

RECYCLED WATER COMMITTEE

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



HANDOUT 5.1-A appended to this packet

**AGENDA
RECYCLED WATER COMMITTEE
Santa Clara Valley Water District Administration Bldg., Room B108
5750 Almaden Expressway, San José, CA**

**Thursday, February 16, 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. Election of Chair and Vice Chair

4. Approval of Minutes: November 9, 2016

Recommendation: Approve the minutes.

5. Action Items:

5.1 Update on Expedited Purified Water Program. (K. Oven)

Recommendation: Receive information and discuss next steps.

5.2 Direct Potable Reuse Update. (G. Hall)

Recommendation: Receive information and discuss next steps.

5.3 Update on Recycled and Purified Water Expansion Efforts. (G. Hall)

Recommendation: A. That the Committee recommend to the District Board of Directors (Board) the following:

- I. Authorize the Chief Executive Officer (CEO) to Execute the Memorandum of Understanding (MOU) Between the Santa Clara Valley Water District (District) and the City of Sunnyvale (Sunnyvale) for Collaborating on Assessing the Feasibility of Water Reuse Alternatives; and
 - II. Authorize the CEO to Execute the MOU between the District, San Francisco Public Utilities Commission (SFPUC), and the Bay Area Water Supply and Conservation Agency (BAWSCA) to Participate in a Feasibility Study to Evaluate Alternatives for Participation in the Expedited Purified Water Program
- B. Receive Information and Discuss Next Steps Related to City of Palo Alto (Palo Alto)/City of Mountain View (Mountain View)

(OVER)

5.4 Grant Funding Opportunities. (G. Hall)

Recommendation: Receive information and discuss next steps.

5.5 Independent Advisory Panel for Potable Reuse. (G. Hall)

Recommendation: Receive information and discuss next steps.

5.6 Public Outreach (R. Callender)

Recommendation: Receive information and discuss next steps.

5.7 Update on Wolfe Road Recycled Water Facilities Project. (K. Oven)

Recommendation: Receive information.

6. Review Committee Workplan and Meeting Schedule.

7. 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.

8. Adjourn:

Adjourn to next regularly scheduled meeting at 12:00 p.m., on May 10, 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.

RECYCLED WATER COMMITTEE

MINUTES

Wednesday, November 9, 2016
12:00 P.M.

(Paragraph numbers coincide with agenda item numbers)

A meeting of the Recycled Water Committee (Committee) was called to order in the Santa Clara Valley Water District Headquarters Boardroom, 5700 Almaden Expressway, San Jose, California, at 12:00 p.m.

1. CALL TO ORDER/ROLL CALL.

Committee members in attendance were District 2 Director B. Keegan, District 7 Director G. Kremen, 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, A. Cheung, P. Daniel, N. Dominguez, C. Elias, J. Fiedler, G. Hall, T. Hemmeter, L. Jaimes, J. Villarreal, K. Oven, L. Sangines, K. Jessop, 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.

Mr. Doug Muirhead asked for a report on the District's comments on direct potable reuse (DPR) in response to the Division of Drinking Water's report to the Legislature, and a report on the results of the demonstration test plan at the Silicon Valley Advanced Water Treatment Center, as compared to next steps in the State's report to the Legislature on DPR.

3. APPROVAL OF MINUTES.

It was moved by Director Keegan, seconded by Chairperson Estremera, and unanimously carried to approve the minutes of the July 6, 2016, meeting as presented. Director Kremen abstained from voting.

4. ACTION ITEMS.

4.1. Update on Expedited Purified Water Program.

Ms. Katherine Oven, Deputy Operating Officer, reviewed the information on this item per the attached Committee Agenda Memo, and staff reviewed the presentation materials contained in Attachment 1 as follows: Ms. Oven, slides 1 through 4, and 16 and 17; Mr. Phillippe Daniel, Contractor, Slides 5 through 8; Ms. Debra Butler, Senior Project Manager, Slides 9 through 10; and Ms. Tracy Hemmeter, Senior Project Manager, Slides 11 through 15.

The Committee noted the information without formal action.

The Committee requested staff bring to the full board 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 San José to support project staffing towards efforts to develop and expand recycled water and potable water reuse in North County.

Director Keegan asked that projected annual IPR and DPR unit costs be broken down into O&M and capital subcomponents.

Director Keegan asked for a list of cities, railroads, agencies, etc... that would be crossed/impacted by each proposed IPR alignment and the corresponding permit requirements thereof.

Director Kremen asked to add SFPUC treated water pipelines in maps for context.

4.2. Update on Recycled and Purified Water Expansion Efforts.

Mr. Garth Hall, Deputy Operating Officer, reviewed the information on this item per the attached Committee Agenda Memo, and Mr. Luis Jaimes, Senior Project Manager, reviewed the presentation materials contained in Attachment 1, slides 19 through 23.

The Committee noted the information without formal action.

Director Keegan asked for information on all entities and their annual revenue sources of funding for each wastewater treatment system in North County.

4.3 Update on Countywide Recycled Water Master Plan (Master Plan).

Mr. Hall reviewed the information on this item per the attached Committee Agenda Memo, and reviewed the presentation materials contained in Attachment 1, Slides 24 through 27.

The Committee noted the information without formal action.

4.4. Update on South County Recycled Water Expansion Efforts.

Mr. Hall reviewed the information on this item per the attached Committee Agenda Memo, and Mr. Hossein Ashktorab, Recycled Water Manager, reviewed the presentation materials contained in Attachment 1, Slides 28 through 31.

Director Estremera asked staff for a status update on District Board letters sent to SCRWA, Gilroy, and Morgan Hill on July 27, 2016 for the purpose of developing a recycled water governance framework.

Director Estremera requested changing the Committee's meeting frequency from bimonthly to quarterly and directed staff to develop a CY 2017 meeting schedule.

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

Ms. Natalie Dominguez, Board Administrative Assistant II, confirmed there were no formal requests or recommendations to be forwarded for Board consideration, and reviewed the Committee's request for information as contained in Item 4.4.

6. ADJOURN.

Chairperson Estremera adjourned the meeting at 1:40 p.m., to the next meeting scheduled to be held at 12:00 p.m., on February 8, 2017, at the Santa Clara Valley Water District Headquarters Boardroom, 5700 Almaden Expressway, San Jose, California.

Respectfully submitted,

Natalie F. Dominguez
Board Administrative Assistant II

Approved:

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Committee: Recycled Water Committee
Meeting Date: 02/16/2017
Agenda Item No.: 5.1
Unclassified
Manager: K. Oven
Email: KOven@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Update on Expedited Purified Water Program.

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

The Expedited Purified Water Program (Program) work on preliminary engineering analyses, groundwater modeling, capacity/operation assessments and partnerships continues. Most critically, since the November 9, 2016 Recycled Water Committee (Committee) meeting, staff has met twice with City of San Jose (CSJ) staff to further the development of a Memorandum of Understanding (MOU) for expanding the production of advanced purified water for potable reuse at a new facility adjacent to the Silicon Valley Advanced Water Purification Center (SVAWPC).

At the District Board's meeting of December 13, 2016, the Board authorized \$200,000 for CSJ staff to participate in review of studies prepared by the District regarding reverse osmosis (RO) concentrate management and quantification of source wastewater, and to provide other input and support for the development of the MOU. A draft funding agreement was sent to CSJ for review on January 23, 2017.

District and CSJ staff, and their legal and bond counsel, met on January 17, 2017 to discuss the issue of private activity as it applies to the planned future use of treated wastewater from the CSJ's Regional Wastewater Facility (RWF) for advanced purification and indirect potable reuse (IPR) via the groundwater basin. It was resolved at this meeting that use of RWF effluent for IPR will not trigger private activity issues for CSJ.

Resolution of several items in the MOU is going to require additional time and some recalibration of options. This will likely entail an additional 1 to 2 years of collaborative effort.

CSJ MOU Development and Status

District and CSJ staff have been meeting regularly since December 2015 to negotiate the terms and commitments of an MOU for the expansion of advanced water purification for potable reuse. The four key MOU issues that have been discussed in the past 15 months are:

1. Land lease
2. Source treated wastewater quantity
3. RO concentrate management
4. Regulatory compliance risks

Of these four issues, it has become apparent in the past few CSJ/SCVWD staff meetings that reaching resolution on source wastewater quantity, RO concentrate management, and regulatory compliance risks will require additional studies, evaluations and analysis, and engagement with external regulatory agencies.

Source Treated Wastewater Quantity. CSJ staff has recently informed District staff that:

- Expansion of non-potable reuse (purple pipe water) appears to be a higher priority for CSJ's tributary wastewater agencies than potable reuse.
- CSJ staff has noted a general decrease in raw wastewater inflows to the Regional Wastewater Facility due to overall water use reduction during the multi-year drought.
- CSJ staff is not confident that raw wastewater inflows will increase over time.
- After satisfying existing and future non-potable demands, diverting more treated wastewater for potable reuse would reduce the volume of tertiary-treated wastewater discharged via the RWF outfall.
- Reduced tertiary-treated wastewater discharge via the RWF outfall may create compliance risks if RO concentrate from an expanded water purification facility was discharged via the RWF outfall.

District staff has prepared initial mass balance calculations that reflect the 2014 South Bay Water Recycling Master Plan (2014 Master Plan) predictions for 2020 and 2035 non-potable water demands and the 2015 Urban Water Management Plan. However, predictions of future raw wastewater inflow volumes must now take into consideration potential new ordinances to conserve water as well as other factors. CSJ staff will be reviewing this preliminary work.

RO Concentrate Management. Based on the 2014 Master Plan, the most cost-effective option for managing RO concentrate, a byproduct of the advanced water purification process, would be to discharge the concentrate via the RWF outfall to mix with tertiary-treated wastewater prior to flowing to South San Francisco Bay. The crux of this option is that there must be no adverse impacts on regulatory compliance to CSJ's existing and anticipated NPDES permit conditions for discharges to San Francisco Bay.

To that end, the District has conducted studies examining the key constituents in the RO concentrate that would be discharged to the RWF outfall. The District's scientific experts have concluded that the initial phase of potable reuse (i.e., a facility producing 24 million gallons per day (mgd) of purified water and 6 mgd of RO concentrate) would be well within the NPDES permit limits. CSJ staff will be reviewing these studies.

The 2014 Master Plan identified several other RO concentrate management alternatives (i.e., use of a separate outfall, use of a deep water outfall, or wetlands treatment). Staff has conducted a preliminary analysis of the alternatives for RO concentrate management included in the 2014 Master Plan, and is currently undertaking more in-depth investigations of such alternatives in a separate study that will be completed in 2018.

Regulatory Compliance Risks. The Cities of San Jose and Santa Clara and their Treatment Plant Advisory Committee (TPAC) are the collective owners of the NPDES compliance risk, with its attendant financial and legal consequences. As deemed appropriate by the Committee at its November 9, 2016 meeting, staff has explored a District share in these regulatory compliance risks.

SUBJECT: Update on Expedited Purified Water Program.

02/16/2017

Program Schedule and Cost Implications

Staff estimates that the aforementioned studies, evaluations, and activities related to source treated wastewater quantity, RO concentrate management options, and regulatory compliance risks could extend for 1 to 2 more years before resolution of the key issues is achieved. This schedule extension will likely increase Program implementation costs.

Next Step

Staff is currently moving forward with:

1. Completion of a funding agreement to allow CSJ staff to fully participate in the review of above-described studies and analyses; to participate in informational presentations and discussions with independent subject matter experts; and to attend meetings with Regional Board staff to explore the future of NPDES permit requirements and risks.
2. Detailed evaluations of RO Concentrate management alternatives, including engineering feasibility, impacts to the environment, permitting, and costs.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

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RECYCLED WATER COMMITTEE

Barbara Keegan, *Board Member, Santa Clara Valley Water District*

Gary Kremen, *Board Member, Santa Clara Valley Water District*

Tony Estremera, *Board Member, Santa Clara Valley Water District*

Recycled Water Committee

February 16, 2017

**Santa Clara Valley
Water District**



Item 5.1
Attachment 1
Page 1 of 10

Agenda Outline

- 5.1 Update on Expedited Purified Water Program (K. Oven)**
- 5.2 Direct Potable Reuse Update (G. Hall)**
- 5.3 Update on Recycled and Purified Water Expansion Efforts (G. Hall)**
- 5.4 Grant Funding Opportunities (G. Hall)**
- 5.5 Independent Advisory Panel for Potable Reuse (G. Hall)**
- 5.6 Public Outreach (R. Callender)**
- 5.7 Update on Wolfe Road Recycled Water Facilities Project (K. Oven)**

5.1 Update on Expedited Purified Water Program



5.1 Presentation Outline

1. District/CSJ MOU status
2. Program Schedule/Cost Implications
3. Next Steps

5.1 Key District/CSJ MOU Issues

| Issue | District Request or Proposal |
|------------------------------------|-------------------------------------|
| Land | ~ 25 acres |
| Treated wastewater quantity | ~ 30 MGD initial* |
| RO Concentrate | ~ 6 MGD |
| Regulatory Compliance Risks | Risk-sharing? |

* 30 MGD inflow yields ~ 24 MGD purified water

5.1 Treated Wastewater Quantity

- City - Expansion of non-potable reuse (NPR) a higher priority for CSJ's tributary wastewater agencies than potable reuse.
- City - Wastewater inflows to Regional Wastewater Facility (RWF) decreasing. Will future be different?
- City – After meeting NPR future demands:
 - Is there enough treated wastewater for potable reuse?
 - How much will remain for outfall discharge to Bay?
 - Outfall discharge must have adequate dilution cushion if RO concentrate sent to outfall.

