



September 20, 2018

## **NOTICE OF MEETING – REQUEST FOR RSVPS**

Members of the Joint Recycled Water Policy Committee with Cities of Palo Alto/E. Palo Alto/Mtn View

### **Santa Clara Valley Water District:**

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

### **City of East Palo Alto:**

Council Member Hon. Donna Rutherford

### **City of Mountain View:**

Council Member Hon. Pat Showalter

### **City of Palo Alto:**

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

### **Supporting Water District Staff Members:**

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

### **Supporting City of Mountain View Staff Member:**

Gregg Hosfeldt, Assistant Public Works Director  
Lisa Natusch, City Clerk  
Wanda Wong, Deputy City Clerk

**Supporting City of Palo Alto Staff Members:**

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

The regular meeting of the Santa Clara Valley Water District Joint Recycled Water Policy Committee with Cities of Palo Alto/E. Palo Alto/Mtn View is scheduled to be held on **Wednesday, September 26, 2018, at 11:00 a.m.**, in the Headquarters Building Boardroom located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

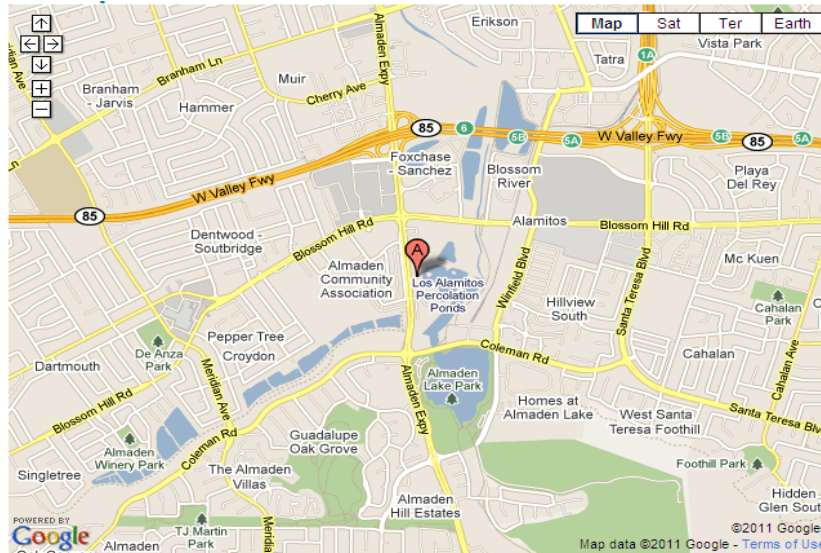
Enclosed for your convenience is a copy of the agenda and corresponding materials. Please bring these materials to the meeting with you.

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

Thank you!

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

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



**From Oakland:**

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

**From Morgan Hill/Gilroy:**

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

**From Sunnyvale:**

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

**From San Francisco:**

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

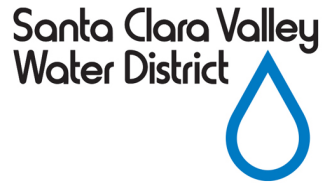
**From Downtown San Jose:**

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

**From Walnut Creek, Concord and East Bay areas:**

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

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# Santa Clara Valley Water District Joint Recycled Water Policy Committee with Cities of PA, EPA, MV Meeting

HQ Boardroom  
5700 Almaden Expressway  
San Jose CA 95118

## REGULAR MEETING AGENDA

Wednesday, September 26, 2018  
11:00 AM

**District Mission: Provide Silicon Valley safe, clean water for a healthy life, environment and economy.**

JOINT RECYCLED WATER POLICY  
ADVISORY COMMITTEE W/ CITIES  
OF PALO ALTO, EAST PALO ALTO &  
MOUNTAIN VIEW

Gary Kremen - District 7, Committee  
Chair

Tony Estremera - District 6  
Barbara Keegan - District 2

All public records relating to an item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarters Building, 5700 Almaden Expressway, San Jose, CA 95118, at the same time that the public records are distributed or made available to the legislative body. Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend Board of Directors' meeting. Please advise the Clerk of the Board Office of any special needs by calling (408) 265-2600.

**Note: The finalized Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.**

**Santa Clara Valley Water District**  
**Joint Recycled Water Policy Committee with Cities of PA, EPA, MV**  
**REGULAR MEETING**  
**AGENDA**

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Wednesday, September 26, 2018

11:00 AM

HQ Boardroom

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**1. CALL TO ORDER:**

1.1. Roll Call.

2. Time Open for Public Comment on any Item not on the Agenda.

*Notice to the public: This item is reserved for persons desiring to address the Committee on any matter not on this agenda. Members of the public who wish to address the Committee on any item not listed on the agenda should complete a Speaker Form and present it to the Committee Clerk. The Committee Chair will call individuals in turn. Speakers comments should be limited to two minutes or as set by the Chair. The law does not permit Committee action on, or extended discussion of, any item not on the agenda except under special circumstances. If Committee action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Committee may take action on any item of business appearing on the posted agenda.*

**3. APPROVAL OF MINUTES:**

3.1. Approval of Minutes.

[18-0814](#)

Recommendation: Approve the March 6, 2018, Meeting Minutes.

Manager: Michele King, 408-630-2711.

Attachments: [Attachment 1: 030618 Jt RWC Draft Mins](#)

Est. Staff Time: 5 Minutes

**4. ACTION ITEMS:**

4.1. Update on Collaborative Efforts for Water Reuse Alternatives in Northwest County.

[18-0815](#)

Recommendation: Receive information and discuss next steps for District and City of Palo Alto Comprehensive Agreement.

