwithstanding the pro rata risk allocation that might otherwise be imposed between the Parties pursuant to Government Code Section 895.6, the Parties agree that all losses or liabilities incurred by a Party shall not be shared pro rata but, instead, Palo Alto and District agree that pursuant to Government Code Section 895.4, each Party shall fully indemnify and hold the other Party, its officers, governing board members, employees, and agents, harmless from any claim, expense or cost, damage or liability imposed for injury (as defined in Government Code Section 810.8) occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying Party, its officers, employees, or agents, under or in connection with or arising out of any work, authority, or jurisdiction delegated to such Party under this MOU. No Party, nor any board member, council member, officer, employee, or agent, thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of the other Party hereto, its officers, board members, council members, employees, or agents, under or in connection with or arising out of any work, authority or jurisdiction delegated to such other Party under this MOU. The obligations set forth in this Section 20 will survive termination and expiration of this MOU.
21. **MODIFICATION.** This MOU may be modified at any time by the mutual written agreement of the Parties.
22. **NON-DISCRIMINATION.** In connection with this MOU, no Party will discriminate against or grant preferential treatment to any person on the basis of race, sex, color, age, marital status, religion, sexual orientation, actual or perceived gender identity, disability, ethnicity, national origin, or any other basis prohibited by state or federal law.
23. **ASSUMPTION OF RISK.** District and Palo Alto acknowledge that there is a risk entering into this MOU and that undertaking of any activities under this MOU is uncertain and that the activities contemplated by this MOU do not bind either Party to commence implementing any of the Water Reuse Alternatives.
24. **COMPLETE AND CURRENT AGREEMENT.** This MOU represents the entire understanding of the Parties with respect to the matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to the matters in this MOU.
25. **SEVERABILITY.** If any provision in this MOU is found by a court of law to be illegal or unenforceable, the MOU will remain in full force and effect as if that provision, section or paragraph were not written into the MOU, unless the omitted language is integral to the Parties' intention and purpose of entering into this MOU.

STAFF PROPOSED

26. **NO THIRD PARTY BENEFICIARIES.** Nothing in this MOU, express or implied, is intended to or shall confer upon any other person any right, benefit or remedy of any nature whatsoever under or by reason of this MOU.

27. **COUNTERPARTS.** The Parties may execute this MOU in one or more counterparts, each of which shall be deemed an original, but all of which together shall be deemed one and the same instrument.

IN WITNESS WHEREOF, the Parties have executed this MOU as of the date first set forth above.

City of Palo Alto

Signature _____

Name:

Title: City Manager

Approved as to form:

Signature _____

Name:

Title: Senior Deputy City Attorney

Signature _____

Name:

Title: City Clerk

Santa Clara Valley Water District

Signature _____

Norma J. Camacho

Interim Chief Executive Officer

Approved as to form:

Signature _____

Anthony Fulcher

Senior Assistant District Counsel



Committee: Recycled Water Committee
Meeting Date: 05/30/2017
Agenda Item No.: 4.7
Unclassified Manager: G. Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Update on Sunnyvale Memorandum of Understanding

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

The purpose of this agenda item is to provide the Committee with updates on the Memorandum of Understanding (MOU) developed with City of Sunnyvale (Sunnyvale) for assessing the feasibility of water reuse alternatives. On March 28, 2017, the District Board of Directors (Board) approved execution of the MOU. Reciprocal approval by Sunnyvale City Council is anticipated for May 23, 2017. Sunnyvale staff and District staff have initiated coordination efforts in preparation for feasibility studies defined in the MOU.

Attachment 1 summarizes the anticipated work plan for implementation of the MOU.

Since 2014, District staff has been evaluating options in collaboration with Sunnyvale to produce purified water for potential potable reuse projects on the north side of the County. The MOU describes the parties' commitments to identify the requirements, issues, activities, resources, costs, and funding necessary to implement potable and non-potable water reuse options. The terms of the MOU cover important assumptions and considerations such as source water availability, permitting, reverse osmosis concentrate management, land requirements, and governance.