5.1 RO Concentrate Management

- District - Discharge via RWF outfall most streamlined, cost-effective option for RO concentrate.
- District - Toxicity study results: 6 mgd of RO concentrate would readily comply with NPDES permit limits.
- CSJ – Key concerns: regulatory risks, South Bay ecosystem impacts.
- CSJ – District should fully consider/evaluate other alternatives (i.e., separate/deep outfall, evaporation ponds, engineered wetlands).

5.1 Regulatory Compliance Risks

- Cities of San Jose/Santa Clara and Treatment Plant Advisory Committee (TPAC) own NPDES compliance risks and attendant financial and legal consequences of violations.
- District – explored sharing in regulatory compliance risks.

5.1 Implications to Program Schedule/Cost

MOU completion? 1 to 2 more years

- Program Schedule Implications
 - Allows full evaluation of options/implications of key MOU issues;
 - Provides additional time to refine Program development.
 - Provides Board opportunity to make decisions on other water supply alternatives.
 - Continued water supply vulnerability.

- Program Cost Implications
 - Costs will escalate:
 - Inflation
 - Potentially higher interest rates
 - Additional RO concentrate facilities/treatment
 - CIP cost shift may lower annual rate increases for 2+ years

5.1 Next Steps

- Execute funding agreement for CSJ staff participation:
 - Review of toxicity studies' results
 - Informational engagement on Program components
 - Meetings with external regulatory agencies.

- Complete detailed evaluations of RO Concentrate management alternatives.



Committee: Recycled Water Committee
Meeting Date: 02/16/2017
Agenda Item No.: 5.2
Unclassified
Manager: G. Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Direct Potable Reuse Update.

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

Regulatory Context

On September 8, 2016, the State Water Resources Control Board (SWRCB) released the Draft Report to the California legislature, "Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse (DPR)" for public comment. The Expert Panel and the Advisory Group Final Reports were also made available to the public at that time.

District staff was actively engaged in the comment process, and participated in several relevant activities including hosting the Northern California WaterReuse DPR Workshop on September 29, 2016, providing verbal comments at the SWRCB public workshop held on October 6, 2016 in Sacramento, and submitting written comments to the SWRCB on October 14, 2016, as well as contributing on content for comments with various California water agencies.

On December 29, 2016, the SWRCB released its Final Report to the California Legislature, which incorporated several of the District's comments. The report concluded that it is technically feasible to implement DPR in California. Thus, the potential for potable reuse projects to provide a local and drought-proof supply source is a step closer to becoming reality.

Considering these developments, staff has conducted an initial assessment to explore the potential of implementing DPR to augment our drinking water supplies.

Initial Evaluation of DPR Potential

Staff has started working on an initial comparison between implementation of indirect potable reuse (IPR) versus DPR in some of the Expedited Purified Water Projects, taking into consideration implementation schedule, operational considerations, regulatory and permitting considerations, public perception, and risks. In particular, staff has compared the implementation of IPR at Los Gatos via a dedicated pipeline versus a DPR/IPR alternative consisting of a combination of IPR to Los Gatos via the Central Pipeline with DPR in the form of raw water augmentation to Penitencia and Rinconada Water Treatment Plants.

Benefits

The initial results of the evaluation conducted by staff indicate that DPR could have potential for implementation by the District in the near future. The main benefits that have been identified are:

1. Potential cost savings from the option to construct shorter pipelines;
2. Increased operational flexibility due to the increased number of receptors; and
3. High utilization rate.

Risks and Uncertainties

However, staff has identified several issues that would need to be evaluated before the District could embark on a DPR alternative. These include:

1. Technical issues regarding the treatability of raw water blended with purified water at the drinking water treatment plants;
2. Conveyance capacity of the Central Pipeline and whether it can accommodate South Bay Aqueduct flow and purified water flow;
3. Potential legal ramifications, such as triggering private activity;
4. Regulatory and permitting considerations for drinking treatment plants and other receptors (i.e., creeks);
5. Public perception; and
6. Cost and schedule impacts of DPR implementation.

Path Forward

In the coming months, staff will be evaluating these issues to identify which would need to be addressed before staff can present a DPR alternative proposal to the Recycled Water Committee for their consideration. In addition, District staff was recently approached by a newly formed coalition of California Water Utilities focused on DPR implementation. The goal of the coalition is to develop a common vision for DPR implementation. Staff is considering joining this coalition to collaborate with the other participating agencies (Ventura Water, San Francisco Public Utilities Commission, City of Santa Barbara, and Los Angeles Department of Water and Power) interested in seeking case-by-case approval from the SWRCB for DPR projects. The cost for participating is \$4,000. Staff believes that by joining this coalition the District would benefit from the technical team expertise, gain valuable insight from the other participating agencies on the process of permitting a DPR project, as well as take a leading role along with other agencies statewide in exploring implementation of DPR projects.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

5.2 Direct Potable Reuse Update



5.2 Direct Potable Reuse (DPR) Update

A. Why DPR?

- ✓ Cost Reduction
- ✓ Operational flexibility
- ✓ Maximizes utilization rate and water rights
- ✓ Leadership role

B. Division of Drinking Water (DDW) DPR Feasibility Report

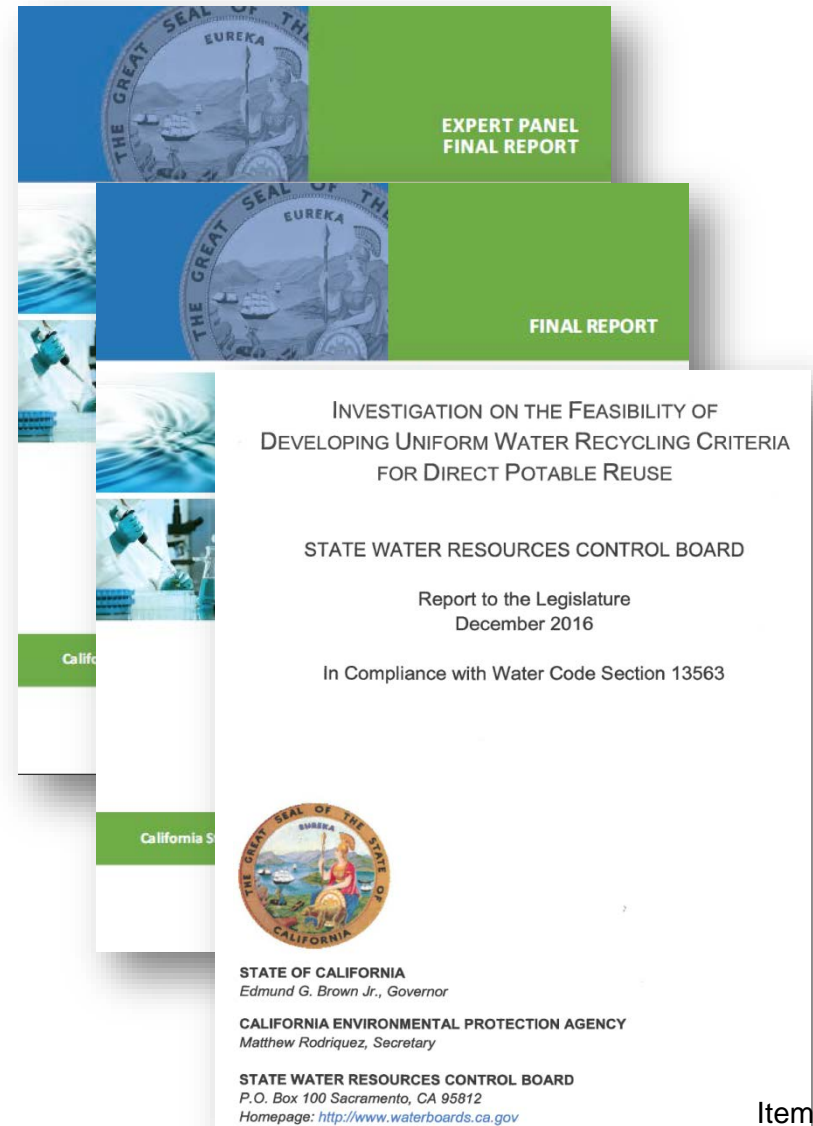
C. District's Response to DPR Feasibility Report

D. Potable Reuse Options [DPR vs Indirect Potable Reuse (IPR)]

E. Next Steps

5.2 DDW DPR Feasibility Report

- September 2016:
Draft feasibility report
- Expert Panel found:
“... that it is **technically feasible** to develop uniform water recycled criteria for DPR in California, ... ” (DDW, page iv)
- December 2016:
Final Report released



5.2 District's Response to Feasibility Report

- Sep. 29, 2016 – District hosted WaterReuse Special Northern California Meeting on Draft Feasibility Report
- Oct. 6, 2016 – Staff traveled to Sacramento to present comments to SWRCB*
- Oct. 14, 2016 – Staff submitted written comments on Draft DPR Feasibility Study to SWRCB



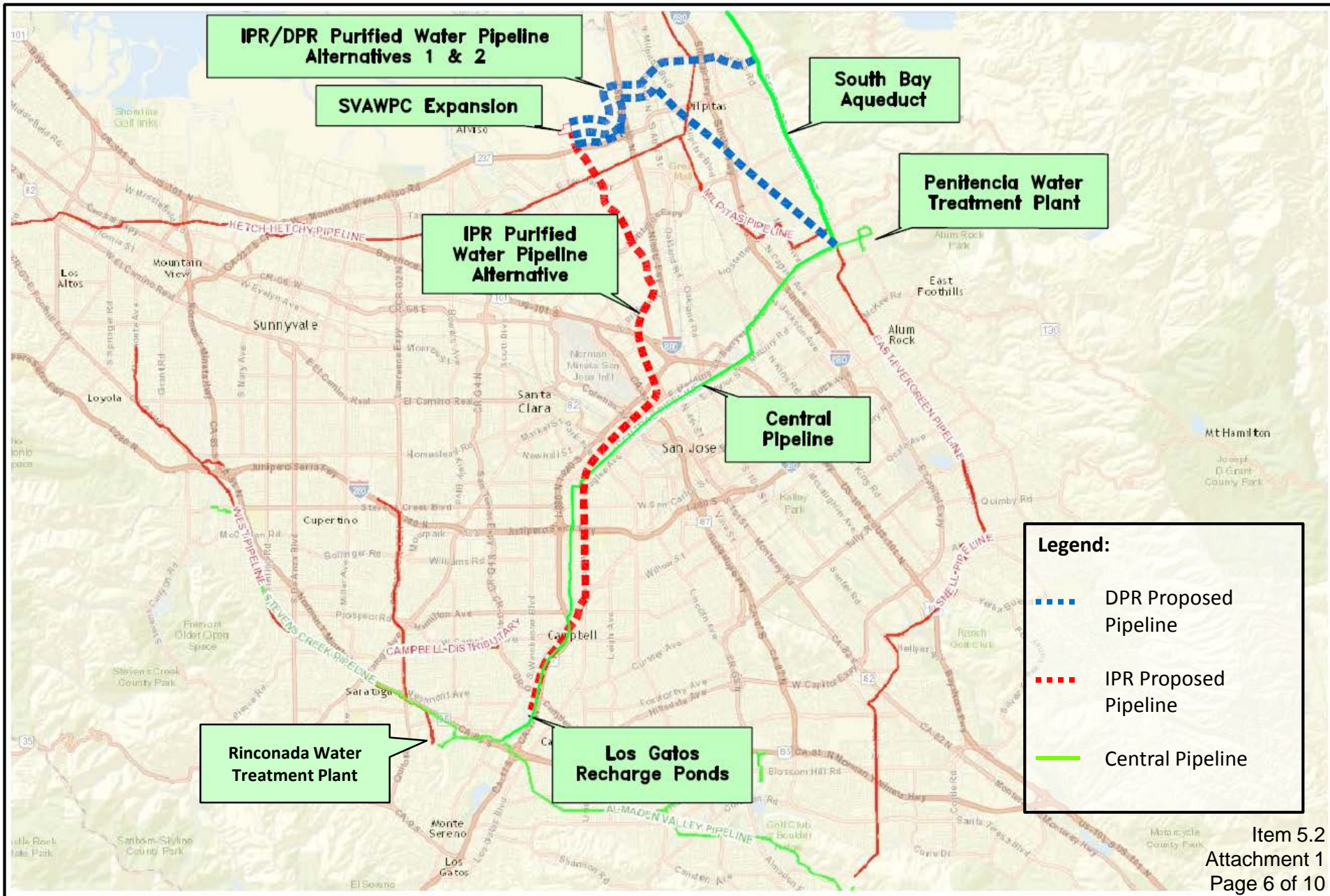
*SWRCB: State Water Resources Control Board

5.2 Potable Reuse Options (DPR vs IPR)

| Option | 1 | 2 |
|---------------------------|--------------------------------------|---|
| IPR/DPR | IPR | DPR/IPR |
| Description | Los Gatos Groundwater Recharge Ponds | Penitencia/ Rinconada Raw Water Augmentation |
| Yield | 24,000 AFY (24 MGD)* | 24,000 AFY (24 MGD)* |
| Treatment Facility | Expanded SVAWPC | Expanded SVAWPC |
| Receptors | Los Gatos percolation ponds | Penitencia Water Treatment Plant (PWTP) |
| | | Central Pipeline: Los Gatos percolation ponds, Stevens Creek Pipeline, and Rinconada Water Treatment Plant (RWTP) |

*Note: 30 MGD (33,600 AFY) of treated wastewater yields 24 MGD (26,900 AFY) of purified water at 80% RO recovery, and a net 21.5 MGD (24,000 AFY) of purified water after a 90% operational efficiency factor is applied.