Manager: Garth Hall, 408-630-2750

Attachments: [Attachment 1: PowerPoint Presentation](#)

Est. Staff Time: 15 Minutes

- 4.2. Update on Northwest County Recycled Water Strategic Plan. [18-0816](#)  
Recommendation: Receive information and discuss next steps.  
Manager: Garth Hall, 408-630-2750  
Attachments: [Attachment 1: PowerPoint Presentation](#)  
Est. Staff Time: 15 Minutes
- 4.3. Update on Countywide Water Reuse Master Plan. [18-0817](#)  
Recommendation: Receive information and discuss next steps on the Countywide Water Reuse Master Plan.  
Manager: Garth Hall, 408-630-2750  
Attachments: [Attachment 1: PowerPoint Presentation](#)  
Est. Staff Time: 15 Minutes
- 4.4. Update on Reverse Osmosis Concentrate Management (ROCM) Project. [18-0818](#)  
Recommendation: Receive information and discuss next steps.  
Manager: Garth Hall, 408-630-2750  
Attachments: [Attachment 1: PowerPoint Presentation](#)  
Est. Staff Time: 15 Minutes
- 4.5. Next Meeting and Tentative Items. [18-0819](#)  
Recommendation: Discuss and confirm next meeting date, location, and tentative items.  
Manager: Garth Hall, 408-630-2750  
Est. Staff Time: 10 Minutes
5. Clerk Review and Clarification of Committee Requests.  
*This is an opportunity for the Clerk to review and obtain clarification on any formally moved, seconded, and approved requests and recommendations made by the Committee during the meeting.*

**6. ADJOURN:**

- 6.1. Adjourn.

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**File No.:** 18-0814

**Agenda Date:** 9/26/2018

**Item No.:** 3.1.

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## COMMITTEE AGENDA MEMORANDUM

### Joint RWPC with Cities of Palo Alto/E. Palo Alto/Mtn View

**SUBJECT:**

Approval of Minutes.

**RECOMMENDATION:**

Approve the March 6, 2018, Meeting Minutes.

**SUMMARY:**

A summary of Committee discussions, and details of all actions taken by the Committee, during all open and public Committee meetings, is transcribed and submitted for review and approval.

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

**ATTACHMENTS:**

Attachment 1: 03/06/18 Draft Meeting Minutes.

**UNCLASSIFIED MANAGER:**

Michele King, 408-630-2711.

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

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# DRAFT MINUTES

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**TUESDAY, MARCH 6, 2018  
1:30 PM**

(Paragraph numbers coincide with agenda item numbers)

A meeting of the Joint Recycled Water Committee (Committee) was held on March 6, 2018, in the Headquarters Building Boardroom at the Santa Clara Valley Water District (SCVWD), 5700 Almaden Expressway, San Jose, California.

**1. CALL TO ORDER/ROLL CALL**

A meeting of the Joint Recycled Water Committee was called to order by SCVWD Director, Hon. Tony Estremera at 1:40 p.m.

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

SCVWD Staff members in attendance were: Hossein Ashktorab, Henry Barrientos, Glenna Brambill, Anthony Fulcher, Garth Hall, Nina Hawk, Luis Jaimes, Katherine Oven and Medi Sinaki.

City of East Palo Staff Member in attendance was: Michele Daher, City of Mountain View Staff Members in attendance were: Lisa Bilir, Jonathan Chavez, Karla Dailey and Ankit Sharma. City of Palo Alto Staff Members in attendance were: Phil Bobel and Karin North.

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

There was no one present who wished to speak.

**3. APPROVAL OF MINUTES**

It was moved by Hon. Barbara Keegan, seconded by Hon. Pat Showalter, and carried, unanimously to approve the minutes of the September 19, 2017, Joint Recycled Water Committee meeting, as presented.

4. **ELECT CHAIR AND VICE CHAIR**

It was moved by Hon. Barbara Keegan, seconded by Hon. Tony Estremera, and carried, unanimously to retain the current Chair and Vice Chair; Hon. Gary Kremen and Hon. Tom DuBois respectively.

5. **ACTION/DISCUSSION ITEMS**

**5.1 DISTRICT COLLABORATIVE EFFORTS TO ASSESS FEASIBILITY OF WATER REUSE ALTERNATIVES**

**A. CITY OF PALO ALTO**

**B. CITY OF MOUNTAIN VIEW**

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

Hon. Pat Showalter, Hon. Tom Dubois and Hon. Tony Estremera spoke on potential partners and agreement issues regarding feasibility of the water reuse alternatives.

No action was taken.

**5.2 UPDATE ON NORTHWEST COUNTY RECYCLED AND PURIFIED WATER EFFORTS**

**A. ADVANCED WATER PURIFICATION SYSTEM FEASIBILITY STUDY**

**B. NORTHWEST COUNTY RECYCLED WATER STRATEGIC PLAN**

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

Ms. Karla Dailey, Ms. Nina Hawk, Hon. Pat Showalter, Hon. Cory Wolbach, Hon. Tony Estremera, Mr. Garth Hall, Mr. Anthony Fulcher, Mr. Luis Jaimes and Ms. Michelle Daher, spoke on the potential sites, funding, CEQA and agreement regarding northwest county recycled and purified water efforts, the purification system feasibility study and the water strategic plan.

No action was taken.

**5.3 UPDATE ON COUNTYWIDE WATER REUSE MASTER PLAN**

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

Mr. Hossein Ashktorab, Hon. Pat Showalter and Mr. Phil Bobel, spoke on the on countywide water reuse master plan.

No action was taken.

#### **5.4 UPDATE ON REVERSE OSMOSIS CONCENTRATE MANAGEMENT PROJECT**

Mr. Medi Sinaki reviewed the materials as outlined in the agenda item.

Hon. Tom Dubois Mr. Phil Bobel, Mr. Garth Hall, and Hon. Cory Wolbach spoke on the reverse osmosis concentrate management project.

No action was taken.

#### **5.5 NEXT MEETING AND TENTATIVE ITEMS**

The Committee agreed to schedule meetings through year end, June, September and November, and that meeting locations be shifted. The Committee will receive invites once the dates are scheduled.

No action was taken.

#### **6. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS AND RECOMMENDATIONS**

Board Committee Liaison Ms. Glenna Brambill reported there were no action items for consideration.

#### **7. ADJOURNMENT**

Vice Chair Hon. Tom DuBois adjourned the meeting at 3:10 p.m.

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

Approved:



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**File No.:** 18-0815

**Agenda Date:** 9/26/2018

**Item No.:** 4.1.

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## COMMITTEE AGENDA MEMORANDUM

### Joint RWPC with Cities of Palo Alto/E. Palo Alto/Mtn View

**SUBJECT:**

Update on Collaborative Efforts for Water Reuse Alternatives in Northwest County.