The MOU outlines activities such as feasibility studies, permitting plans, monitoring plans, and governance coordination. A majority of the Sunnyvale MOU work will be performed under the Countywide Recycled and Purified Water Master Plan. Additional MOU activities will be covered by the Reverse Osmosis Concentrate Management Plan and other studies. Coordination with Sunnyvale is underway for this MOU. An initial meeting with Sunnyvale staff to implement MOU commitments was held on April 18, 2017. Additional bi-monthly meetings are anticipated to continue through completion of the MOU. A project update will be provided at the next District/Sunnyvale Joint Recycled Water Committee meeting planned for July 2017.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

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4.7 Update on Sunnyvale Memorandum of Understanding



4.7 Sunnyvale MOU Milestones

Item	Schedule/Milestones
MOU Approval Status	<ul style="list-style-type: none">• District Board approved MOU on March 28, 2017• Planned for Sunnyvale City Council approval on May 23, 2017
MOU Coordination	<ul style="list-style-type: none">• Kickoff meeting with Sunnyvale staff on April 18, 2017• Bi-monthly coordination meetings
MOU Activities and Studies	<ul style="list-style-type: none">• Complete by 2018/2019

4.7 Sunnyvale MOU Activities - Work Plan

Activity	Planned Work
Feasibility Studies	<ul style="list-style-type: none"> • Countywide Recycled and Purified Water Master Plan • Reverse Osmosis Concentrate Management Plan • Additional studies, if needed
Permitting Plans	<ul style="list-style-type: none"> • Countywide Recycled and Purified Water Master Plan • Additional studies, if needed
Monitoring Plans	<ul style="list-style-type: none"> • Future studies
Governance	<ul style="list-style-type: none"> • Countywide Recycled and Purified Water Master Plan • Future negotiations for Comprehensive Agreement

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Committee: Recycled Water Committee
Meeting Date: 05/30/2017
Agenda Item No.: 4.8
Unclassified
Manager: G. Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Update on South County Efforts.
A. Joint Water Resources Committee
B. South County Recycled Water Pipeline Expansion

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

A. Joint Water Resources Committee

On January 18, 2017, and February 6, 2017, respectively, the Cities of Morgan Hill and Gilroy approved the formation of a joint City Council(s) and District Board committee for items related to recycled water and other areas of common interest in water resources. The formation of this committee was in response to a letter of invitation extended by the District Board to form a joint committee for items related to recycled water, dated July 27, 2016.

The committee representatives will include District Board Chair John Varela and Vice Chair Richard Santos; the City of Gilroy Mayor Dion Bracco and Councilmember Cat Tucker; and the City of Morgan Hill Councilmembers Larry Carr and Rene Spring. The first committee meeting is tentatively scheduled for May 24, 2017. Staff continues to work with the cities to finalize the meeting date and develop the agenda.

B. South County Recycled Water Pipeline Expansion

In September 2016, the US Bureau of Reclamation (Reclamation) signed an Assistance Agreement with the District to provide \$4 million in federal grant funding as part of Reclamation's WaterSMART Title XVI Water Reclamation and Reuse Program. On May 12, 2017, Reclamation announced award of an additional \$1.68 million in funding, for a combined total of \$5.68 million in federal funding for the South County Recycled Water Short-term Phase 1B/2A Project (South County Project). As part of the grant requirements, Reclamation is responsible to prepare an update to the approved 2010 NEPA document for the South County Project. Per the request of Reclamation, the District performed an additional cultural survey to support the NEPA update. The District is scheduled to complete and submit a draft report of the survey in early May 2017. The South County Project advertisement for construction is on hold until Reclamation completes the NEPA update and the update is approved by both parties. The estimated schedule for construction has been revised from February 2017 through March 2018 to June 2019 through July 2020.

SUBJECT: Update on South County Efforts.

05/30/2017

The Project Plan for the South County Project has been updated to include the planning, design, and construction of an additional 2,100 linear feet of 30-inch diameter recycled water pipeline extension. This proposed project phase, Phase 2B, will complete the extension of the South County Recycled Water Pipeline system to connect the 359-acre Glen Loma Ranch private development and associated recycled water system currently under construction. Once completed, the combined recycled water system extension by the District and within the Glen Loma Ranch development will complete the proposed South County Recycled Water Master Plan Capital Improvement Plan recommendation to construct a new 30-inch recycled water pipeline between the South County Regional Wastewater Authority treatment plant and District's booster pump station located at Christmas Hill Park.

ATTACHMENT(S):

None.



Committee: Recycled Water Committee
Meeting Date: 05/30/2017
Agenda Item No.: 4.9
Unclassified
Manager: R. Callender
Email: RCallender@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Update on Outreach Opportunities for District Board of Directors to Engage with the Public and Elected Body Committees on Recycled and Purified Water Expansion Efforts.

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

The Santa Clara Valley Water District (District) continually promotes its Expedited Purified Water Program through public engagement measures aimed at building community and stakeholder support for the program, including public tours of the Silicon Valley Advanced Water Purification Center (SVAWPC), speakers bureau program, social media, District blog and electronic newsletter, informational materials in English, Spanish, Vietnamese and Chinese. By providing opportunities for the District's Board of Directors (Board) to connect with their constituents and committees of other elected bodies through presentations, it allows for one-on-one conversations about purified water's value and benefits.