5.2 Potable Reuse Options (DPR vs IPR)



5.2 Potable Reuse Options (DPR vs IPR)

| IPR (Los Gatos) | | DPR/IPR (PWTP/RWTP) | |
|---|---|--|---|
| Pros | Cons | Pros | Cons |
| Implementation/ Schedule/ Regulatory/ Permitting/ Operations/ Public Perception | | | |
| <ul style="list-style-type: none"> • IPR regulations well established • Accepted and proven technology • Fewer operational water quality parameters • Allows for injection wells • Extensive outreach program in place | <ul style="list-style-type: none"> • Extensive pipeline construction / length • Multiple jurisdictions involved in permit acquisition • Limited flexibility due to single receptor • Lexington alternative needed | <ul style="list-style-type: none"> • Minimal plant modifications at PWTP and RWTP • Shorter pipeline length • Maximizes utilization • More flexibility due to multiple receptors • Maximizes water rights • Tours indicated high level of acceptance | <ul style="list-style-type: none"> • “DPR “case by case” approvals could lead to conservative design • Unknown maximum allowable blending • Permitting complexity • Coordination with Department of Water Resources for South Bay Aqueduct deliveries |

5.2 Potable Reuse Options (DPR vs IPR)

IPR (Los Gatos)

DPR/IPR (PWTP/RWTP)

Risks

- Stranded pipeline – having to abandon IPR (public perception, failed implementation elsewhere)
- Overspending for pipeline
- Implementing more costly alternative

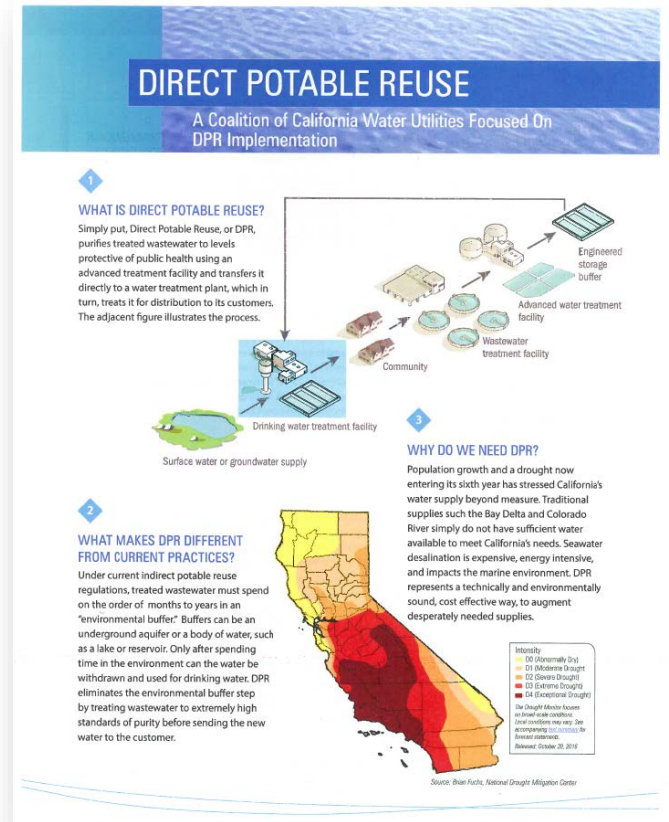
- Potential stranded assets – additional treatment requirements
- Having to abandon DPR (public perception, failed implementation elsewhere)
- Potential to trigger private activity

5.2 Next Steps for DPR

- Evaluate Technical Issues
- Assess Permitting and Regulatory Options
- Evaluate Potable Reuse Private Activity Risk
 - DPR: Need guidance from Internal Revenue Service
- Refine Costs

5.2 Next Steps for DPR

- Join DPR Coalition of California Water Utilities
 - Goal: Develop common framework for implementation of DPR projects in California.
 - Collaborating Utilities:
 - Ventura Water
 - San Francisco Public Utilities Commission
 - City of Santa Barbara
 - Los Angeles Department of Water and Power
 - Cost: \$4,000





Committee: Recycled Water Committee
Meeting Date: 02/16/2017
Agenda Item No.: 5.3
Unclassified
Manager: G. Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Update on Recycled and Purified Water Expansion Efforts.

RECOMMENDED ACTION:

- A. That the Recycled Water Committee (Committee) Recommend to the Santa Clara Valley Water District (District) Board of Directors (Board) the Following:
 - I. Authorize the Chief Executive Officer (CEO) to Execute the Memorandum of Understanding (MOU) Between the District and the City of Sunnyvale (Sunnyvale) for Collaborating on Assessing the Feasibility of Water Reuse Alternatives; and
 - II. Authorize the CEO to Execute the MOU Between the District, San Francisco Public Utilities Commission (SFPUC), and the Bay Area Water Supply and Conservation Agency (BAWSCA) to Participate in a Feasibility Study to Evaluate Alternatives for Participation in the Expedited Purified Water Program.
- B. Receive Information and Discuss Next Steps Related to City of Palo Alto (Palo Alto)/City of Mountain View (Mountain View)

SUMMARY:

The purpose of this agenda item is to provide the Committee with updates on partnerships being developed with Sunnyvale, Palo Alto along with Mountain View, and SFPUC. MOUs with Sunnyvale and SFPUC/BAWSCA have been negotiated and will be considered by the Committee today. The MOUs with these agencies assess the feasibility and potential cost-sharing participation of developing potable water reuse options in Santa Clara County (County). Attachment 1 shows the status of each MOU.

Sunnyvale

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. A proposed 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 this MOU cover important assumptions and considerations such as source water availability, permitting, reverse osmosis concentrate management, land requirements, and governance. During the term of the MOU, Sunnyvale will not enter into any

SUBJECT: Update on Recycled and Purified Water Expansion Efforts.

02/16/2017

agreement providing treated wastewater effluent to another entity or project that could materially reduce the amount of source water available to the District without District's consent. 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. Terms of the draft MOU were also presented to staff from the cities of San Jose and Santa Clara on November 4, 2016. District and Sunnyvale staff have reached consensus on the final terms of the MOU, which will be considered by the committee today (Attachment 2).

San Francisco Public Utilities Commission

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 objective of the Feasibility Study is to evaluate the concept of having SFPUC participate financially in the District's potable reuse program in exchange for a portion of the purified water to increase water supply reliability for SFPUC customers in the County. A draft MOU was discussed with this Committee on November 9, 2016. Potential benefits include improved reliability of regional water supplies and increased utilization of the expanded Silicon Valley Advanced Water Purification Center. The key items of the Feasibility Study include: defining objectives; analyzing constraints; identifying conceptual alternatives; and deciding on next steps. The MOU includes provisions for up to \$37,500 of cost sharing from SFPUC. The District/SFPUC/BAWSCA MOU (Attachment 3) is finalized and will be considered by the Committee today.

Palo Alto/Mountain View

Staff from Palo Alto and Mountain View are re-evaluating the commitments made at the September 27, 2016, Joint Recycled Water Committee meeting of elected officials from the District, Palo Alto and Mountain View. Staff from the two cities are currently considering the degree to which an MOU between the District and the cities would restrict the cities from discussing sales of treated wastewater with other potential wholesalers.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

Attachment 2: Copy of District/Sunnyvale MOU

Attachment 3: Copy of District/SFPUC/BAWSCA MOU

5.3 Update on Recycled and Purified Water Expansion Efforts



5.3 Sunnyvale, Palo Alto/Mountain View and SFPUC Draft Milestones

| Item | City of Sunnyvale | City of Palo Alto/ City of Mountain View | SFPUC |
|------------------------------------|-----------------------------------|--|----------------------------|
| MOU Status | Finalized draft with City Manager | Palo Alto and District staff continue negotiations | Signed by SFPUC and BAWSCA |
| Complete MOU | March 2017 | TBD | March 2017 |
| Conduct Feasibility Studies | December 2017 | TBD | December 2018 |

5.3 City of Sunnyvale Draft MOU Terms of Agreement

| Draft MOU Terms of Agreement | |
|------------------------------|---|
| Sunnyvale | |
| Source Water and Quality | <ul style="list-style-type: none">• Assumes availability of 5-10 MGD tertiary• District consent before other agreements to provide water |
| Alternative Projects | <ul style="list-style-type: none">• Several projects including purified water and/or expansion of recycled water |
| Land | <ul style="list-style-type: none">• City's decommissioned landfill (5 acres)• Other sites near WPCP |
| 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 Bay• Loss of existing open space |

5.3 SFPUC Draft MOU Terms of Agreement

Conduct joint feasibility study to evaluate potential SFPUC participation in District's Expedited Purified Water Program

| Feasibility Study | |
|-------------------|---|
| 1 | SFPUC financial contribution for feasibility study up to \$75K |
| 2 | Consider allocation of 5 to 15 MGD of District's purified water |
| 3 | Identify water delivery alternatives |
| 4 | Increase utilization of District purified water facilities |

5.3 Palo Alto/Mountain View Draft MOU

| | Palo Alto/Mountain View Potential MOU Terms of Agreement (Assumptions) |
|--------------------------|---|
| Source Water and Quality | <ul style="list-style-type: none">• Evaluate opportunities to obtain up to 10 MGD treated wastewater |
| Land | <ul style="list-style-type: none">• Potentially up to 4 acres |
| Commitment | <ul style="list-style-type: none">• NOTE: Palo Alto/Mountain View staff are considering the extent to which the cities can commit to restrict discussions of wastewater sales to the District alone |
| 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 Bay• Loss of existing open space |

5.3 Staff Recommendations

- A. That the Recycled Water Committee Recommend to the Santa Clara Valley Water District (District) Board of Directors the Following:
 - I. Authorize the Chief Executive Officer (CEO) to Execute the Memorandum of Understanding (MOU) Between the District and the City of Sunnyvale for Collaborating on Assessing the Feasibility of Water Reuse Alternatives; and
 - II. Authorize the CEO to Execute the MOU Between the District, San Francisco Public Utilities Commission, and the Bay Area Water Supply and Conservation Agency to Participate in a Feasibility Study to Evaluate Alternatives for Participation in the Expedited Purified Water Program.

**Memorandum of Understanding
between the
Santa Clara Valley Water District
and the
City of Sunnyvale
for Collaborating on Assessing the Feasibility of Water Reuse Alternatives**

This Memorandum of Understanding (MOU) is made and entered into on [REDACTED] (Effective Date), by and between the City of Sunnyvale (Sunnyvale), a municipal corporation, and the Santa Clara Valley Water District (District), a special district created by Legislature of the State of California. Sunnyvale and District hereinafter may be referred to individually as “Party” or collectively as “Parties.”

RECITALS

- A. **Whereas**, 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. **Whereas**, 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 components of Santa Clara County’s water supply portfolio, which ensures the region’s continued economic health and quality of life; and
- C. **Whereas**, as a result of over four years of recent and current drought throughout California, the District’s surface, groundwater, and imported water supplies have been limited and substantial customer water use reductions were required to avoid severe groundwater depletion; and
- D. **Whereas**, Sunnyvale owns and operates a Water Pollution Control Plant (Sunnyvale WPCP or WPCP) that is capable of treating municipal wastewater in accordance with recycled water regulations for non-potable reuse by customers in its service area; and
- E. **Whereas**, Sunnyvale is currently in the design phase of a major upgrade to its WPCP to replace aging facilities and to meet anticipated future regulatory requirements for effluent discharge; and
- F. **Whereas**, 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 at least 24,000 AFY of purified water through expansion of the Silicon Valley Advanced Water Purification Center (Expanded 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 Sunnyvale and the Ford Ponds area. 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. **Whereas**, since 2014 the District and Sunnyvale have been working together in evaluating alternative plant layouts and facilities so that Sunnyvale may provide the District with treated wastewater and the District may further treat that water to meet potable reuse requirements; and
- H. **Whereas**, Sunnyvale has completed a master plan for improvements and expansion of its WPCP, which currently contemplates using conventional activated sludge (CAS) treatment, and which has an implementation schedule that may be different from the District's schedule for building and operating a District Advanced Water Purification Facility (AWPF); and
- I. **Whereas**, the Parties have evaluated three alternative plant layouts and facilities (Options 1, 2 and 3), of which Options 1 and 2 involve designing and constructing membrane bioreactor (MBR) facilities to be incorporated into the Sunnyvale WPCP upgrade. Under those two options, MBR effluent would supply water to an AWPF that the District would construct on the Sunnyvale WPCP site, which would further treat the water to meet water quality requirements for indirect potable reuse; and
- J. **Whereas**, Option 3 involves Sunnyvale making treated wastewater effluent available to a site not located at the Sunnyvale WPCP, but at a site close to the Sunnyvale WPCP, where the District would construct an AWPF for producing purified water; and
- K. **Whereas**, current District staff analysis indicates that Option 3 is the most cost effective among the three alternative plant layouts and facilities and has the added advantage of relative independence in scheduling, requiring limited coordination with Sunnyvale's upgrade work at the Sunnyvale WPCP; and
- L. **Whereas**, in addition to assisting the District with further evaluation of Options 1, 2 and 3, Sunnyvale desires to assist the District in evaluating a multi-level AWPF on the Sunnyvale WPCP site as well as evaluating other advanced water purification treatment and recycled water alternatives including: constructing a pipeline to convey treated wastewater from the Sunnyvale WPCP for treatment at the Expanded SVAWPC; constructing an intertie (or interties) to convey treated wastewater from the Sunnyvale WPCP to the South Bay Water Recycling (SBWR) system; constructing a small scale AWPF at the Sunnyvale WPCP to manage salinity of recycled water; and constructing an intertie to convey treated wastewater from Palo Alto's Regional Water Quality Control Plant (RWQCP) for advanced treatment at the Sunnyvale WPCP and/or the Expanded SVAWPC; and
- M. **Whereas**, the Parties desire to enter into this MOU to set forth the terms of their collaboration pertaining to assessing the feasibility of water use alternatives and efforts to engage the cities of Palo Alto, Mountain View, San Jose and Santa Clara to develop a multi-agency MOU to explore the feasibility of developing one or more of the alternatives identified in Recitals I through L above; and