**RECOMMENDATION:**

Receive information and discuss next steps for District and City of Palo Alto Comprehensive Agreement.

**SUMMARY:**

The purpose of this agenda item is to provide the Joint Recycled Water Committee (Committee) with an update on the partnerships under development between the District and the City of Palo Alto (Palo Alto) to develop potable water reuse options in northwestern Santa Clara County (Northwest County).

The District Recycled Water Committee directed staff to expedite development of a Comprehensive Agreement between the District and Palo Alto, where Palo Alto represents the Regional Water Quality Control Plant (RWQCP) partner agencies. District and Palo Alto staff have met several times since March 2018 to discuss next steps to complete the Comprehensive Agreement. Key terms and conditions for a proposed District-Palo Alto agreement include:

- a committed minimum volume (currently 9 million gallons per day (MGD) is being discussed) of treated wastewater for District purification;
- the price (if any) to be paid by the District for this volume of treated wastewater;
- land to be secured for a District regional purification plant; and
- collaboration on reverse osmosis concentrate management.

Additional terms and conditions would include District cost sharing of a 1-2 MGD local plant located next to the RWQCP. The local plant would provide low-salinity water to blend with the relatively high salinity recycled water currently produced at the RWQCP. This would be similar to how the Silicon Valley Advanced Water Purification Center functions relative to South Bay Water Recycling.

**ATTACHMENTS:**

Attachment 1: PowerPoint Presentation

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**File No.:** 18-0815

**Agenda Date:** 9/26/2018  
**Item No.:** 4.1.

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**UNCLASSIFIED MANAGER:**  
Garth Hall, 408-630-2750



# 4.1 Update on Collaborative Efforts for Water Reuse Alternatives in Northwest County



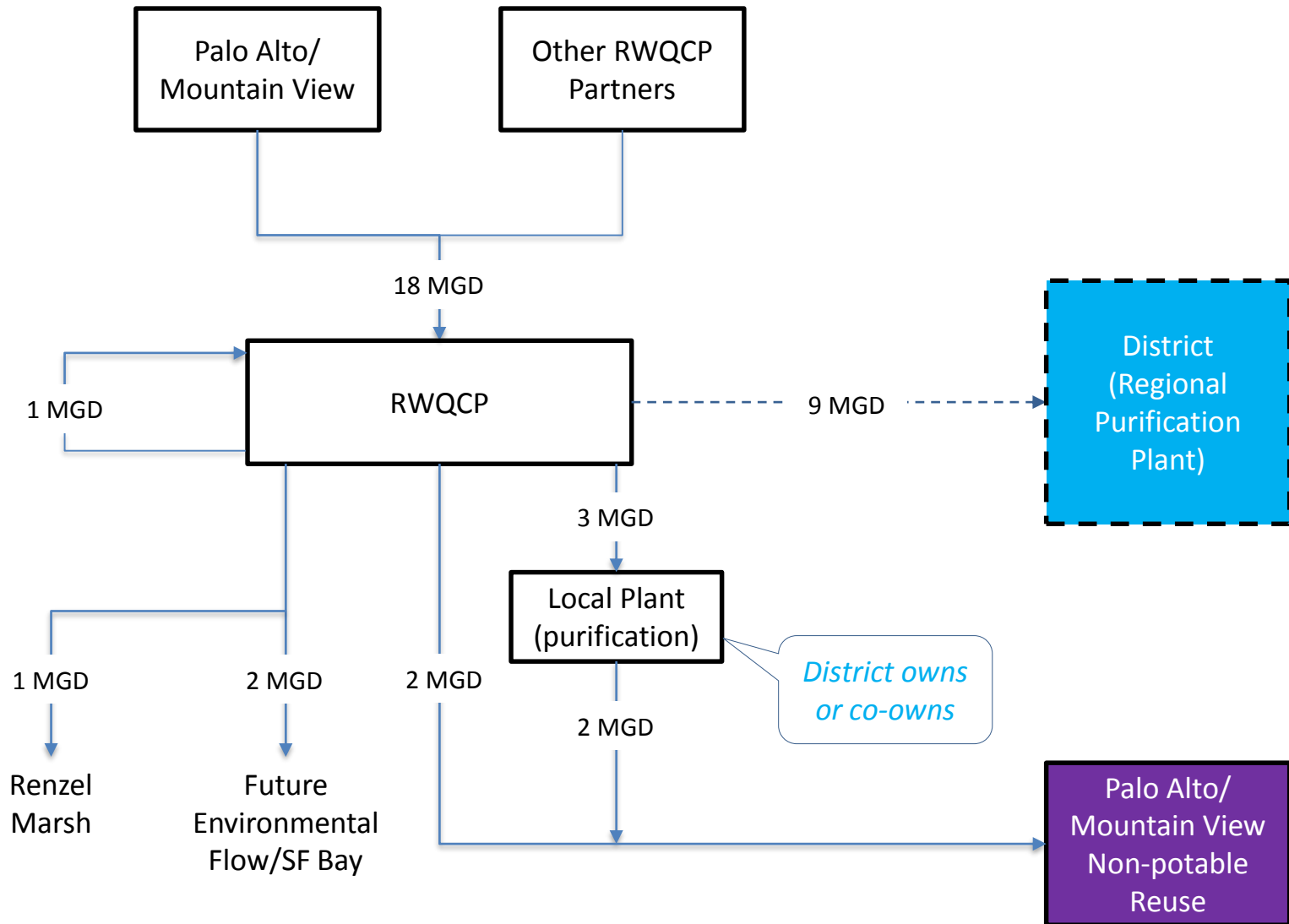
# Recent Engagement

Item	Timeline
District and City of Palo Alto MOU	August 2017
District and City of Mountain View MOU	October 2017
District, City of Palo Alto and Mountain View staff initiate discussions on Comprehensive Agreement	Bi-weekly meetings start in August 2017
Staff from all three agencies develop Guiding Principles	April 2018
Executive team from District, Palo Alto & Mountain View discuss term sheet elements	May 2018 to present

# Proposed Guiding Principles

- Palo Alto and Mountain View seek funding support for the design (and in a subsequent year, construction) of a 1-2 MGD local plant.
- Comprehensive Agreement, including 1-2 MGD local plant and a 9 MGD (approx.) regional purification plant/wastewater supply, could extend through 2060
- District seeks a guaranteed quantity of treated wastewater for purification
- Palo Alto to represent all RWQCP partner agencies
- Effluent quantity to be used may be revised per recommendations from the Countywide Water Reuse Master Plan
- Unused wastewater currently allocated to Palo Alto and Mountain View may be available for potable reuse until such time that Palo Alto and/or Mountain View need it.