The District's Board are the direct link to the communities served by the agency. The 2017 outreach and education plan for the program provides various opportunities for the board to engage with the public, neighborhood, and civic groups throughout Santa Clara County.

- Using Nextdoor, a notice was sent under each directors' name to his/her district informing residents of free SVAWPC tours and speaker bureau presentations on the purified water program and general District information. With each presentation request, directors are given first opportunity to present to the organizations in their respective district.
- Many municipalities in Santa Clara County distribute electronic and/or hardcopy newsletters to their constituents. In coordination with the public information officers of these municipalities, informational ads and/or details on the SVAWPC public tours and speakers bureau presentations are being placed in each city encouraging neighborhood or civic groups to schedule private tours or presentation for their groups.
- The Asian Community Open House, scheduled for July 15, 2017, provides an opportunity for District Board members to engage with residents. Additional event information is forthcoming as event details unfold. This event is similar to the Latino Tour Day held August 2017.

SUBJECT: Update on Outreach Opportunities for District Board of Directors to Engage with the Public and Elected Body Committees on Recycled and Purified Water Expansion Efforts.

05/30/2016

In addition to the tactics in the outreach and education plan, the Office of Government Relations is actively identifying opportunities with elected counterparts, including, but not limited to the following presentation opportunities over the next six months:

- The Santa Clara County Board of Supervisors' Housing, Land Use, Environment, and Transportation Committee
- The Santa Clara County Cities Association (which includes elected representatives from each of the 15 cities)

This approach is helping build a supporter base of neighborhood stakeholders and local community leaders for the Expedited Purified Water Program.

Surveys

A public surveying firm was contracted to conduct a phone survey of Santa Clara County voters to capture attitudes and acceptance of direct potable reuse.

The survey will be conducted in Chinese, Spanish, and Vietnamese, with results brought to the Recycled Water Committee at its next meeting. The survey results will help further define the District's outreach strategy with key messaging and identify specific focus areas.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

4.9 Public Outreach Update



4.9 Public Outreach Update

Opportunities for District Board of Directors to engage with the public and elected body committees

- Utilize Nextdoor social media
- Collaborate with local municipalities to encourage tours of Silicon Valley Advanced Water Purification and speaker bureau presentations
- Attend July 15 Asian Community Day at purification center
- Present to Santa Clara County Board of Supervisors' Housing, Land Use, Environment and Transportation committees and Santa Clara County Cities Association

Water Reuse Survey

- Survey of Santa Clara County voter attitudes and acceptance of direct potable reuse



Committee: Recycled Water Committee
Meeting Date: 05/30/2017
Item No.: 5
Manager: M. Meredith
Email: mmeredith@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: 2017 Committee Work Plan.

RECOMMENDED ACTION:

Review and discuss the 2017 Committee Work Plan, and provide direction to staff.

SUMMARY:

The Clerk of the Board has directed staff to establish annual work plans for all Board committees. The 2017 Work Plan for the Recycled Water Committee is attached.

Included in the Work Plan is a "Parking Lot". The Parking Lot contains a list of items either referred to the Committee by the Board, or requested by the Committee to be brought back to it. The Committee is requested to review the Parking Lot and give feedback on agenda placement for Parking Lot items.

BACKGROUND:

The Recycled Water Committee was enacted by the Board of Directors on January 12, 2016. The Committee's purpose is to develop a long-term proposal for how the District can work together with other local agencies on recycled water opportunities within the district boundaries, to establish a collaborative process to facilitate policy discussion and sharing of technical information on recycled water issues.

It is the role of the Recycled Water Committee to meet with the other entities (Sunnyvale, Palo Alto, CSJ SC/TPAC) in individual meetings as required and/or necessary. The Recycled Water Committee can also meet with new entities if the need arises.

Work plans are established as a framework for committee discussions. They are dynamic documents, subject to change as factors occur. They provide advance notice to the public of timelines for Committee accomplishment of work, and as Committee work is accomplished and outcomes are subsequently logged onto the work plan, the work plan becomes an annual Committee accomplishment report.

ATTACHMENT(S):

Attachment 1: 2017 Committee Work Plan

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RECYCLED WATER COMMITTEE

Updated: 5/19/17

PURPOSE AND GUIDANCE

The Recycled Water Committee was enacted by the Board of Directors on January 12, 2016. The Committee's purpose is to develop a long-term proposal for how the District can work together with other local agencies on recycled water opportunities within the district boundaries, to establish a collaborative process to facilitate policy discussion and sharing of technical information on recycled water issues. It is the role of the Recycled Water Committee to meet with the other entities (Sunnyvale, Palo Alto, CSJ SC/TPAC) in individual meetings as required and/or necessary. The Recycled Water Committee can also meet with new entities if the need arises.