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

- 1. SCOPE AND NATURE OF MOU.** This MOU is intended to broadly describe the Parties' commitments to study the feasibility of the alternatives identified in Recitals I through L above. 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.
- 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 Sunnyvale enters into a new agreement to undertake 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, subject to approval by the California Division of Drinking Water.
- 5. ASSUMPTIONS RELATED TO THE FEASIBILITY OF IMPLEMENTING WATER REUSE ALTERNATIVES.** The Parties understand that the assumptions listed in a – g of this Section 5 are not intended to impose obligations onto either Party, but instead are assumptions the District will take into consideration as it investigates 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 (Comprehensive Agreement). For the purposes of exploring the feasibility of the Water Reuse Alternatives, the Parties shall use the following assumptions:
 - a. The Sunnyvale WPCP upgrade project will take priority over implementing any of the Water Reuse Alternatives that may impact Sunnyvale's implementation of the Sunnyvale WPCP upgrade project;
 - b. A projected average daily flow of 5 million gallons per day (mgd) of source water (effluent from the Sunnyvale WPCP dual media filters) will be made available to the District through the year 2020, and an additional 5 mgd of source water after 2020, for a total of 10 mgd. If the District determines that it wishes to increase the foregoing source water assumptions Sunnyvale will work in good faith to determine whether flows higher than these amounts can be included in this assumption;

- c. Though the above assumption for projected average daily flow of source water to be made available to the District is a good faith estimate, events beyond the control of Sunnyvale may adversely impact the quality or volume of source water, which may necessitate a temporary limit on the amount of source water made available to the District and the District will need to make its own estimates as to how any temporary limits on the amount of source water available to the District will impact the feasibility of the Water Reuse Alternatives. In making such an estimate the District may assume that Sunnyvale will use best efforts to reestablish the availability of source water to the District;
- d. Sunnyvale will temporarily interrupt the provision of source water or limit the amount of source water available to the District when Sunnyvale experiences decreases in influent flows, operation difficulties, or an inability of the Sunnyvale WPCP to meet NPDES requirements. The District will need to make its own estimates as to how any temporary interruptions of the amount of source water available to the District will impact the feasibility of the Water Reuse Alternatives;
- e. The District will need to make its own assumptions as to whether there will be a District cost to acquire treated wastewater from Sunnyvale. Terms and conditions for acquisition of treated wastewater will be included in the Comprehensive Agreement to be negotiated by the Parties in the future;
- f. During the term of this MOU, Sunnyvale will not enter into any agreement to provide treated wastewater effluent to another entity or project that could materially (defined as more than 0.2 mgd) reduce the amount of source water assumed to be available to the District in Section 5 b to d, without the District's consent; and
- g. Sunnyvale does not have sufficient information at this time to determine whether requirements will be established by State and Federal regulatory agencies for the minimum discharge flow of treated effluent from the Sunnyvale WPCP to its outfall, which is connected to the San Francisco Bay, in order to meet fish, wildlife and other environmental requirements. The Parties will in collaboration determine whether such requirements are intended to be established by regulatory agencies responsible for these areas. The District will include the conclusions of this determination as a factor in deciding whether to proceed with the design and construction of a Water Reuse project.

6. DEVELOPMENT OF A RESIDUALS MANAGEMENT PLAN.

- a. If the District desires to implement any of the Water Reuse Alternatives, the District and Sunnyvale will develop a residuals management plan describing the management of treatment residuals (Residuals Management Plan). In the Parties' 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, related to the development of the District AWP. If a Sunnyvale RO treatment facility is developed for the purpose of reducing the salinity of Sunnyvale's non-potable recycled water, it is assumed that Sunnyvale will be responsible for managing treatment residuals from that facility. The District will work with Sunnyvale to identify and design facilities to discharge or process treatment residuals, including conveyance systems to potentially bring RO concentrate from other locations to

Sunnyvale 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 AWPf, and the conveyance of that treated solid waste to the Sunnyvale WPCP. The District will be responsible for treating and conveying solid waste generated by the AWPf. Sunnyvale will be responsible for managing and operating the Sunnyvale WPCP's solid waste disposal system. The operational and disposal costs related to the residuals and solids generated at the AWPf will be the responsibility of the District.

7. DEVELOPMENT OF A PERMITTING PLAN.

- a. The Parties agree to investigate the potential environmental issues associated with reduced Sunnyvale WPCP effluent discharge into the San Francisco Bay due to Sunnyvale's planned delivery of treated wastewater to the District to implement any of the Water Reuse Alternatives.
- b. The Parties agree to investigate potential environmental issues due to the loss of existing open space if the District determines that Option 3 is the preferred option to construct an AWPf on Sunnyvale's decommissioned landfill located near the Sunnyvale WPCP site. The Parties will enter into negotiations to develop a process to retire this open space including the compensation needed resulting from this loss of open space.
- c. District and Sunnyvale will collaborate in developing a permitting acquisition plan (Permitting Plan). The Permitting Plan shall identify the permits necessary for the District's preferred option to construct an AWPf. The Permitting Plan 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.

- 8. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE.** The Parties agree that the feasibility studies contemplated in this MOU are exempt from California Environmental Quality Act ("CEQA") requirements pursuant to Section 15262 of the CEQA Guidelines that exempt projects involving only feasibility or planning studies for future actions which have not been approved, adopted, or funded. This MOU is intended to broadly describe the Parties' commitments to study the feasibility of the alternatives identified in Recitals I through L above. Sunnyvale and the District mutually acknowledge that this MOU is not comprehensive or definitive, and that this MOU does not commit or obligate either party to any particular course of action with respect to any of the Water Reuse Alternatives. Sunnyvale and District do not intend to be bound with respect to the approval of a lease to Sunnyvale lands for the siting of an AWPf and its approval and construction, or the delivery of source water from the Sunnyvale WPCP, or the availability of outfall capacity from the Sunnyvale WPCP to discharge RO concentrate, until, among other things, any required environmental review, including any required public hearings, are completed in compliance with the CEQA. Depending on the Water Reuse Alternative selected, if any, the Parties will determine who will serve as the CEQA lead agency. District and Sunnyvale will collaborate in the preparation of the appropriate CEQA documentation.

9. DEVELOPMENT OF A WATER QUALITY MONITORING PLAN. The Parties agree to enter into negotiations to develop a Water Quality Monitoring Plan to conduct sampling and laboratory analyses necessary to monitor and determine water quality related to the Water Reuse Alternatives that the District selects as its preferred option. In the Plan, Sunnyvale will be responsible for sampling and laboratory analyses of source water supplied by the Sunnyvale WPCP while District will be responsible for sampling and laboratory analyses of water being processed within and by any AWPf implemented by District. Parties will share water quality and processing data associated with District's operation of an AWPf.

10. PERMITS AND RIGHT OF ENTRY. During the term of this MOU:

- a. Sunnyvale will facilitate obtaining permits necessary for the District to complete its assessment of the feasibility of the Water Reuse Alternatives.
- b. District may, subject to the issuance of a temporary permit or other document issued by Sunnyvale and the provision of insurance certificates in forms satisfactory to Sunnyvale's Risk Manager, enter sites owned by Sunnyvale to conduct tests and studies preliminary studies (including engineering, environmental, and geotechnical) to determine the feasibility of the Water Reuse Alternatives and possible locations for siting the AWPf on the Sunnyvale WPCP site or land off the Sunnyvale WPCP, site such as Sunnyvale's decommissioned landfill site located near the Sunnyvale WPCP site.

11. ADDITIONAL INFORMATION. The Parties may, during the term of this MOU, request additional information, data and records relevant to District's site investigations from one another. The Parties shall provide such additional information, data and records, if reasonably available, in a reasonably timely manner.

12. LAND AND LEASE OPTION AGREEMENT. If District and Sunnyvale find the decommissioned landfill site, including the nine-acre closed landfill site that is generally shown in Attachment A of this MOU, which is incorporated herein by this reference, suitable for construction of an AWPf, then District and Sunnyvale, subject to CEQA and all other legal requirements, will conduct preliminary studies (including engineering, environmental, and geotechnical) to determine the suitability of locating the AWPf on such site. If the landfill site is found to be suitable by District and Sunnyvale, the Parties, subject to CEQA and all other legal requirements, shall endeavor to enter into a land lease option agreement that provides District with a right to a long-term lease of the site for the purpose of constructing, operating and maintaining an AWPf. District will work with Sunnyvale to identify and acquire the necessary rights of way for the transmission pipes conveying source water from the Sunnyvale WPCP to the AWPf site, and disposing of AWPf RO concentrate by delivery to the Sunnyvale WPCP outfall, if this alternative proves to be feasible and is included in the Comprehensive Agreement. The parties intend that the future lease option agreement include a description of the preliminary AWPf layout, site dimensions, access and exit routes, potential compensation, areas designated for Sunnyvale's use, if any, and other applicable terms and conditions that are mutually acceptable.

District and Sunnyvale shall also work together to evaluate the feasibility of using Sunnyvale's oxidation ponds 1 and 2 (oxidation ponds) for RO concentrate management after

the oxidation ponds are no longer needed by Sunnyvale, or if the RO concentrate management allows concurrent use of the oxidation ponds, as treatment facilities. If Sunnyvale’s oxidation ponds are found to be suitable by District for RO concentrate management, the Parties, subject to CEQA and all other legal requirements, shall endeavor to enter into a land lease option agreement that provides District with a right to a long-term lease of Sunnyvale oxidation ponds for the purpose of constructing, operating and maintaining RO concentrate treatment facilities.

13. COST SHARING. Activities undertaken by the Parties in furtherance of this MOU shall be funded as shown on Table 1, unless otherwise agreed to in writing by both Parties.

Table 1.

| Activity | District Share | Sunnyvale Share | Lead Agency |
|--|-----------------------|------------------------|--------------------|
| <u>Feasibility Studies</u> | | | |
| Identifying sites receiving the advanced treated recycled water as described in Section 4 | 100% | 0% | District |
| Studies to determine available source water quantity from WPCP as described in Section 5b and 5g | 80% | 20% | District |
| Management of treatment residuals from District facilities as described in Section 6 | 100% | 0% | District |
| Management of treatment residuals from Sunnyvale RO treatment facility as described in Section 6a | 0% | 100% | Sunnyvale |
| Preliminary studies to determine feasibility of District AWPF site as described in Section 10 | 100% | 0% | District |
| Preliminary studies to determine feasibility of Sunnyvale AWPF site as described in Section 6 | 0% | 100% | Sunnyvale |
| <u>Permitting</u> | | | |
| Permitting for WPCP upgrade project | 0% | 100% | Sunnyvale |

| | | | |
|--|-------------|-----------|-----------------|
| Permitting Plan for District AWPf as described in Section 7 | 100% | 0% | District |
|--|-------------|-----------|-----------------|

Monitoring

| | | | |
|---|-----------|-------------|------------------|
| Water quality monitoring of source water from WPCP as described in Section 9 | 0% | 100% | Sunnyvale |
|---|-----------|-------------|------------------|

| | | | |
|---|-------------|-----------|-----------------|
| Water quality monitoring for District’s AWPf as described in Section 9 | 100% | 0% | District |
|---|-------------|-----------|-----------------|

Management

| | | | |
|---|------------|------------|-----------------|
| CEQA for selected Water Reuse Alternative(s) as described in Section 8 | 90% | 10% | District |
|---|------------|------------|-----------------|

| | | | |
|--|------------|------------|------------------|
| Joint evaluation of potential District role in Sunnyvale’s non-potable recycled water system as described in Section 19 | 50% | 50% | Sunnyvale |
|--|------------|------------|------------------|

14. GRANTS AND EXTERNAL LOANS. District and Sunnyvale 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 water, sites for groundwater infiltration and injection, residuals and RO concentrate management facilities, and other related improvements to Sunnyvale’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.

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

16. TERMINATION.

- a. Termination for Breach of MOU: If either Party believes that the other Party has failed in any material respect to perform its obligations under this MOU, then that Party may provide written notice to the breaching party describing the alleged failure in reasonable detail. If the breaching Party does not cure or begin to cure the material failure within 60 calendar days after receiving such written notice, then the non-breaching Party may terminate this MOU by written notice to the breaching Party.

- b. Termination for Infeasibility. Additionally, either Party may terminate this MOU upon thirty days written notice to the other following a determination that the Water Reuse Alternatives are infeasible due to cost, environmental restrictions, regulatory or legal restrictions, size, or similar concerns.
- c. Failure to Appropriate Funding. The District or City may terminate this MOU immediately upon written notice to the other that the City Council or Board of Directors, respectively, has failed to appropriate funds for that party's cost sharing obligations under this MOU.

17. DISPUTES. Either Party may give the other Party written notice of any dispute. The Parties shall attempt in good faith to resolve any dispute arising out of or relating to this MOU promptly by negotiations between the District's Chief Executive Officer or designee, and the City Manager, or designee, on behalf of Sunnyvale. Within twenty calendar days after receipt of the notice of dispute, these executives shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary, to exchange information and attempt to resolve the dispute. If the matter has not been resolved within ninety calendar days of the first meeting, either Party may initiate mediation. The Parties shall select a mediator. If they cannot agree on a mediator, the Party demanding mediation shall request that the Superior Court of Santa Clara County appoint a mediator. The mediation meeting shall not exceed eight hours, unless the Parties agree to extend said time. The costs of the mediator shall be borne by the Parties equally. Mediation under this Section is a condition precedent to filing an action in any court. All negotiations and any mediation conducted pursuant to this Section are confidential and shall be treated as compromise and settlement negotiations to which Sections 1119 and 1152 of the California Evidence Code shall apply, and Sections 1119 And 1152 are incorporated herein by reference. Notwithstanding the foregoing provisions, a Party may seek a preliminary injunction or other provisional judicial remedy if in its judgment such action is necessary to avoid irreparable damage or to preserve the status quo.