# District/Palo Alto Proposed Relationship



# Proposed Agreement Components

## I. 1-2 MGD Local Plant

- Own/Cost sharing: 80:20\* after external funding, if any.
- O&M responsibility: 80:20 based on/ownership cost share)
- Agreement Term
- CEQA: EIR Addendum with Palo Alto as lead agency
- Governance

## II. Purified Water

- Amount of wastewater: 9MGD
- Compensation for wastewater
- Reverse Osmosis Concentrate\*\*
- Land/siting\*\*
- Agreement Term
- CEQA: District lead agency
- Governance

\*\*if sited locally at Palo Alto RWQCP

\*Cost share range of 50% to 100% under staff discussion

# 1-2 MGD Local Plant -Joint Planning Status/Schedule

Project	Schedule	Funding Agencies
RO Feasibility Study	Completed May 2017	District Palo Alto Mountain View
Northwest County Recycled Water Strategic Plan	Completion anticipated May 2019	District Palo Alto
1-2 MGD Local Plant	Design complete FY 2020 Construction complete FY 2022	Pending Comprehensive Agreement

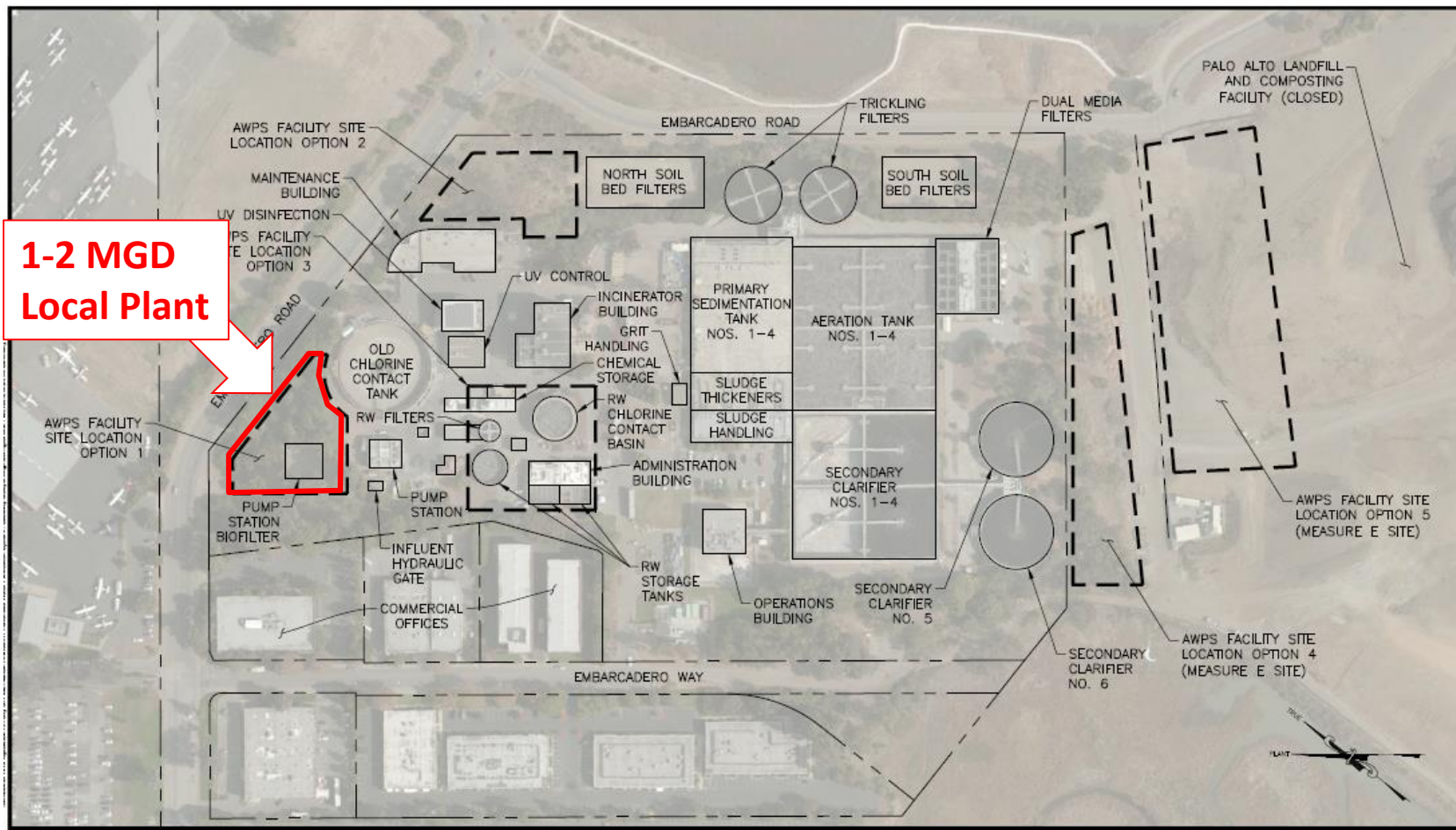
# District-Palo Alto Local Plant

Santa Clara Valley  
Water District



# 1-2 MGD Local Plant

## Palo Alto Regional Water Quality Control Plant (RWQCP)





# Recycled Water Data - Current and Future

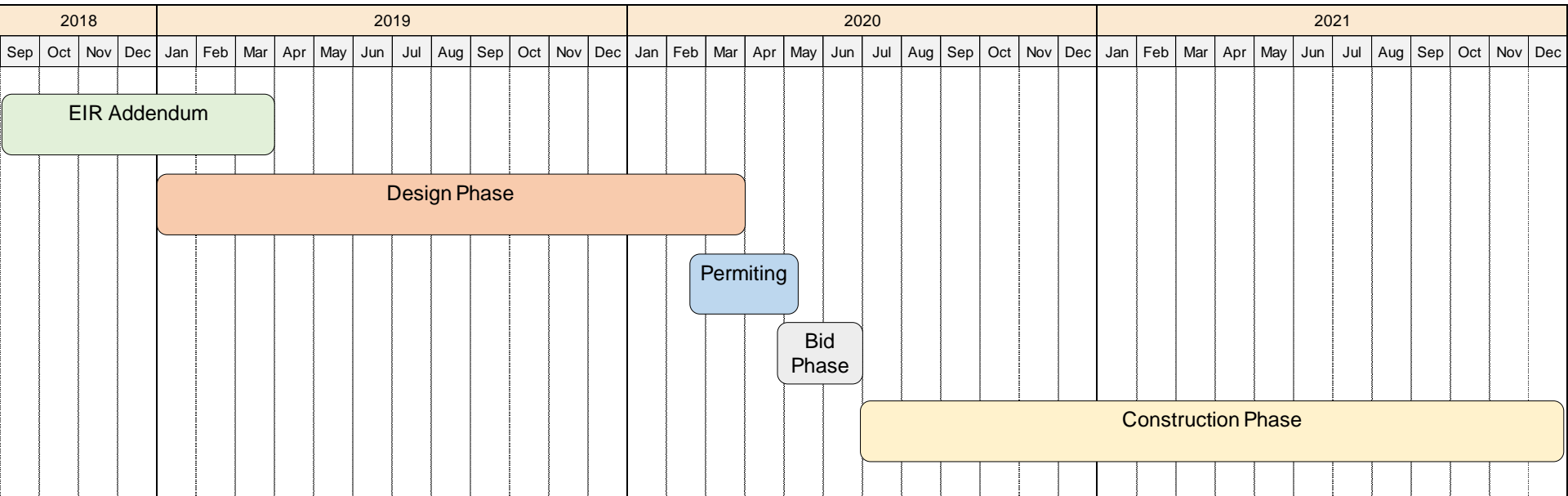