The Board of Directors identified the following Issues, Challenges, Strategies and Opportunities related to Recycled Water during their October 4, 2016 Priorities and Strategic Directions Work/Study Session. As such, the Recycled Water Committee, while doing its work, should seek out opportunities to address the Board's identified issues and challenges, and support the Board's identified strategies and opportunities, as follows:

Issues/Challenges	Strategies/Opportunities
<ul style="list-style-type: none"> Public perception Governmental Relations/Water Rights Funding/Delivery Method 	<ul style="list-style-type: none"> Expedite Purified Water Program partnering with San Jose/Santa Clara, plus look at potential opportunity with South Bay Recycled Facilities Develop Partnerships with Sunnyvale, Palo Alto, Mountain View for new recycled/purified water Expand South County Recycled Water partnering with SCRWA

This annual work plan establishes a framework for committee discussion and action during the annual meeting schedule. The committee work plan is a dynamic document, subject to change as external and internal issues impacting the District occur and are recommended for committee discussion. Subsequently, an annual committee accomplishments report is developed based on the work plan and presented to the District Board of Directors.

PARKING LOT

The Parking Lot contains unscheduled items referred to the Committee by the Board of Directors, or requested to by the Committee to be brought back by staff.

Date Requested	Requesting Body	Assigned Staff	Discussion Subject	Intended Outcome(s)
02/09/16	Board of Directors	K. Oven	Refer to the RWC the memo date 02/09/16, from Director Hsueh, to the Board of Directors, regarding Recommendation on Implementation of Expedited Purified Water Program, identified as item 5.2-A on the 02/9/16 Board of Directors meeting agenda.	Receive and discuss information, and consider a recommendation(s) to the Board.

RECYCLED WATER COMMITTEE

Updated: 5/19/17



PARKING LOT

The Parking Lot contains unscheduled items referred to the Committee by the Board of Directors, or requested to by the Committee to be brought back by staff.

Date Requested	Requesting Body	Assigned Staff	Discussion Subject	Intended Outcome(s)
02/16/17	Committee	K. Oven	The Committee requested staff bring back information on the technical studies, P3s, and alternatives.	Receive and discuss information, and consider a recommendation(s) to the Board.
11/09/16	Committee	G. Hall	The Committee requested staff bring back information on a proposed budget adjustment of \$100,000 to \$150,000, in the current fiscal year, as part of a cost-share opportunity with the City of Gilroy to support efforts to expand non-potable water reuse in South County.	Receive and discuss information, and consider a recommendation(s) to the Board.
07/06/16	Committee	M. Lugo	Staff is to agendize an item for the Board to discuss a naming and branding process for the Expedited Purified Water Program, similar to the process used for naming the Silicon Valley Advanced Water Purification Center.	Receive and discuss information, and consider a recommendation(s) to the Board.
07/06/16	Committee	H. Ashktorab	The Committee suggested the District continue the pursuit to have a District Director seated on the South County Regional Wastewater Authority Board of Directors.	Provide a status update to the Committee
07/06/16	Committee	H. Ashktorab	Staff is to agendize an item for Board discussion regarding how Morgan Hill can become involved in South County recycled water expansion, and directed staff to prepare a proposal letter to the City of Morgan Hill.	Receive and discuss information, and consider a recommendation(s) to the Board.
05/12/16	Committee	G. Hall	Staff is to coordinate a San Diego County Water Authority presentation on water desalination projects to the full Board of Directors, and agendize a discussion of water desalination and a consultant selection process at a future Committee meeting.	Receive and discuss information, and consider a recommendation(s) to the Board.
05/12/16	Committee	K. Oven	Staff is to schedule a "closed door" briefing on the current Integration Agreement, following the 05/19/16 RWPAC meeting.	Provide information to the Committee
05/12/16	Committee	M. Lugo	Staff is to provide regular updates to the Board of Directors on outreach activities for the recycled water program.	Provide a status update to the Committee
05/12/16	Committee	G. Hall	Staff is to agendize a Board discussion on the groundwater study relative to the recycled water program.	Provide a status update to the Committee
03/01/16	Committee	G. Hall	Staff is to come back with information on mgd of potable recycled water produced, and percentage utilized from June 2015 forward.	Provide information to the Committee
02/09/16	Board of Directors	K. Oven	Refer to the RWC the memo date 02/09/16, from Director Hsueh, to the Board of Directors, regarding Recommendation on Implementation of Expedited Purified Water Program, identified as item 5.2-A on the 02/9/16 Board of Directors meeting agenda.	Receive and discuss information, and consider a recommendation(s) to the Board.