18. COORDINATION.

- a. District and Sunnyvale staff will continue to inform the District-Sunnyvale 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 Sunnyvale will establish a Technical Advisory Committee (TAC) comprised of the District's Chief Executive Officer and Sunnyvale'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 Sunnyvale.

19. JOINT EVALUATION OF POTENTIAL DISTRICT ROLE IN SUNNYVALE'S NON-POTABLE RECYCLED WATER SYSTEM.

- a. Sunnyvale currently owns and operates a non-potable recycled water system (Sunnyvale Non-Potable Recycled Water System) that supplies an average daily flow of 1 mgd of

recycled water that meets CA Title 22 requirements to existing customers within its service area. The Parties agree to collaborate in determining how best to continue to serve these existing customers in the future, and how the costs should be shared related to developing any Water Reuse Alternative that involves changes to Sunnyvale Non-Potable Recycled Water System.

- b. The Parties will continue to collaborate in exploring the future development of the Wolfe Road 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 Sunnyvale's recycled water system, or (ii) acquisition of Sunnyvale 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.

20. 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 Sunnyvale:

Deanna J. Santana
City Manager
456 West Olive Avenue
Sunnyvale, CA 94088

If to District:

Norma J. Camacho
Interim Chief Executive Officer
Santa Clara Valley Water District
5750 Almaden Expressway, San Jose, CA 95118

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.

21. 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.

22. 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.

23. 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, Sunnyvale 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 23 will survive termination and expiration of this MOU.

- 24. ASSUMPTION OF RISK.** District and Sunnyvale acknowledge that there is a risk entering into this MOU and that undertaking of any activities or the payment of any costs under this MOU is uncertain and that the activities contemplated by this MOU do not suggest that District may ever commence implementing any of the Water Reuse Alternatives.
- 25. MODIFICATION.** This MOU may be modified at any time by the mutual written agreement of the Parties.
- 26. 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.
- 27. 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.
- 28. WAIVER.** Waiver by either party of any default, breach or condition precedent shall not be construed as a waiver of any other default, breach or condition precedent or any other right hereunder.
- 29. 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.
- 30. 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 this MOU, unless the omitted language is integral to the Parties' intention and purpose of entering into this MOU.

31. 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.

32. ASSIGNMENT. District acknowledges that Sunnyvale desires to enter into this MOU because of the prior experience and qualifications of District. Therefore, District shall not assign, sell, or otherwise transfer any rights (collectively “assignment”) under this MOU without the prior written consent of Sunnyvale. No assignment shall be effective until the Sunnyvale City Council approves the assignment.

33. 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.

This MOU will be effective as of the last date signed below.

**City of Sunnyvale,
a municipal corporation**

Deanna J. Santana
City Manager

Date

Approved as to form:

John A. Nagel, City Attorney

**Santa Clara Valley Water District,
a Special District**

Norma Camacho
Interim Chief Executive Officer

Date

Approved as to form:

Anthony Fulcher, Senior Assistant District Counsel

ATTACHMENT A – GENERAL LOCATION OF PROPOSED SITE FOR AWPf

OFFICE OF COUNTY ASSESSOR — SANTA CLARA COUNTY, CALIFORNIA

| | |
|--------------------|------------------|
| BOOK 110 | PAGE 3 |
|--------------------|------------------|



NTS

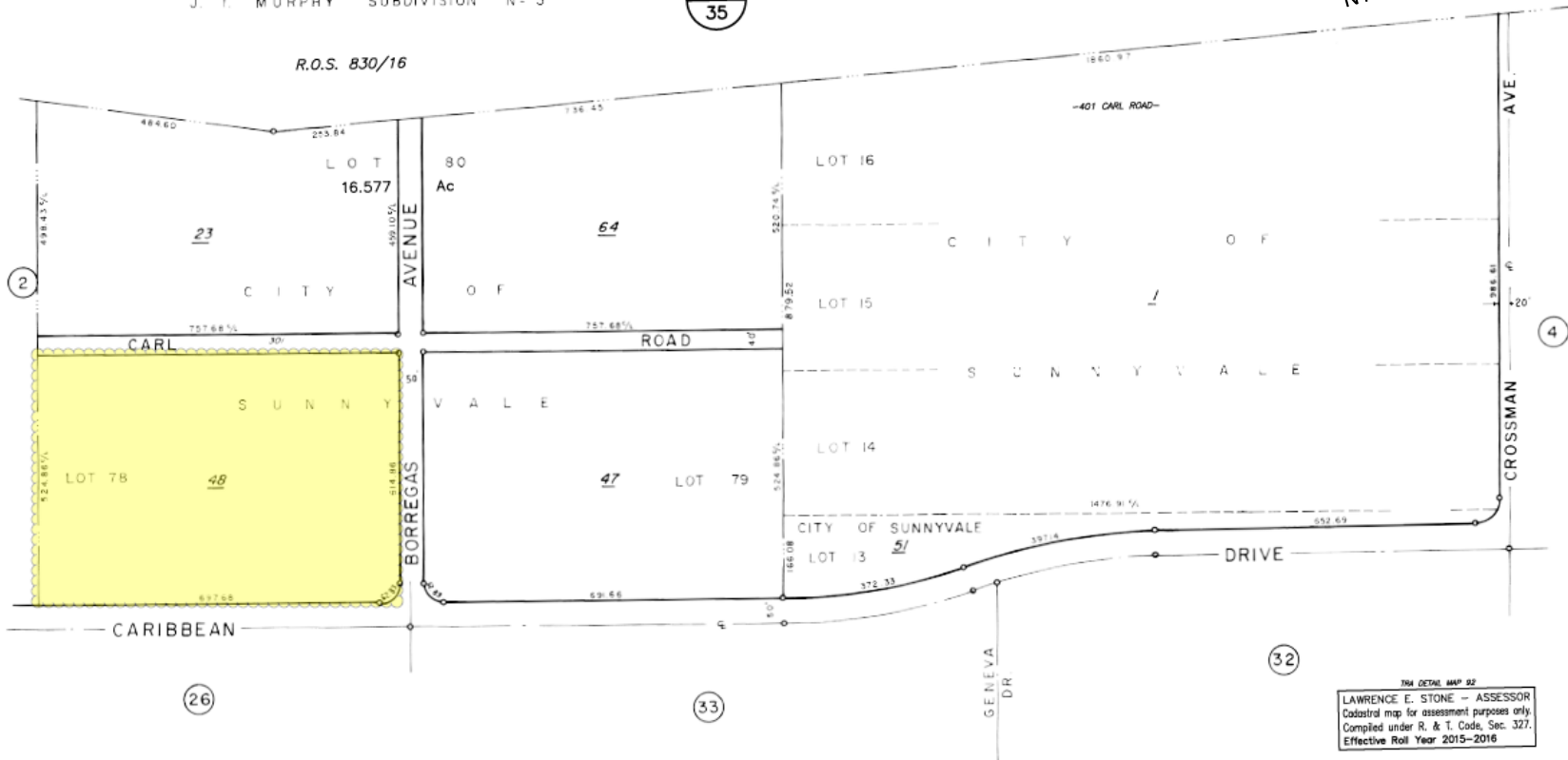
R. O. S. 256/28, 29

J. T. MURPHY SUBDIVISION N^o 3

15
35

CROSSMAN SUBDIVISION N^o 2

R.O.S. 830/16



THIS DETAIL MAP IS
LAWRENCE E. STONE — ASSESSOR
Cadastral map for assessment purposes only.
Compiled under R. & T. Code, Sec. 327.
Effective Roll Year 2015–2016

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MEMORANDUM OF UNDERSTANDING

BETWEEN

SANTA CLARA VALLEY WATER DISTRICT AND

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION AND BAY AREA WATER SUPPLY AND CONSERVATION AGENCY TO

PARTICIPATE IN A FEASIBILITY STUDY TO EVALUATE ALTERNATIVES FOR SAN FRANCISCO PUBLIC UTILITIES COMMISSION AND BAY AREA WATER SUPPLY AND CONSERVATION AGENCY PARTICIPATION IN THE EXPEDITED PURIFIED WATER PROGRAM

This MEMORANDUM OF UNDERSTANDING (“MOU”), made in the State of California on this _____ day of _____ 2017, is by and between the Santa Clara Valley Water District (“SCVWD”), an independent special district created by Legislature of the State of California, the Bay Area Water Supply and Conservation Agency (“BAWSCA”), and the San Francisco Public Utilities Commission (“SFPUC”), a department of the City & County of San Francisco, collectively referred herein as the “Parties” and singularly as a “Party.”

This MOU sets forth the respective roles and responsibilities of the Parties regarding the development of a Feasibility Study between the Parties to identify and evaluate options for the SFPUC/BAWSCA to participate in SCVWD’s Expedited Purified Water Program (“Program”).

RECITALS

1. WHEREAS, current and future drought conditions in California threaten water supply reliability; and
2. WHEREAS, SCVWD is investigating the feasibility of developing up to 45,000 acre-feet per year (“AFY”) or 40 million gallons per day (“MGD”) of purified water capacity by 2025 to augment water supply in Santa Clara County (“County”) via indirect potable reuse and potential direct potable reuse; and
3. WHEREAS, the SFPUC and SCVWD share common customers in the County; and
4. WHEREAS, SCVWD, as part of its Program, may develop capacity to produce additional water supplies that could be available, including to the SFPUC/BAWSCA and customers common to the SCVWD; and
5. WHEREAS, the SFPUC and SCVWD independently deliver treated water to the cities of San Jose and Santa Clara; and

6. WHEREAS, the Parties will have access to and may use all of the deliverables produced through this Feasibility Study; and
7. WHEREAS, the Parties are partners on multiple projects and programs related to improving regional water supply reliability, including the Bay Area Regional Reliability Project; and
8. WHEREAS, the SFPUC and SCVWD developed and make beneficial use of a System Intertie, located in the city of Milpitas; and
9. WHEREAS, the Parties intend to continue working together on projects and programs of mutual interest.

NOW, THEREFORE, in consideration of the recitals and mutual obligations of the Parties herein expressed, the Parties agree as follows:

1. PREAMBLE

The Parties seek to work cooperatively to determine whether a water supply project can be developed to mutually benefit the Parties and provide greater water supply reliability to their common customers. This Feasibility Study includes two distinct phases: 1) Prepare an initial screening with sufficient information for the Parties to determine whether to proceed with continued analysis of a water supply project(s) to supply between 5-15 MGD in excess of SCVWD's needs, which can be made available to SFPUC customers/BAWSCA members within Santa Clara County; and 2) If the initial screening demonstrates that a project(s) is viable, prepare a technical memorandum specifying in detail an arrangement in which the SFPUC/BAWSCA can commit financial and other resources to the SCVWD in exchange for the right to receive 5-15 MGD from SCVWD's Program, should the SCVWD decide to implement that program.

The scope of work for Phase 1 of the Feasibility Study is detailed herein. It will conclude with a Work Plan for Phase 2. Developing the scope of work and cost of Phase 2 is also envisioned as part of this Feasibility Study and will be finalized as an addendum to this MOU upon the completion of Phase 1.

2. DEFINITIONS

- a) "CEQA" -The California Environmental Quality Act.
- b) "Consultant" - Consulting firms, engineering firms, scientific firms, public outreach firms, facilitation firms or other professional services firms retained by SCVWD to provide services for the Feasibility Study.
- c) "Consultant Contracts" – Consultant services contracts between SCVWD and Consultant for professional services for the development of the Feasibility Study.
- d) "ESA" – The Federal Endangered Species Act

- e) “NEPA” - The National Environmental Policy Act
- f) “Feasibility Study” - A proposed study of alternatives, analysis, and documentation of the feasibility of the concept broadly described in Article 1 of this MOU. The Feasibility Study will define objectives, evaluate project constraints, evaluate the delivery approach, conduct performance assessment, and estimate project costs.
- g) “Feasibility Study Staff Time” - Staff and management time from one or more of the Parties that is necessary for conducting the general project management and other duties as assigned under this MOU.
- h) “Participation Agreement” – An agreement in which SFPUC/BAWSCA shares in the costs of the Project in exchange for a right to receive a portion of the purified water produced by the Project, where the SCVWD may substitute such portion of purified water with other sources of SCVWD water.
- i) “Program” – more fully, “Expedited Purified Water Program – SCVWD’s planned development of up to 45,000 AFY or 40 MGD of purified water capacity by 2025 to augment water supply in the County via indirect potable reuse and potential direct potable reuse.
- j) “Project” – The constructed elements of the Expedited Purified Water Program.
- k) “Regional Facility” or “System Interties” - One or more facilities or interties between two neighboring agencies used to access (1) raw water or (2) treated water meeting drinking water standards administered by the California Division of Drinking Water.

3. TERM

- a) This MOU shall become effective upon its execution by all Parties.
- b) This MOU will terminate on December 31, 2018 or when all obligations under this MOU have been performed, whichever occurs first.
- c) Payment obligations under Article 8, Cost Sharing and Payment, and Article 11, Cancellation, shall survive discharge or termination of this MOU until obligations are satisfied.

4. PURPOSE

The purpose of this MOU is to:

- a) Define the roles and responsibilities of each Party in coordinating the development of the Feasibility Study by Consultant(s). All work associated with the Feasibility Study is to be conducted in accordance with the MOU.