RWQCP	Current	Future
<b>Total Dissolved Solids</b>	Approximately 900 mg/L	Planning target 500 mg/L
<b>Non-potable Reuse Destination</b>	Palo Alto + Mountain View	Palo Alto + Mountain View + growth
<b>Non-potable Reuse Flow</b>	0.6 MGD tertiary	4 MGD*

\*At 85% RO membrane efficiency, 5 MGD required to obtain ~4 MGD of enhanced recycled water.

# Planning Schedule for 1.125 MGD Local Plant

## City of Palo Alto

### Advanced Water Purification Facility Phased Implementation Schedule for 1.125 MGD Local Plant (Design-Bid-Build)



# Cost Estimates for 1.125 MGD Local Plant

Item	Estimate	Potential WIIN Funding (25%)*	Net Cost
CEQA, Permits, Special Studies, Design, CM, Inspections**	\$2,432,000	\$608,000	\$1,821,000
Construction	\$13,904,000	\$3,476,000	\$10,428,000
<b>Total ***</b>	<b>\$16,336,000</b>	<b>\$4,084,000</b>	<b>\$12,252,000</b>

**NOTES:**

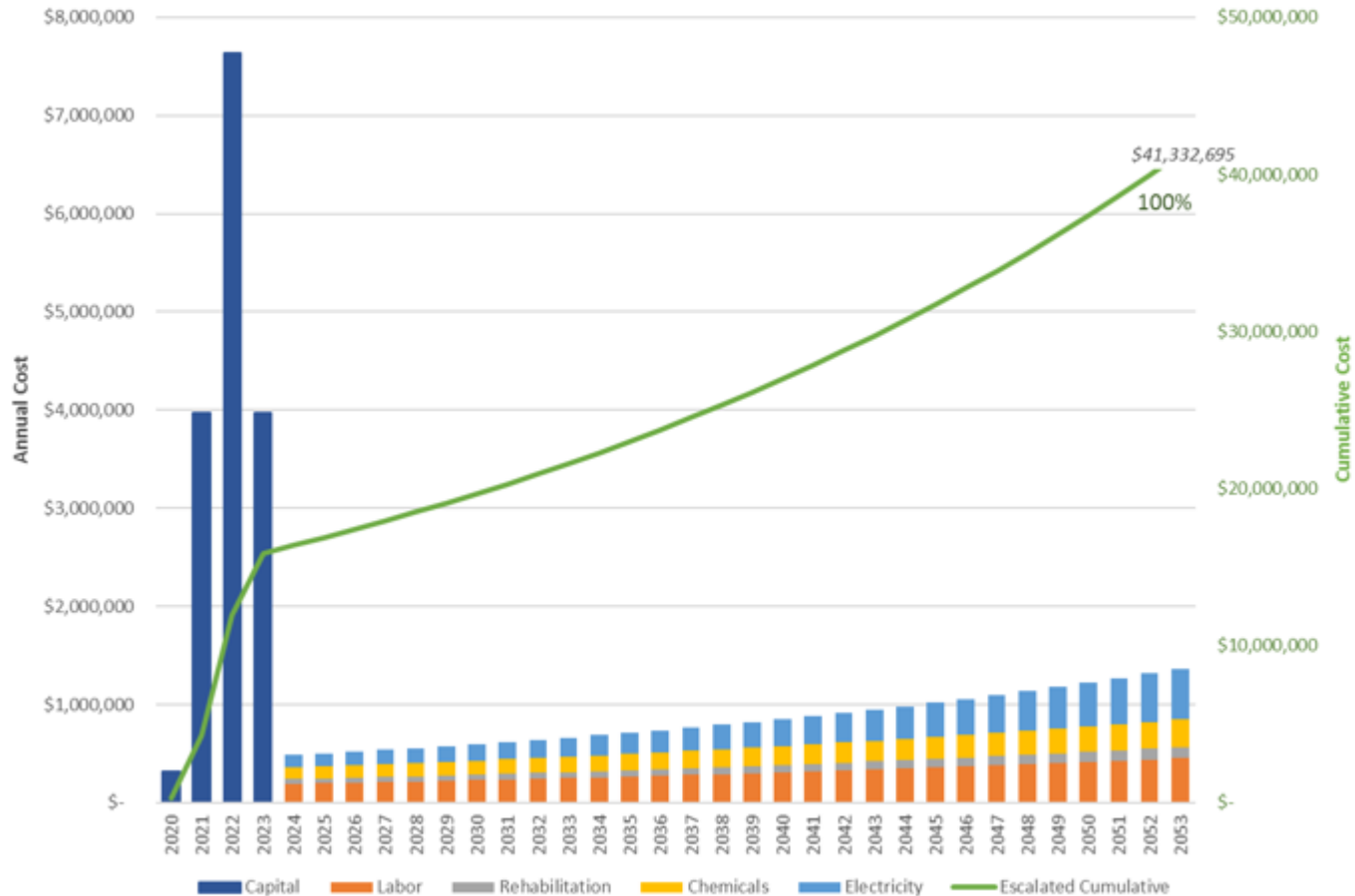
\* Clean Water State Revolving Fund (CWSRF) financing may be available. Pending technical, financial and environmental packet submittal in CY2019. Palo Alto would pursue 100% financing, with cost share TBD.