RECYCLED WATER COMMITTEE

Updated: 5/19/17



2017 WORK PLAN

MEETING DATE	WORK PLAN ITEM, BOARD POLICY, & POLICY CATEGORY	ASSIGNED STAFF	INTENDED OUTCOME(S)	ACCOMPLISHMENT DATE AND OUTCOME
05/30/17	Approval of Minutes – February 16, 2017	L. Moore	Approve Minutes	
	IRS Opinion Letter in Protection of Tax-Exempt Status	C. Sun	Receive information and provide feedback, in response to the Committee's request of 02/16/17.	
	Review Committee Work Plan	Committee	Confirm Agenda Topics for Next Meeting(s)	
	Next Meeting Date	Committee	Confirm/Adjust Next Meeting Date(s)	

MEETING DATE	WORK PLAN ITEM, BOARD POLICY, & POLICY CATEGORY	ASSIGNED STAFF	INTENDED OUTCOME(S)	ACCOMPLISHMENT DATE AND OUTCOME
08/09/17	Approval of Minutes – May 30, 2017	L. Moore	Approve Minutes	
	<i>*Insert Action Items Here.</i>			
	Review Committee Work Plan	Committee	Confirm Agenda Topics for Next Meeting(s)	
	Next Meeting Date	Committee	Confirm/Adjust Next Meeting Date(s)	

RECYCLED WATER COMMITTEE

Updated: 5/19/17



MEETING DATE	WORK PLAN ITEM, BOARD POLICY, & POLICY CATEGORY	ASSIGNED STAFF	INTENDED OUTCOME(S)	ACCOMPLISHMENT DATE AND OUTCOME
11/08/17	Approval of Minutes	L. Moore	Approve Minutes	
	<i>*Insert Action Items Here.</i>			
	Review Committee Work Plan	Committee	Confirm Agenda Topics for Next Meeting(s)	
	Next Meeting Date	Committee	Confirm/Adjust Next Meeting Date(s)	



2017 ACCOMPLISHMENTS REPORT

MEETING DATE	WORK PLAN ITEM, BOARD POLICY, & POLICY CATEGORY	ASSIGNED STAFF	INTENDED OUTCOME(S)	ACCOMPLISHMENT DATE AND OUTCOME
02/16/17	Election of Chair and Vice Chair	L. Moore	Elect Committee Officers	Elected Chair: T. Estremera Elected Vice Chair: B. Keegan
	Approval of Minutes	L. Moore	Approve Minutes	Approved as presented
	Update on Expedited Purified Water Program/Memorandum of Understanding with City of San Jose	K. Oven	Receive information and discuss next steps.	The Committee requested staff bring back information on the technical studies, P3s, and alternatives for discussion and development of a Committee recommendation to the Board for their consideration.
	Direct Potable Reuse Update.	G. Hall	Receive information and discuss next steps.	The Committee requested that staff begin the process of preparing an IRS opinion letter, in protection of tax-exempt status, and to bring back updates to the Committee until it is finalized.
	Update on Recycled and Purified Water Expansion Efforts.	G. Hall	Receive information and discuss next steps for i) Sunnyvale, ii) Palo Alto/Mtn View, iii) SFPUC	Noted
	Grant Funding Opportunities.	G. Hall	Receive information and discuss next steps.	Noted
	Independent Advisory Panel for Potable Reuse	G. Hall	Receive information and discuss next steps.	The Committee requested that staff create more opportunities for directors to connect with the public via presentations to committees and other elected bodies; and to promote more SCVAWPC tours.
	Public Outreach	R. Callender	Receive information and discuss next steps.	Noted
	Review Committee Work Plan and Agenda Topics for next meeting		Review work plan and and identify agenda topics for next meeting.	Noted

May 30, 2017

Recycled Water Committee (“RWC”)
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118

RE: Agenda Item 4.1 Expedited Purified Water Program (“EPWP”) Update

Dear Directors Keegan, Estremera and Kremen,

Poseidon Water LLC (“Poseidon”), as the P3 coordinator of one of the shortlisted teams for the Public - Private Partnership approach for the Expedited Purified Water Program (the “EPWP”), is pleased to provide these comments on Item 4.1 on the Agenda for the Santa Clara Valley Water District’s (“District”) Recycled Water Meeting on May 30, 2017.

We have been following your Board deliberations on this issue since you gave Staff direction to pursue Progressive Design Build (“PDB”) and Public Private Partnership (“P3”) approaches back in July 2015. After June of last year, when we shortlisted for the P3 approach, we have complied with the District’s communication rules during a lengthy procurement process. We have followed the District’s procedure for public comments at Board and Committee meetings as our primary method to communicate with the District.