- b) Establish the guidelines and principles for cost sharing between the Parties for the development of the Feasibility Study.
- c) Establish procedures for incurring costs such as contracting and payment of Consultant(s) for developing the Feasibility Study.
- d) Establish procedures for the SCVWD seeking reimbursement from SFPUC/BAWSCA for costs incurred by SCVWD for payment of Consultant(s) developing the Feasibility Study.

5. WORK TO BE PERFORMED

The Feasibility Study will be conducted cooperatively by the Parties and Consultant(s) in two phases. The focus of the first phase (“Phase 1”) will be to identify the key project objectives for the Parties and define viable alternative(s) that can meet those objectives. Based on the results of Phase 1, viable project alternative(s) can be further analyzed in detail in Phase 2, providing sufficient technical and institutional information to evaluate a Project(s) that can mutually benefit the Parties. Subsequent tasks and work products may be added through addendum(s) to this MOU as agreed by the Parties.

At the conclusion of Phase 1, each Party reserves the right to not move forward with Phase 2 or subsequent activities envisioned under this MOU. However, any Party may use the analysis developed herein for any future planning or development.

The SCVWD is seeking to develop a drought-proof water supply through purifying treated wastewater through advanced water treatment technologies. This Program is expected to meet or exceed drinking water standards and may be utilized to replenish the Santa Clara County groundwater basin; to supplement the raw water treated at the SCVWD’s water treatment plants; or to enable storage of the water through its participation in various banking programs and/or exchanges with other water agencies.

The following tasks have been identified for assessing the Phase 1 feasibility of SFPUC/BAWSCA’s participation in the Program:

- 1. *Define objectives for the SCVWD and SFPUC/BAWSCA and their principles of participation*
 - a. **Purpose:** Identify the specific objectives that each Party has with respect to its participation in the Feasibility Study. These objectives will include conveyance, timing, quantity, quality and reliability of water supply and any other impacts or constraints of concern.
 - b. **Elements:**
 - i. The Parties will develop specific objectives and may solicit feedback from the following stakeholders, as appropriate:
 - 1. City of San Jose
 - 2. City of Santa Clara
 - ii. Synthesize preliminary findings

- iii. Hold a meeting between the Parties summarizing key areas of overlap, differences, and identifying issues that will require further analysis.
 - iv. Draft specific objectives, principles of participation, issues to be resolved in the near term, and those that require further study.
 - c. Deliverables:
 - i. Meeting agendas and summaries.
 - ii. Specific objectives, principles of participation, and list of issues to be resolved in Phase 1 (short-term) and Phase 2 (requiring further analysis).
- 2. *Conduct constraints analysis*
 - a. Purpose: Identify potential constraints/boundaries that would impact the Parties from entering into a Participation Agreement, and identify the particular terms and conditions of a Participation Agreement.
 - b. Elements:
 - i. Review and analyze the following areas of importance from each Party's perspective:
 - 1. Legal requirements and constraints
 - 2. SCVWD imported water contracts
 - 3. SCVWD treated water contracts
 - 4. Institutional/governance requirements
 - 5. Regulatory
 - 6. Environmental
 - 7. Financial
 - 8. Infrastructure
 - 9. Operational
 - 10. Water supply project commitments/availability of water
 - 11. Others as identified in Task 1
 - ii. Prepare draft findings and circulate among Parties for review and comment.
 - iii. Hold a joint meeting between the Parties to discuss draft findings and assess the need for further analysis (if necessary)
 - iv. Finalize findings
 - c. Deliverables: Memorandum (draft and final) summarizing findings.
- 3. *Identify conceptual alternatives*
 - a. Purpose: Identify conceptual alternatives that may be analyzed in further detail.
 - b. Elements:
 - i. Identify alternatives that meet the objectives identified in Task 1 and are not immediately omitted from further consideration under the constraints identified in Task 2.
 - 1. Groundwater extraction (SCVWD Campbell Well Field)
 - 2. New or leased wells.

3. Treated surface water deliveries to the SFPUC at the Intertie in Milpitas.
 4. Treated surface water deliveries to the SFPUC at a new Westside Intertie, to be developed.
 5. Treated water deliveries directly to San Jose and/or Santa Clara.
 6. Transfers/exchanges, either direct or indirect to SFPUC/BAWSCA, using Los Vaqueros, Semitropic, State Water Project, or other.
 7. Direct transfer of purified water to the San Francisco Regional Water System.
- ii. Select up to four (4) viable project alternatives from Task 3.b.i
 1. Develop Project schematic
 2. Identify infrastructure requirements for each alternative
 3. Identify preliminary (concept-level) capital and operations and maintenance costs
 - c. Deliverable: Technical Memorandum describing selected viable Project alternatives.
4. *Develop Work Plan for Phase 2*
 - a. Purpose: Identify hydraulic modeling and other needs for further analysis of each alternative.
 - b. Develop cost estimate for proposed scope of work for Phase 2.
 - c. Deliverable: Work plan description and cost estimate for Phase 2.

6. REGULATORY APPROVALS, ENVIRONMENTAL APPROVALS, ENVIRONMENTAL COMPLIANCE AND ENVIRONMENTAL REVIEWS

The Parties agree that the work contemplated in this MOU, as it involves a feasibility study, is exempt from the requirements of CEQA pursuant to CEQA Guidelines and is similarly exempt from the National Environmental Policy Act (NEPA) and the ESA.

7. RESPONSIBILITIES OF THE PARTIES

General responsibilities of all Parties are as follows:

- a) Work cooperatively to develop a work plan and the Feasibility Study.
- b) Commit Feasibility Study Staff Time to work with staff from the other Parties and the selected Consultant(s) in conducting the Feasibility Study.
- c) Share relevant engineering, permitting, regulatory and operational information regarding its own facilities and permits with the other Parties for the benefit of the Feasibility Study.
- d) Provide access to facilities and operational data that may be needed for developing the Feasibility Study (such as groundwater management,

hydrogeology, intakes, aqueducts and pumping plants, transmission lines, reservoirs, treatment plants, interties, etc.). If needed, commit Feasibility Study Staff Time to conduct necessary analysis of its own facilities, permits, operational data, modeling information, procedures or requirements, or any other data needed for the Feasibility Study and share the information with the other Parties. Access to facilities will be consistent with, and will follow, the facility owner's standard safety and notification requirements.

- e) Provide oversight and review of Feasibility Study work products.
- f) Conduct general work that is needed to advance the Feasibility Study development. These efforts may include State and Federal grant application and grant administration support, website update, and outreach.
- g) Accept that, if any Party chooses to move forward with individual projects and concepts also being evaluated as part of the Feasibility Study, those individual projects and concepts are not subject to the terms of this MOU.

The Parties hereby designate SCVWD as the contracting entity under this MOU. Subject to approval by SCVWD's authorized representative, SCVWD shall be responsible for entering into Consultant Contract(s) to undertake the Feasibility Study. SCVWD shall conduct a consultant procurement process that satisfies its own internal consultant procurement policies/criteria. Once a Consultant(s) is selected, and only after the Parties have funded the Feasibility Study preparation effort as provided in Article 8 of this MOU, shall SCVWD enter into Consultant Contract(s). If SCVWD fails to approve the necessary Consultant Contract(s) or SCVWD terminates Consultant Contract(s) for any reason, SCVWD may terminate its participation in this MOU under Article 11.

8. COST SHARING AND PAYMENT

The estimated Consultant cost to complete this scope of work is \$75,000. SFPUC agrees to reimburse SCVWD for 50% of the total Consultant cost. BAWSCA's share of the cost will be paid to SFPUC through a separate agreement. The SFPUC funding commitment, therefore, shall not exceed \$37,500, unless additional funding is authorized in writing through a modification pursuant to Article 15 of this MOU. If the projected cost to complete the scope of work to be performed by Consultant(s) is likely to exceed \$75,000, then Parties shall meet and confer within two weeks (14 days) of the notification by SCVWD of the projected increase in cost. Within 7 days of the meet and confer, Parties may choose to amend Consultant Contract(s) and this MOU to include the newly negotiated costs or make alternate arrangements.

- a) SCVWD shall request disbursement of SFPUC's financial commitment on a reimbursement basis by submitting to SFPUC invoices(s) for incurred Consultant Contract costs. SCVWD shall submit an invoice to SFPUC for Consultant Contract costs no more than once a calendar quarter, which shall include the hourly rates, hours spent and task break down of the activities performed in support of this scope of services specified in Consultant Contract(s).

- b) Following the review and approval of an invoice by SFPUC, SFPUC shall disburse to SCVWD an approved amount thirty (30) days after receipt of that invoice.
- c) An invoice may be rejected by the SFPUC only if:
 - a. it is submitted without signature;
 - b. is submitted under signature of a person other than SCVWD's duly authorized representative;
 - c. the invoice contains a material error; or
 - d. paying the invoice would result in SFPUC exceeding its financial commitment described in Article 8 of this MOU.

SFPUC shall notify SCVWD of any invoice so rejected, and the reasons therefore.

Costs incurred on the Feasibility Study by a Party for “in-kind” services including Feasibility Study Staff Time and overhead costs, as well as costs for Consultant oversight, meetings, travel, and incidental expenses shall not be reimbursable by the other Party.

No work on the Feasibility Study shall commence until this MOU has been executed by all Parties. If a single Party chooses to terminate its participation under the terms of this MOU, said Party shall remain financially responsible for its contribution as detailed in Article 11, Cancellation.

9. HOLD HARMLESS, INDEMNIFICATION, REMEDIES AND INSURANCE

To the extent permitted by California State law and in proportion to fault, each Party will indemnify, defend and hold all other Parties and their directors, officers, agents, and employees safe and harmless from any and all claims, suits, judgments, damages, penalties, costs, expenses, liabilities and losses (including without limitation, sums paid in settlement of claims, actual attorneys' fees, paralegal fees, consultant fees, engineering fees, expert fees and any other professional fees) that arise from or are related in any way to each Party's, its employees', officers', or other agents' in the operation and/or performance of this MOU; provided, however, that no Party shall indemnify or hold harmless another Party for that Party's own negligent acts, errors or omissions, or willful misconduct, in the operation and/or performance of this MOU or the performance of Consultant(s).

Notwithstanding the preceding paragraph, where more than one Party is named in a suit challenging the Feasibility Study, or made subject to a claim or penalty regarding the same, the Parties shall coordinate and undertake a joint defense, utilizing a joint defense agreement to the extent possible, subject to the approval of the Parties. Each Party agrees that, to the greatest extent practicable, it shall cooperate in such defense and execute any waivers and/or tolling agreements that may be necessary in order to provide for a single joint defense of such a suit, claim, or imposition of penalty. Any communications between the Parties and any of their respective consultants and attorneys engaged in the joint defense shall be privileged as joint defense communications. Work performed during the joint defense by Consultants or attorneys, to the extent allowed by law, shall

be considered attorney work product. Nothing in this paragraph is intended to require a joint defense under circumstances where it would be legally impermissible or under circumstances where it is wholly impractical.

This indemnity provision shall survive the termination of this MOU and the termination of any Party's participation in this MOU. Further, each Party will be liable to the other Party(s) for attorneys' fees, costs and expenses, and all other costs and expenses whatsoever, which are incurred by the other Party(s) in enforcing this indemnity provision.

In all Consultant Contracts funded in whole or part by the Parties, SCVWD shall name the SFPUC, BAWSCA, and their respective officers, agents and employees as additional insureds and additional indemnitees in the insurance coverage and indemnity provisions customarily used in the SCVWD's professional service contracts.

10. DISPUTES

Any claim that a Party may have against the other Party regarding the performance of this MOU including, but not limited to, claims for compensation will be submitted to such other Party. The Parties will attempt to negotiate a resolution of such claim and if necessary process an amendment to this MOU or a settlement agreement to implement the terms of any such resolution.

11. CANCELLATION

If a Party elects to terminate its participation in this MOU or in the Feasibility Study, it may do so by delivering to the other Party a written notice of intention to terminate. Termination shall take effect thirty days following the receipt of notice by the other Party. No portion of the terminating Party's financial contribution provided under this MOU for use in preparing the Feasibility Study shall be refunded to the terminating Party.

12. MAINTENANCE AND INSPECTION OF BOOKS, RECORDS, AND REPORTS

The Parties will, upon reasonable advance written notice, make available for inspection to the other Parties all records, books and other documents directly relating to the Feasibility Study as well as any other work related to water supply institutional arrangements and MOU that are required for conducting the Feasibility Study. Prior to release of such documents (other than in response to a request under the California Public Records Act or San Francisco Sunshine Ordinance, a subpoena, or court order), all draft information shall to be approved by all Parties for finalization and release.

13. MOU NOT A PRECEDENT

The Parties intend that the provisions of this MOU will not bind the Parties as to the provisions of any future agreement between them. This MOU was developed specifically for the specified MOU term.

14. NOTICES

Any notice, demand, or request made in connection with this MOU must be in writing and will be deemed properly served if delivered in person or sent by United States mail, postage prepaid, to the addresses specified herein.

Santa Clara Valley Water District
Attention: Garth Hall, Deputy Operating Officer, Water Supply
5750 Almaden Expressway
San Jose, CA 95118

San Francisco Public Utilities Commission
Attention: Paula Kehoe, Manager, Water Resources
525 Golden Gate Avenue, 10th Floor
San Francisco, CA 94102

Bay Area Water Supply and Conservation Agency
Attention: Nicole Sankdula, Chief Executive Officer
155 Bovet Road, Suite 650
San Mateo, CA 94402

15. MODIFICATION

This MOU may be modified only upon the mutual written consent of the Parties.

16. NO THIRD-PARTY BENEFICIARIES

No third-party beneficiaries are intended or created by this MOU.

17. AUDITS

SFPUC may audit the District's records related to disbursements of SFPUC funds, per Article 8 of this MOU, during normal business hours by providing the District with a least five business days notice.