\*\* Estimate includes design for 1.125 to 2.25 MGD facility

\*\*\*Class 3 AACE estimate (-20 to +30 % accuracy)

# 1.125 MGD Local Plant - Estimated Expenditures

Example: District 100% Capital and O&M. Escalated Dollars  
(Does Not Include CWSRF or WIIN Funding)



# 1.125 MGD Local Plant – Estimated Capital Cost

District Contribution under Consideration by Staff	Capital Costs*
50%	\$8,168,000
80%	\$13,068,800
100%	\$16,336,000

Notes:

1. Does not include CWSRF or WIIN funding
2. Estimate includes CEQA, Permits, Special Studies, Design, CM, Inspections and Construction

# 1.125 MGD Local Plant- Estimated Cost

## District Rate Impact (Excluding CWSRF/WIIN funding)

	Reference Rate*	50% Cost-Share**	80% Cost-Share**	100% Cost-Share**
FY2024 Groundwater Production Charge (per AF)	\$2,051	\$7 more	\$10 more	\$15 more

\* Protection and Augmentation of Water Supplies 2018, Figure 4-2.1 Ten Year Projection, Zone W-2

\*\* Range of cost share under staff consideration. Estimated assuming 100% financed @ 5%.

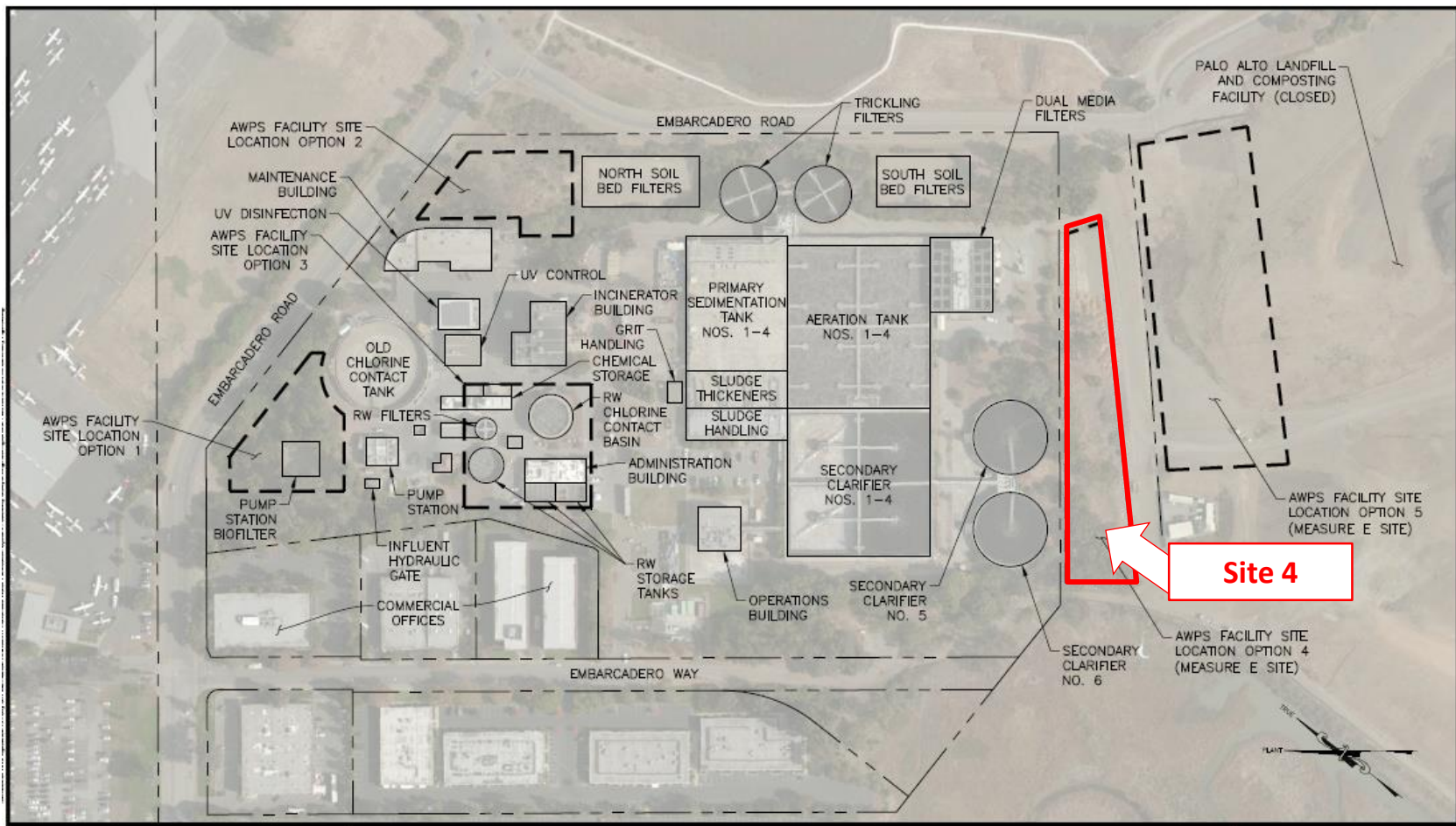
# District-Owned Regional Purification Plant