At the end of the last Board workshop on this issue on March 27, 2017, after considerable Board dialogue, Board Chair Verela concluded that item by stating that as discussed by the majority of the Board, the item would be re-agendized with the Design Build and the P3 contractors coming forward, along with Staff, so that the Board could hear from all sides. He further concluded that Staff needed to come back with a cost analysis of the price and advantages of the two procurement methods. Poseidon Water welcomes any opportunity to more fully participate in your deliberative process.

When this Recycled Water Committee last met on February 16, 2017, Staff identified the need to set out a path forward for the Board to make a decision on the EPWP procurement method. The EPWP update for this Committee meeting notes that the Board directed Staff to schedule another Work Session and to arrange for a presentation from the San Diego County Water Authority (“SDCWA”). The Staff memo also identifies some questions that were raised at the Board workshop. Poseidon appreciates the effort by Staff to address these issues and recommends that they be incorporated into the agenda for the next Board workshop which would include participation by the Design Build and P3 entities.

While we anticipate that Poseidon’s perspective on these issues will be presented at the next Board workshop, we have the following initial comments regarding the four areas that Staff presented for discussion. As we expressed in our RFQ response in April 2016, we believe that it is the most efficient use of the Staff and Respondents time and resources to make a procurement track decision for each project component prior to the start of the RFP process and prior to any detailed design work.

Poseidon Water LLC

Poseidon's Comments

1. Financial: Does the District have sufficient capacity to publicly fund all the major capital programs under consideration? Would the District's bond rating be at risk?

Performing the EPWP or part of the EPWP as a properly structured P3, will most likely have a positive impact on the District Debt Capacity and Debt Rating. The successful delivery of the Carlsbad Seawater Desalination Plant by Poseidon served to supplement and drought-proof SDCWA's water supply without significant impact to water rates or their debt burden, a factor that led to an upgrade of their credit rating to AAA resulting in lower interest rates that saved over \$63M (net present value basis) on a new \$340M bond issuance (June 2016).

- o *"The upgrade reflects the authority's successful integration of its increased storage capacity and desalinated water supply into its system while weathering one of the driest periods on record in the state without significant impact to its rates or debt burden" – S&P Global Ratings credit analyst*

2. P3 Delivery Approach: Concern expressed over "progressive" element in proposed P3.

During the public comment periods in prior District's Board meetings and EPWP Committee's Meetings, we have advocated for the SVAWPC Expansion of the EPWP to be performed under the P3 approach while the pipelines and associated infrastructure be performed under the Progressive DB approach. For the SVAWPC Expansion one of the advantages of the P3 approach is that instead of the District going through an expensive 30% design package it can procure the Project through a detailed Scope Book with all the requirements of the District regarding plant capacity, source and product water quality specifications, points of delivery, levels of treatment, major technology components standards, major specifications regarding key materials to be used, quality standards, minimum useful life specifications and any other parameters meeting the Districts requirements that define the performance levels that you need for the Project.

This Performance Based Approach is one of the advantages of the P3 structure and will allow the P3 shortlisted parties to submit firm pricing proposals without the need for the District to perform a 30% design package. Under the Performance Based Approach the District's Staff maintains the necessary controls over the main parameters and design components of the project through the design, construction and operating periods, all to be reflected in the Scope Book and in the Water Purchase Agreement.

3. Cost: How do we meaningfully compare the two delivery method alternatives?

Value-for-money ("VFM") analysis is one of the primary tools to compare different delivery methods. The VFM shows overall lifecycle costs of each delivery method considering expected costs under each option including a cost assigned to the risk transfer inherent to the project with the cost allocated to the party that bears each specific risk. Although VFM analysis is a valuable decision making tool, results are highly dependent on subjective parameters including the value assigned to risk transfer and the value of debt capacity preservation. The District does not need a 30% design package to perform a VFM analysis, or to have a healthy discussion on the value of risk transfer, and the value of debt capacity preservation to the District.

4. Workload: What staffing levels are required under PDB vs. P3?

RFQ Phase: Evaluating alternative procurement approaches is a Staff intensive process. During

the 2016 RFQ process the Staff went through a very intense review based on stringent criteria to determine the shortlisted parties for the different procurement tracks. The Staff reviewed volumes of qualifications for the Pipeline Progressive DB Track, the SCVWPC Expansion DB Track and the P3 Track. We understand that it was an extremely time-consuming exercise. It is Poseidon's view that there will be limited value in revisiting the RFQ process again based on the stringent parameters for qualification included in the original RFQ, the number and high quality of the teams that responded to the RFQ and the time spent by the shortlisted parties in providing input, under the District's communication rules, during a lengthy procurement process.