18. CERTIFICATION OF FUNDS

Any and all on-going costs under this MOU are subject to the budget and fiscal provisions of the City and County of San Francisco's Charter. Charges will accrue only after prior written authorization certified by the Controller, and the amount of the SFPUC's obligation hereunder shall not at any time exceed the amount certified for the purpose and period stated in such advance authorization. This MOU will terminate without penalty, liability or expense of any kind to the SFPUC at the end of any fiscal year if funds are not appropriated for the next succeeding fiscal year. If funds are appropriated for a portion of the fiscal year, this MOU will terminate, without penalty, liability or expense of any kind at the end of the term for which funds are appropriated. The SFPUC has no obligation to make appropriations for the Feasibility Study pursuant

to this MOU in lieu of appropriations for new or other agreements. The SFPUC budget decisions are subject to the discretion of the Mayor and the Board of Supervisors. THIS SECTION CONTROLS AGAINST ANY AND ALL OTHER PROVISIONS OF THIS MOU AND APPLIES TO ALL PARTIES' ABILITY TO PARTICIPATE IN THE ONGOING COSTS OF THE MOU AND ALL PARTIES MAY TERMINATE WITHOUT PENALTY IF FUNDS ARE NOT APPROPRIATED BY THEIR RESPECTIVE GOVERNING BODIES.

19. SEVERABILITY

If any term or provision of this MOU is deemed invalid or unenforceable by a court of competent jurisdiction or by operation of any applicable law, it will not affect the validity of any other provision, which will remain in full force and effect.

20. COMPLETE AGREEMENT

Other than as specified herein, no document or communication passing between the Parties to this MOU will be deemed to be part of this MOU.

21. ASSIGNMENT

This MOU is not assignable either in whole or in part, except upon mutual written consent of the Parties.

22. AMENDMENT AND WAIVER

Except as provided herein, no alteration, amendment, variation, or waiver of the terms of this MOU shall be valid unless made in writing and signed by all Parties. Waiver by any Party of the default, breach or condition precedent, shall not be constructed as a waiver of any other default, breach or condition precedent, or any right hereunder.

23. SUCCESSORS

This MOU shall bind the successors of the Parties in the same manner as if they were expressly named.

24. INTERPRETATION

This MOU shall be deemed to have been prepared equally by all Parties, and its individual provisions shall not be construed or interpreted more favorably for one Party on the basis that the other Parties prepared it.

25. INTEGRATION

This MOU represents the entire understanding of the Parties as those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder.

26. WAIVER

The waiver at any time by any Party of its right with respect to default or other matter arising in connection with this MOU will not be deemed a waiver by that Party with respect to any subsequent default or matter.

27. GOVERNING LAW

This MOU is governed by and will be interpreted in accordance with the laws of the State of California.

28. COUNTERPART

This MOU may be executed in counterpart. Facsimile and electronic signatures shall be binding.

IN WITNESS WHEREOF, the Parties have executed this MOU by their duly authorized representatives, in counterpart.

SANTA CLARA VALLEY WATER DISTRICT

APPROVED AS TO FORM


By: _____
Anthony Fulcher
Senior Assistant District Counsel

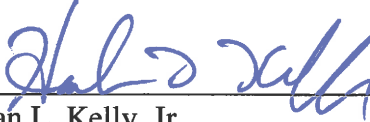
By: _____
Norma Camacho
Interim Chief Executive Officer

Dated: _____

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

APPROVED AS TO FORM

By: 
Josh Milstein
Deputy City Attorney
Dated: 1-12-17

By: 
Harlan L. Kelly, Jr.
General Manager

Dated: 1/13/17

Authorized by San Francisco Public Utilities Commission,
Resolution No. 17-0007
Adopted January 10, 2017

BAY AREA WATER SUPPLY AND CONSERVATION AGENCY

By: Nicole Sandkulla
Nicole M. Sandkulla
General Manager

Dated: 1/19/2017



Committee: Recycled Water Committee
Meeting Date: 02/16/2017
Agenda Item No.: 5.4
Unclassified
Manager: G. Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Grant Funding Opportunities.

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

The Santa Clara Valley Water District (District) continues to research and pursue potential financing and grant opportunities for the Expedited Purified Water Program (Program) and non-potable reuse (NPR) projects. This Agenda item provides an update on these efforts as they pertain to federal and state funding opportunities.

In 2016, the District successfully applied for and received an award of \$4 million in Federal Title XVI grant funding for the South County Recycled Water System Phase 1B and 2A project (South County Project). For the South County Project, the District also applied for:

- \$6.7 million in state funding through the Proposition 1/Clean Water State Revolving Funding (Prop 1/CWSRF) program; and
- \$1.7 in additional federal funding through the Title XVI program

The award of the \$4 million federal grant triggered a requirement to revise the National Environmental Policy Act (NEPA) document that the U.S. Bureau of Reclamation (USBR) had prepared for the South County Project in 2010. The additional environmental assessments and document revision by USBR may take up to two years to complete. The construction of the South County Project has been postponed until the update NEPA document process is finished.

District staff and consultants met with the State Water Resources Control Board (SWRCB) and discussed the South County Project funding application and introduced the Expedited Purified Water Program on October 26, 2016. This meeting was planned to discuss funding opportunities through the SWRCB Prop 1/CWSRF program for the District's Program projects, currently under development. The SWRCB stated it is not likely there will be Proposition 1 grant funding available for any projects including the South County Project due to the amount of funding estimated to be allocated to existing projects with completed applications. However, the SWRCB anticipates continued available funding through the CWSRF loan program and encouraged the District to apply. The SWRCB stated the District's projects may also be considered for funding through the Green Project Reserve (GPR) loan program, that includes principal forgiveness for up to \$2.5 million in initial funding. Staff is developing the additional

CEQA+ documentation to complete the application requirements for the South County Project to be considered for \$2.5 million in GPR funding.

A schedule projecting projects for the program to apply for targeted funding opportunities is provided in Attachment 1. A summary of the targeted state and federal funding opportunities for water reuse projects is provided in Table 1.

| Table 1: Summary of Funding Opportunities | | |
|--|---|---|
| Item | Funding Source | Type |
| STATE | | |
| 1 | SWRCB - Proposition 1 | Grant |
| 2 | SWRCB - Proposition 1 IRWM | Grant |
| 3 | Clean Water State Revolving Fund (CWSRF) | Loan |
| 4 | Green Project Reserve (GPR) | Loan (First \$2.5 million Grant/Principal Forgiveness Loan) |
| FEDERAL | | |
| 5 | Title XVI Program/Water Infrastructure Improvements for the Nation Act (WIIN) | Grant |
| 6 | Water Infrastructure Finance and Innovation Act (WIFIA) | Loan |

The Federal Water Infrastructure Improvements for the Nation (WIIN) Act was signed into law on December 16, 2016. WIIN includes provisions to authorize new water reuse projects, under the Reclamation Wastewater and Groundwater Study and Facilities Act (Title XVI Program), through a competitive feasibility study process. Guidelines for the feasibility studies process are to be released within 60 days of enactment of the WIIN Act. The Federal government appropriated \$50 million for funding the Title XVI Program. The District is participating through the Western Recycled Water Coalition as well as with District Lobbyist to obtain Title XVI authorization for the District Program.

The U.S. Environmental Protection Agency established the Water Infrastructure Finance and Innovation Act (WIFIA) in 2014. The WIFIA program is for projects over \$20 million, features federal financing up to 49 percent of the project costs, at a T-Bond rate. Repayment may be extended over a period of 35 years and starts 5 years after construction. Staff has reviewed the interim final rules released in December 2016 and continues to evaluate WIFIA as a potential funding opportunity for the District Program.

Staff has successfully completed this work with the assistance of consultant services. On July 7, 2015, the District executed an agreement for consultant services to assist staff with identifying potential funding opportunities and preparation of funding applications to support the District's Program and non-potable reuse projects. Approximately thirty-six percent (36%, \$158,500) of the budget (\$435,200) for consultant services has been expended for services provided through November 30, 2016.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

5.4 Grant Funding Opportunities



5.4 Funding Opportunities

| | Funding Source | Status | Next Steps |
|----------------|--|---|---|
| STATE | | | |
| 1 | SWRCB - Proposition 1 | South County: Applied \$6 M (2016) | Wait list, no funding available for new applicants |
| 2 | SWRCB – IRWM Proposition 1, and 84 | Sunnyvale: Received \$4 M (2015) | TBD |
| 3 | Clean Water State Revolving Fund (CWSRF) | --- | Potable Reuse: Initiate application development upon completion of Engineering Studies, June 2017 |
| 4 | Green Project Reserve | South County: Developing CEQA+ | TBD |
| FEDERAL | | | |
| 5 | USBR Title XVI Program / Water Infrastructure Improvements for the Nation Act (WIIN) | South County: Received \$4 M (2016), Applied \$1.7 M (2017) SBWR: Applied \$0.5 M (2017) | Potable Reuse: Apply for new Title XVI authorizations, criteria to be released mid February 2017 (WIIN) |
| 6 | US EPA Water Infrastructure Finance and Innovation Act (WIFIA) | --- | Potable Reuse: Under evaluation |

5.4 Federal - USBR

U.S. Bureau of Reclamation (USBR) Title XVI Funding Program

- Received \$4 million grant - September 2016
- Applied for \$1.7 million additional grant – December 2016
- \$4M grant triggered *NEPA document revisions
 - Revisions to be performed by USBR
- South County Recycled Water System Phase 1A/2B construction postponed for up to two years due to NEPA process

*National Environmental Policy Act

5.4 Federal - WIIN

Water Infrastructure Improvements for the Nation Act (WIIN)

- Signed into law December 16, 2016
- Provisions to approve *Title XVI authorizations* for *new projects* through competitive application process.
 - District seeking Title XVI authorization for projects

5.4 Federal - WIFIA

US EPA Water Infrastructure Finance and Innovation Act (WIFIA)

- *Potential funding opportunity*
- Interim final rules released December 6, 2016
 - Two-stage competitive application process: (1) initial project selection, and (2) project funding
 - \$500,000 - \$1 million in non-refundable application fees
 - Minimum eligible project cost = \$20 million
 - Maximum Federal financing (loan) = 49% eligible project cost

5.4 Draft Funding Application Schedule

| Task | 2017 (Calendar Year) | | | | 2018 | | | | 2019 | | | | 2020 | | | |
|--|----------------------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| TECHNICAL DOCUMENTS | | | | | | | | | | | | | | | | |
| Facility Plan (10%) | | | | | | | | | | | | | | | | |
| Engineer's Report / ROWD | | | | | | | | | | | | | | | | |
| CEQA | | | | | | | | | | | | | | | | |
| Permitting | | | | | | | | | | | | | | | | |
| GRANT FUNDING | | | | | | | | | | | | | | | | |
| Clean Water State Revolving Fund / Prop 1 | | | | | | | | | | | | | | | | |
| General Package | | | | | | | | | | | | | | | | |
| Financial Package | | | | | | | | | | | | | | | | |
| Technical Package | | | | | | | | | | | | | | | | |
| Environmental Package | | | | | | | | | | | | | | | | |
| Financial Agreement | | | | | | | | | | | | | | | | |
| Title XVI | | | | | | | | | | | | | | | | |
| Feasibility Study | | | | | | | | | | | | | | | | |
| NEPA | | | | | | | | | | | | | | | | |
| Annual Applications / Financial Document | | | | | | | | | | | | | | | | |
| OTHER | | | | | | | | | | | | | | | | |
| South Bay Water Recycling: MOU | | | | | | | | | | | | | | | | |
| San Francisco Public Utility Commission: MOU | | | | | | | | | | | | | | | | |
| Sunnyvale: MOU | | | | | | | | | | | | | | | | |
| Palo Alto: MOU | | | | | | | | | | | | | | | | |



Committee: Recycled Water Committee
Meeting Date: 02/16/2017
Agenda Item No.: 5.5
Unclassified
Manager: G. Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Independent Advisory Panel for Potable Reuse.

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

The District held its fourth Independent Advisory Panel (IAP) for Potable Reuse meeting on January 9, 2017. The last meeting was held on December 11, 2016. The purpose of this recurring meeting is to present the latest information regarding the District's Potable Reuse Program and elicit input from leading experts in the field of potable reuse regarding the District's projects. More than 60 representatives from a wide array of organizations attended the meeting, including regulators from the Regional Water Quality Control Board, the Division of Drinking Water, the Department of Health, recycled water producers, professional consultants currently working on District potable reuse related projects, research institutions, and District staff.

The meeting agenda included the following items: 1) the District's potable reuse objectives and goals; 2) an update on District's potable reuse efforts since the last meeting; 3) an update on the Reverse Osmosis Concentrate Management Plan Project; 4) a review of the Membrane Bioreactor Demonstration Study results; and 5) a review of next steps under the District's potable reuse program.