Santa Clara Valley  
Water District



# Potential Site – District Regional Purification Plant

Purification Plant next to existing RWQCP\*



\* Other alternatives include delivery of treated wastewater for purification at remote sites



# Future District Purification Plant - Source Water

Allocation Description		Effluent Flow (MGD)
Total Effluent from RWQCP*		18
City of Mountain View Non-Potable Reuse***		-4
City of Palo Alto	Non-Potable Reuse***	-1
	Renzel Marsh (per NPDES)	-1
	Future Environmental Benefits	-2
	RWQCP Internal Process Water	-1
<b>Treated Effluent to the Regional Purification Plant**</b>		<b>9</b>

\* Based on average annual influent flow (Source: City of Palo Alto, February 2018)

\*\* To be reviewed based on further analysis

\*\*\* Includes purified water from Local Plant for salinity management

# Cost Models: Acquiring Treated Effluent

Model	Methodology
Avoided Cost of Treatment	Avoid UV Treatment
Proxy Price of New Water	[Capital + O&M Costs] – [Purified Water Cost]
Wastewater Examples	Other Wastewater Agencies

\* Based on avoided cost for UV treatment of effluent, value to be determined.

\*\*To be reviewed based on further analysis

# Next Steps

Santa Clara Valley  
Water District



# Recap: Proposed Agreement Components

## I. 1-2 MGD Local Plant

- Own/Cost sharing: 80:20\* after external funding, if any.
- O&M responsibility: 80:20 based on/ownership cost share)
- Agreement Term
- CEQA: EIR Addendum with Palo Alto as lead agency
- Governance

## II. Purified Water

- Amount of wastewater: 9MGD
- Compensation for wastewater
- Reverse Osmosis Concentrate\*\*
- Land/siting\*\*
- Agreement Term
- CEQA: District lead agency
- Governance

\*\*if sited locally at Palo Alto RWQCP

\*Cost share range of 50% to 100% under staff discussion

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**File No.:** 18-0816

**Agenda Date:** 9/26/2018  
**Item No.:** 4.2.

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## COMMITTEE AGENDA MEMORANDUM

### Joint RWPC with Cities of Palo Alto/E. Palo Alto/Mtn View

**SUBJECT:**

Update on Northwest County Recycled Water Strategic Plan.

**RECOMMENDATION:**

Receive information and discuss next steps.

**SUMMARY:**

This agenda item provides updated information on the Northwest County Recycled Water Strategic Plan.

Northwest County Recycled Water Strategic Plan

The Northwest County Recycled Water Strategic Plan (Strategic Plan) includes recycled water preliminary planning studies for the expansion of recycled water to Stanford Research Park, and customers in Los Altos, Los Altos Hills, Mountain View, East Palo Alto, and Menlo Park. The Strategic Plan also includes a groundwater assessment in Northwest County to better understand groundwater conditions and the potential for potable reuse in the area.

On March 13, 2018, the District, Palo Alto and the project consultant held a visioning workshop. During the facilitated workshop, the stakeholders, including Stanford University, East Palo Alto, Los Altos, Mountain View, and Cal Water explored the group's interest in expanding recycled water (potable and non-potable) in their service area. Subsequently, staff selected the top eight options for further consideration. The next step is to refine and evaluate the selected options.

The groundwater assessment portion of the project is currently underway and includes an evaluation of several modeling scenarios to determine groundwater pumping thresholds and indirect potable reuse options. District staff continues to work effectively with Palo Alto and expects to finalize the Strategic Plan by March 2019.

As previously reported to the Committee, Palo Alto submitted a funding application to the U.S. Bureau of Reclamation (USBR) on August 16, 2017 to fund a 1.125 MGD Advanced Water Purification Facility (AWPF), a 2.25 MGD AWPF and a larger (regional) 6.75 MGD AWPF. Funding is provided through the Water Infrastructure Improvements for the Nation (WIIN) Act. Recently, the USBR communicated that they are willing to issue a determination of feasibility for the smaller AWPFs, based on the Advanced Water Purification Feasibility Study completed in May 2017. These local projects could then be considered for the next cycle of WIIN funding in late September 2018.

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District and Palo Alto staff will meet in the coming weeks to discuss next steps to pursue funding for the regional facility and potential submittal of additional USBR required documentation.

**ATTACHMENTS:**

Attachment 1: PowerPoint Presentation.