RFP Phase: As detailed in our response to question 2 above, by procuring the Project following a more traditional P3 approach the District will not need to spend the time and resources, including Staff time, to go through a lengthy 30% design package review prior to issuing the RFP, but instead Staff would need to include as part of the RFP a Performance Based Scope Book as described above to receive firm binding proposals from the two shortlisted parties.

Design/ Construction Phases: Based on our experience delivering the Carlsbad desal project under a performance based project delivery approach for the desal plant, SDCWA only had to have one or two dedicated staff members involved in the design/construction process of the plant. SDCWA staff reviewed all design packages with the assistance of an outside design firm and had the right to review all construction activities of the plant and had full access to the design and construction personnel. For the 10-mile pipeline portion of the project, SDCWA reviewed design packages mostly with internal staff resources but had a much heavier presence including field inspectors which was more of a traditional Design-Build approach than the full performance-based approach for the Plant.

Commissioning/performance testing of the Plant Phase: SDCWA staff increased their on-site presence for this phase.

Overall, it appeared that the pipeline Design-Build process consumed a significantly greater amount of the SDCWA staff resources compared to the Plant component.

Poseidon will have a representative at the May 30th Committee Meeting where we hope to be able to interact with the RWC Board members, the Staff, other interested parties and the public.

Sincerely,



Stan Williams
Vice-President, Project Development
Poseidon Water
5780 Fleet Street, Suite 140
Carlsbad, CA 92008
swilliams@poseidonwater.com
(760) 655-3995

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HANDOUT ITEM 4.6

05/30/17 RV



Santa Clara Valley Water District



ADVANCED WATER PURIFICATION SYSTEM FEASIBILITY STUDY FACTSHEET

(May 2017)

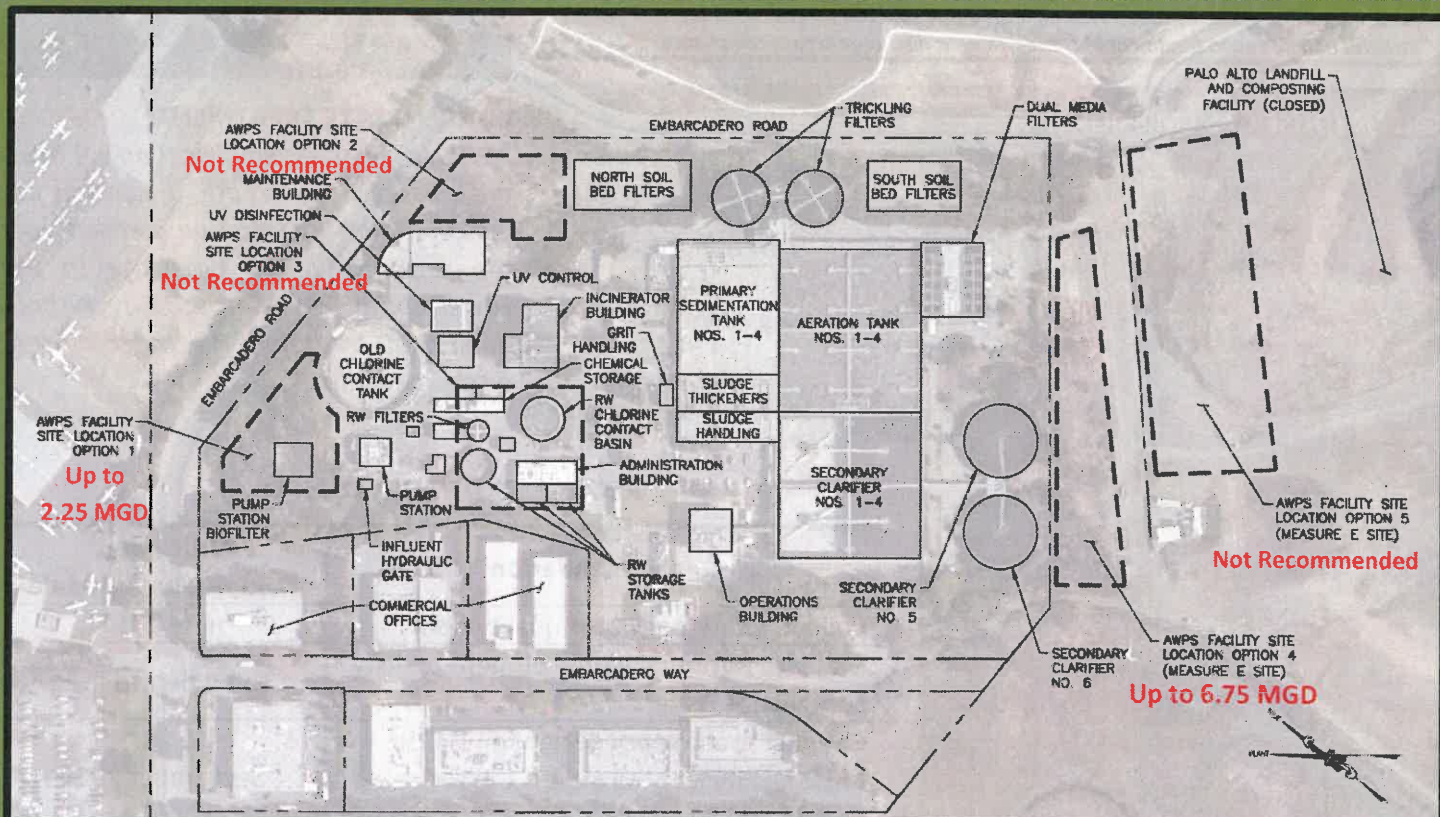
STUDY OVERVIEW: The City of Palo Alto's Regional Water Quality Control Plant (RWQCP) currently provides tertiary-treated recycled water to permitted users in its service area. The RWQCP, in collaboration with the Santa Clara Valley Water District and the City of Mountain View, evaluated needed process additions to improve the quality of this water, particularly the level of total dissolved solids, in the Advanced Water Purification System Feasibility Study.¹ This study compared different water quality improvement options (including potable water blending and constructing new treatment processes) and included evaluations of greenhouse gas emissions, storage requirements, facility siting, concentrate treatment options, and initial design and construction cost estimates.