Overall the event was very well received by those who attended. Panel members were impressed by the quantity and quality of the information presented. Regarding the Membrane Bioreactor Demonstration Study report, the panel had several questions and suggested the report be revised to incorporate their feedback. With regards to the Reverse Osmosis Concentrate Management Plan Project the panel was very pleased with the study and provided a few comments that staff will be incorporating into the project execution plan. In addition, the panel concluded that the current level of ongoing analytical monitoring performed at the Silicon Valley Advanced Purification Center (SVAWPC) is adequate. Staff will follow up with the panel on how to best manage and analyze the Critical Control Points online monitoring data collected at the SVAWPC.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

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5.5 Independent Advisory Panel for Potable Reuse



5.5 Panel Benefits

- **NWRI Panel Provides:**
 - Independent third-party review and evaluation
 - Scientific and technical advice by leading experts
 - Help and support with challenging scientific questions
 - Documented reports of status, progress, findings, and recommendations from each panel meeting
 - Assistance with interactions with the public, decision makers, and regulators

5.5 Purpose of IAP Meeting

- Workshop to update expert panel on SCVWD's Potable Reuse (PR) efforts
- Board members in attendance:
 - Director Keegan
 - Director LeZotte



5.5 IAP Accomplishments

- Held four meetings so far:
 - April 2013, May 2014, Dec. 2015, and Jan. 2017
- Findings and recommendations on:
 - PR Program Goals and Next Steps
 - PR Demo Test Plan
 - MBR Study
 - RO Concentrate Study
 - PR Outreach Program
 - PR Groundwater Studies



5.5 Topics and Key Outcomes

- Workshop Topics
 - Recap of SCVWD's PR efforts in 2016
 - RO Concentrate Management Plan
 - Membrane Bioreactor Demonstration (MBR) Study
 - PR Options Next Steps
- Key Outcomes
 - Event was well received by attendees and panel
 - MBR Study: panel had several questions; consultant will revise report
 - RO Concentrate Management Plan: well received; staff will revise execution plan to include panel input
 - Staff will develop an action plan to address panel's input

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Committee: Recycled Water Committee
Meeting Date: 02/16/2017
Agenda Item No.: 5.6
Unclassified
Manager: R. Callender
Email: RCallender@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Public Outreach.

RECOMMENDED ACTION:

Receive information and discuss next steps.

SUMMARY:

The Santa Clara Valley Water District is committed to raising public awareness and securing acceptance of its potable reuse efforts as a viable alternative to address future water supply needs. The Office of Communications plays an important role in ensuring it employs a cohesive and strategic approach to build widespread support from key stakeholders and community leaders.

This presentation highlights the Office of Communications' efforts during 2016 to meet that objective, primarily through the tour and taste test programs. It also addresses its plans for 2017 to continue to build on the current momentum in the areas of enhanced engagement to our employees, the multi-ethnic community and environmental and health professionals.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

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5.6 Public Outreach



5.6 Outreach

Looking back at 2016

✓ Tours

✓ Community presentations

✓ Taste tests



5.6 Outreach

Tours lead the way

1,978 visitors!

49 private tours!

41 public tours!



To learn.

To evaluate.

To teach.

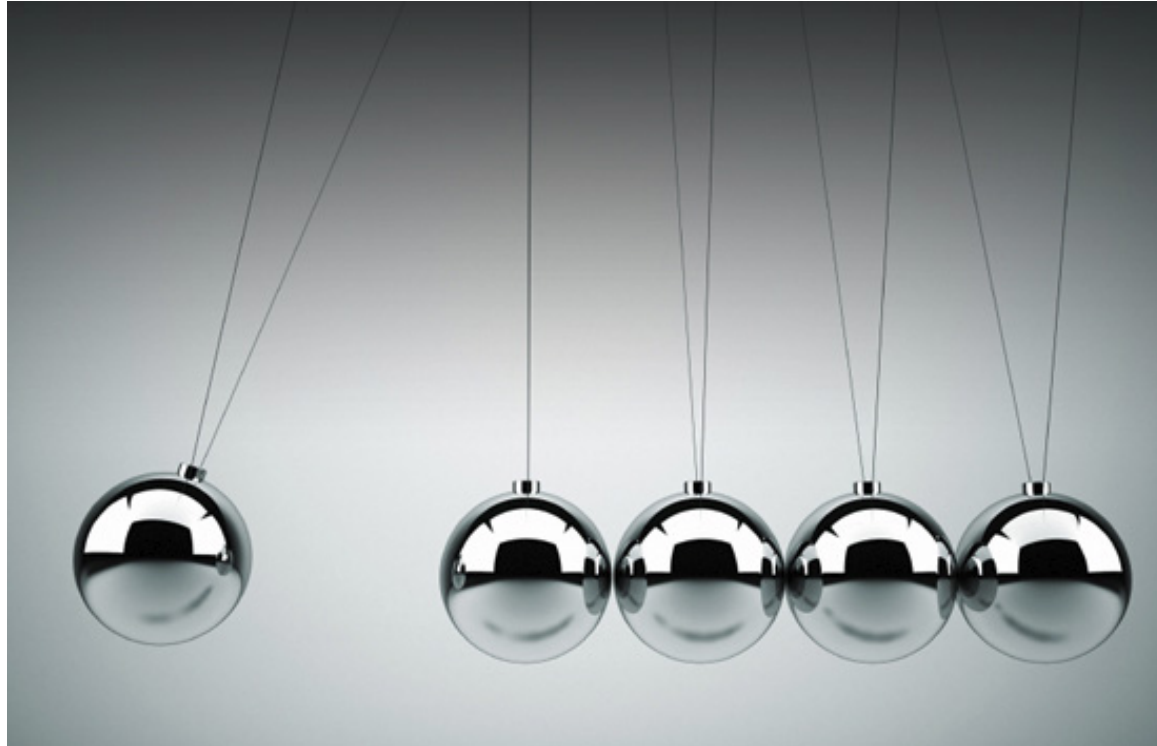
5.6 Outreach

The taste test challenge



5.6 Outreach

Our mission for 2017: Build momentum



5.6 Outreach

Enhance employee engagement

Educate environmental and health professionals

Measure the public

Target multi-ethnic communities



Committee: Recycled Water Committee
Meeting Date: 02/16/2017
Agenda Item No.: 5.7
Unclassified
Manager: K. Oven
Email: KOven@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Update on Wolfe Road Recycled Water Facilities Project.

RECOMMENDED ACTION:

Receive information.

SUMMARY:

The contractor has completed installation of 13,300 linear feet of 24-inch diameter recycled water pipeline along Wolfe Road to serve various customers in Sunnyvale and the Apple Campus 2 in Cupertino. The pipeline has been fully tested, and Wolfe Road pavement repair has been completed.

Work continues on the new recycled water pump station adjacent to the City of Sunnyvale's San Lucar Pump Station. The pumping, electrical, and control system equipment is on order and is anticipated to be delivered to the site by mid-March 2017. Installation and testing of the equipment is expected to be completed by early May 2017.

Apple continues to make progress on the recycled water pipeline tie-in from their campus to the Wolfe Road pipeline in the vicinity of Wolfe and Homestead Roads. Apple engineers estimate that their pipeline installation will be completed by mid-May. The District contractor's construction schedule may be extended to enable the installation of a telemetry conductor in Apple's pipeline and a pressure transmitter in their turnout after Apple's pipeline is installed and tested.

ATTACHMENT(S):

None

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2017 WORK PLAN - RECYCLED WATER COMMITTEE

Updated: 2/10/17

GP8. The Board has established Advisory Committees, which bring respective expertise and community interest, to advise the Board, when requested, in a capacity as defined: prepare Board policy alternatives and provide comment on activities in the implementation of the District's mission for Board consideration. In keeping with the Board's broader focus, Advisory Committees will not direct the implementation of District programs and projects, other than to receive information and provide comment

The 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.

| MEETING DATE | WORK PLAN ITEM, BOARD POLICY, & POLICY CATEGORY | ASSIGNED STAFF | INTENDED OUTCOME(S) | ACCOMPLISHMENT DATE AND OUTCOME |
|--------------|---|----------------|---|---|
| 02/08/17 | 3. Election of Chair and Vice Chair | L. Moore | Elect Committee Officers 1. Chair 2. Vice Chair | DATE Elected as follows: Chair – Vice Chair – |
| | 4. Approval of Minutes | L. Moore | Approved minutes. | |
| | 5. Action Items: Update on Expedited Purified Water Program. | K. Oven | Receive information and discuss next steps. | |
| | Direct Potable Reuse Update. | G. Hall | Receive information and discuss next steps. | |
| | Update on Recycled and Purified Water Expansion Efforts. | G. Hall | Receive information and discuss next steps: A. Sunnyvale B. Palo Alto/Mountain View C. San Francisco PUC | |
| | Grant Funding Opportunities. | G. Hall | Receive information and discuss next steps. | |
| | Independent Advisory Panel for Potable Reuse. | G. Hall | Receive information and discuss next steps. | |
| | Public Outreach. | R. Callender | Receive information and discuss next steps. | |
| | Update on Wolfe Road Recycled Water Facilities Project. | K. Oven | Receive information. | |

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

2017 WORK PLAN - RECYCLED WATER COMMITTEE

Updated: 2/10/17

| MEETING DATE | WORK PLAN ITEM, BOARD POLICY, & POLICY CATEGORY | ASSIGNED STAFF | INTENDED OUTCOME(S) | ACCOMPLISHMENT DATE AND OUTCOME |
|--------------|---|----------------|---|---------------------------------|
| | 6. Review Committee Work Plan and Agenda Topics for next meeting | | Review work plan and and identify agenda topics for next meeting. | |
| 05/10/17 | 3. Approval of Minutes | L. Moore | Approved minutes. | |
| | 4. Action Items: Issue Challenge – 1. Public perception 2. Governmental Relations/Water Rights 3. Funding/Delivery Method Strategies/Opportunities – A. Expedite Purified Water Program partnering with San Jose/Santa Clara, plus look at potential opportunity with South Bay Recycled Facilities B. Develop Partnerships with Sunnyvale, Palo Alto, Mountain View for new recycled/purified water C. Expand South County Recycled Water partnering with SCRWA (Above Items identified in the Board Priorities and Strategic Directions document.) | | | |
| | 5. Review Committee Work Plan and Agenda Topics for next meeting | | | |
| 08/09/17 | 3. Approval of Minutes | L. Moore | Approved minutes. | |

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

2017 WORK PLAN - RECYCLED WATER COMMITTEE

Updated: 2/10/17

| | | | | |
|-----------------|--|----------|-------------------|--|
| | 4. Action Items: A. Subject B. Subject C. Subject | | | |
| | 5. Review Committee Work Plan and Agenda Topics for next meeting | | | |
| 11/08/17 | 3. Approval of Minutes | L. Moore | Approved minutes. | |
| | 4. Action Items: A. Subject B. Subject C. Subject | | | |
| | 5. Review Committee Work Plan and Agenda Topics for next meeting | | | |

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

February 15, 2017

Santa Clara Valley Water District
Joint Recycled Water Committee Members
5750 Almaden Expressway
San Jose, CA 95118

Re: Indirect Potable Reuse

Dear Committee Chair Estremera, Committee Vice Chair Kremen, and Committee Member Keegan:

In continuation of our collaboration on the Expedited Purified Water Program we appreciate the opportunity to review a draft of your memo to the Recycled Water Committee. The memo outlines four key issues that need to be resolved to develop a Memorandum of Understanding (MOU) between the City and the District to execute an indirect potable reuse (IPR) project. The memo discusses the results of this collaboration since December 2015, addresses possible next steps and highlights the need for additional time and funding to complete an MOU. We would like to take the opportunity to emphasize our interest in completing an additional preliminary analysis in order to establish an effective MOU.

To date, discussions on an MOU were conducted at a conceptual level and any substantive work was dependent on a private activity analysis to determine viability of the IPR project. This analysis was recently completed in January 2017. We were informed by the District that it only intended to pursue indirect potable reuse so the private activity analysis was limited to IPR. The MOU to be negotiated will only address IPR. Additional private analysis would be required if the District decides to pursue direct potable reuse.

The completion of the private activity analysis was essential to the City decision making process. City staff was also awaiting funding for staff to be able to work on the IPR project. As we have shared with the District before, per Proposition 218, staff funded by utility funding cannot work on projects that are related to water supply. We are currently reviewing the scope of services in the funding agreement that was sent to us on January 23, 2017 and will respond with our comments. Once the scope and funding are finalized, we look forward to working with you on the IPR project.

Key MOU issues related to RO concentrate management and regulatory compliance are also still awaiting additional analysis of alternatives from the District. Although the District staff state that RO concentrate management utilizing the RWF outfall is the most streamlined and inexpensive option, it does present the highest regulatory risk to the City and the wastewater facility and could be

detrimental to the health of the Bay. Thus, we would like to see an evaluation of alternate discharge options. The draft memo indicates that a study evaluating other discharge options will be completed in 2018. The discharge option selected will have substantive implications on the terms of the MOU, especially with regards to permit compliance and risk sharing.

In addition to the items outlined above, other District led initiatives may influence the terms of the MOU. The District is currently circulating a model ordinance for water efficient new developments. Two key components of this ordinance are the requirement for gray water systems and use of recycled water. If this ordinance was to be adopted by all the cities in our treatment plant service area, there would be changes to the quantity and quality of the effluent. The grey water on site recycling systems could materially impact the quality of the effluent; the flow could decrease substantially and alter the chemical composition of the influent and effluent. Mandatory connections to recycled water systems for indoor and outdoor use create challenges related to the available capacity of recycled water. In order for a large amount of new development to connect to recycled water, the quantity of recycled water would need to be significantly increased, thus potentially making less effluent available for IPR. The City cannot commit to a specific amount of effluent without taking the future impact of these water efficiency measures proposed by the District into consideration. We propose further analysis of the long-term impacts of this ordinance on the system's ability to meet all required demands.

We are very committed to working with the District on addressing these next steps and helping forge a path towards a sustainable water supply. We understand this project is very important for the region and look forward to being a vital partner in this endeavor. We also look forward to receiving additional information from the District in order to evaluate the most effective path forward. We take great pride in not only providing an essential service to the South Bay but also acting as stewards of the environment, specifically the South San Francisco Bay. Once all viable alternatives have been evaluated and the discharge option that provides the best value to our community is selected, we can continue to move forward on a project that promotes the well-being of our region, while protecting the environment.

We look forward to continued collaboration with you on this project. Thank you.

Sincerely,



Kerrie Romanow
Director, Environmental Services

CC: Norma Camacho