WATER QUALITY GOAL: 400 – 500 mg/L total dissolved solids of enhanced recycled water (blend of existing tertiary-treated recycled water with advanced-treated recycled water)

RECOMMENDED ADVANCED WATER PURIFICATION SYSTEM (AWPS):

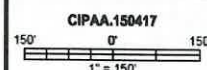
Microfiltration or Ultrafiltration + Reverse Osmosis

POTENTIAL AWPS FACILITY LOCATIONS AT THE EXISTING RWQCP PROPERTY & MAXIMUM FACILITY CAPACITIES



111 N. Market Street
Suite 440
San Jose, CA 95113
408.610.4202 Phone

FIGURE ES-2: AWPS FACILITY SITE LOCATION OPTIONS
ADVANCED WATER PURIFICATION SYSTEM FEASIBILITY STUDY
CITY OF PALO ALTO



¹ J. Aranda et. al. (2017). *Advanced Water Purification System Feasibility Study*. MNS Engineers Inc., San Jose: Palo Alto Regional Water Quality Control Plant.



ADVANCED WATER PURIFICATION SYSTEM FEASIBILITY STUDY FACTSHEET

(May 2017)

COST ESTIMATES:

Alternative No.	AWPS Capacity (MGD)	AWPS Site Location ¹	Total Estimated Design, Construction, & Construction Management Costs ^{2,3}
1	1.125	1	\$22,288,000
2	2.25	1	\$29,904,000
3	3.9	4	\$49,056,000
4	4.5	4	\$59,248,000 ⁴
5	6.75	4	\$69,328,000 ⁴

¹Refer to Figure ES-2

²Includes design, construction management, inspection, environmental compliance (CEQA), equipment, chemical dosing systems, filtrate & storage tanks, instrumentation, controls, demolition, relocation of utilities, site grading, piping, drainage, facility building, landscaping, and access roads

³AACE International Classification System, Class 5 (-50 to + 100 percent accuracy)

⁴Includes nanofiltration treatment of concentrate for discharge permit compliance



GREENHOUSE GAS EMISSIONS:

RWQCP greenhouse gases are expected to increase by less than 1% for facility sizes 4.5 MGD and smaller due to the purchase of green (carbon-neutral) electricity at the RWQCP.

ENERGY USE:

RWQCP energy use is expected to increase by 5, 9, and 19 % for a facility sized at 1.125, 2.25, and 4.5 MGD respectively.

CONCENTRATE TREATMENT:

AWPS facility sizes smaller than 3.9 MGD are expected to create a concentrate waste stream that can be blended with the current RWQCP discharge to the Lower South San Francisco Bay without additional treatment to meet current discharge limits.



RECOMMENDED NEXT STEPS:

Recommendation	Anticipated Completion Schedule
Collect additional water quality data	June 2017
Evaluate potential whole effluent toxicity compliance issues	To be determined
Conduct preliminary design for 1.125 MGD facility located at Site 1 expandable to 2.25 MGD	September 2017
Evaluate next steps needed to utilize Site 4 (Measure E site) for larger facility (up to 6.75 MGD)	July 2017
Prepare a funding plan	To be determined