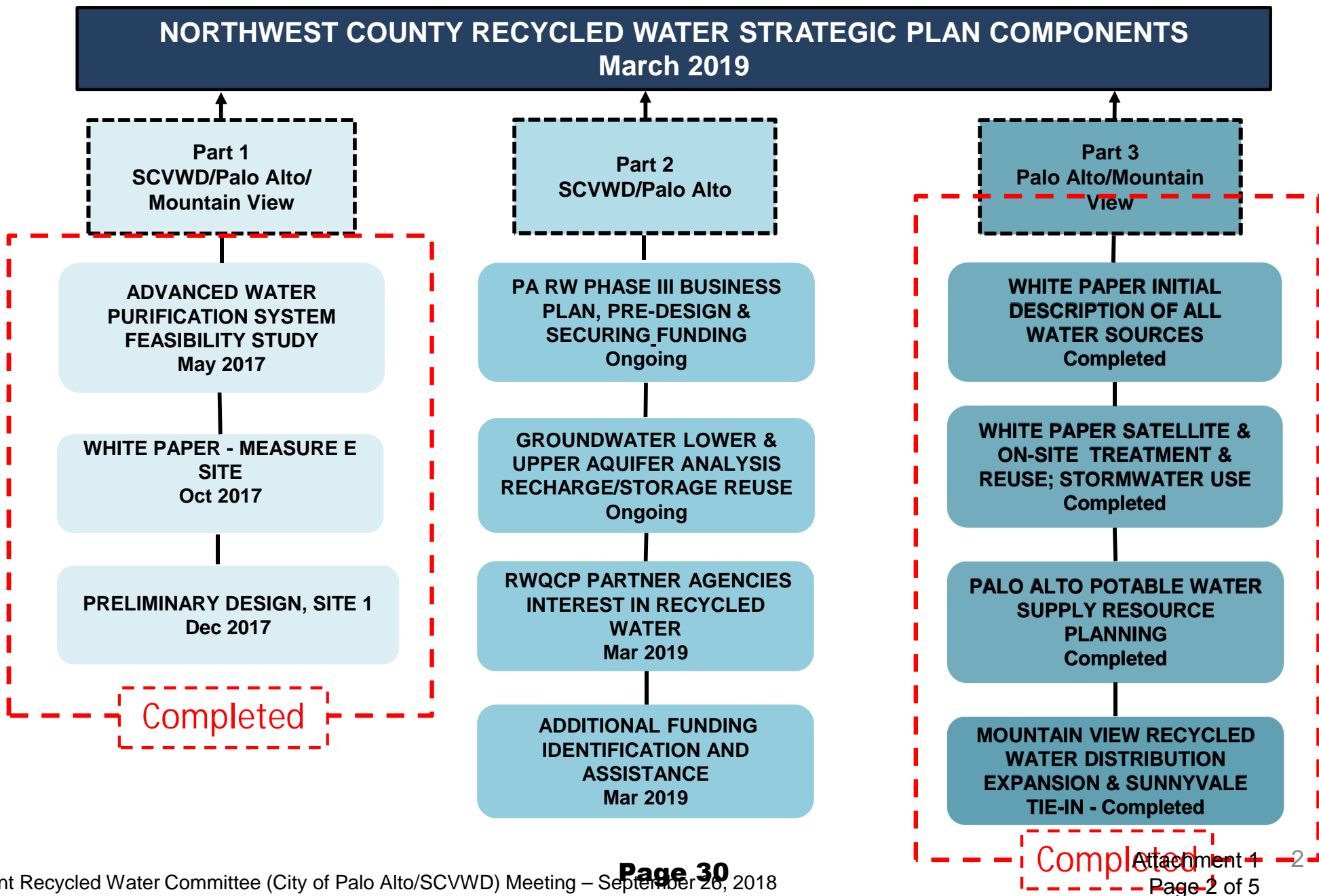
**UNCLASSIFIED MANAGER:**

Garth Hall, 408-630-2750

# 4.2 Update on Northwest County Recycled Water Strategic Plan



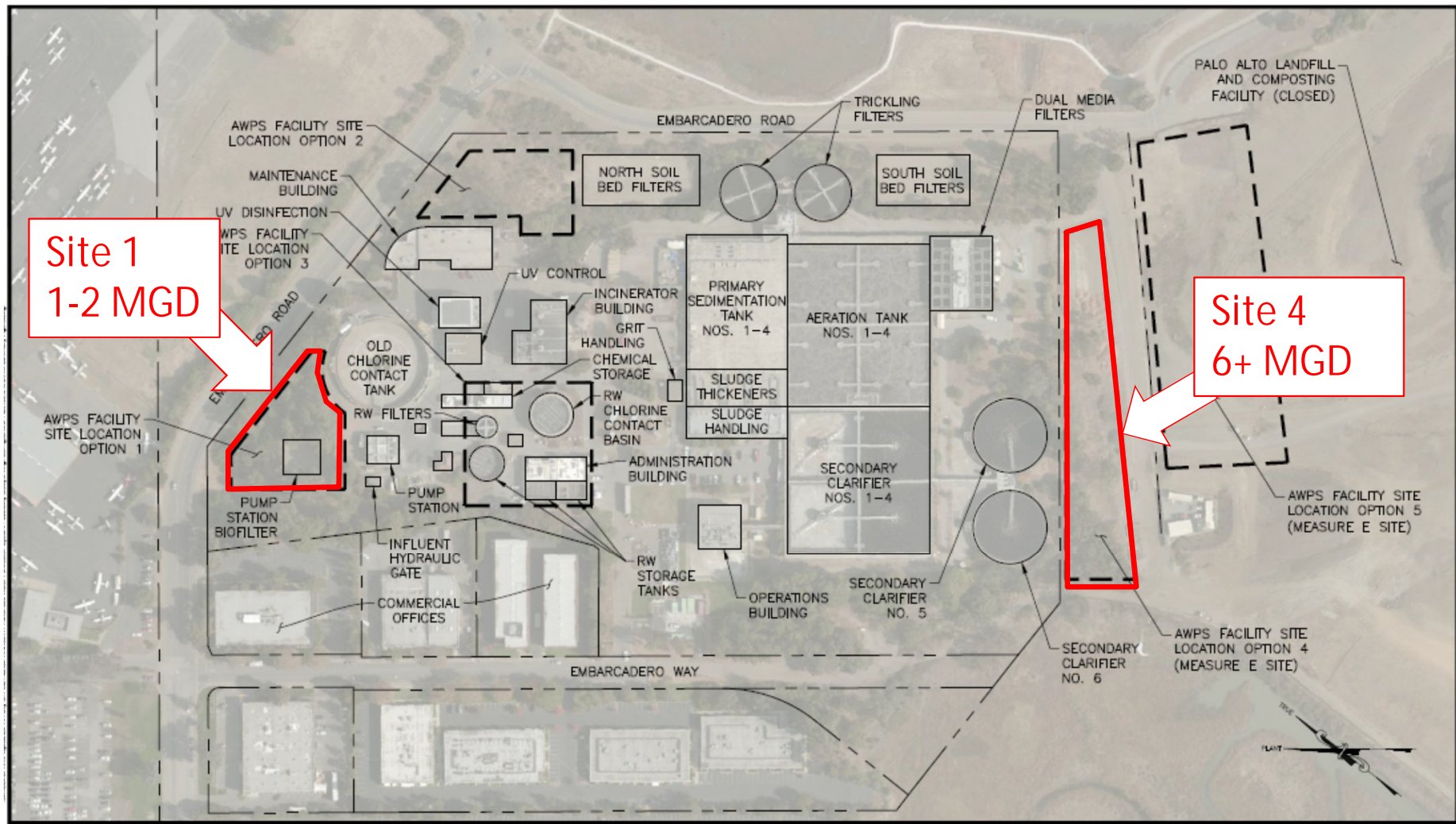
# 4.2 Northwest County Recycled and Purified Water Efforts





# 4.2 Northwest County Recycled and Purified Water Efforts

## Advanced Water Purification System (AWPS) Feasibility Study



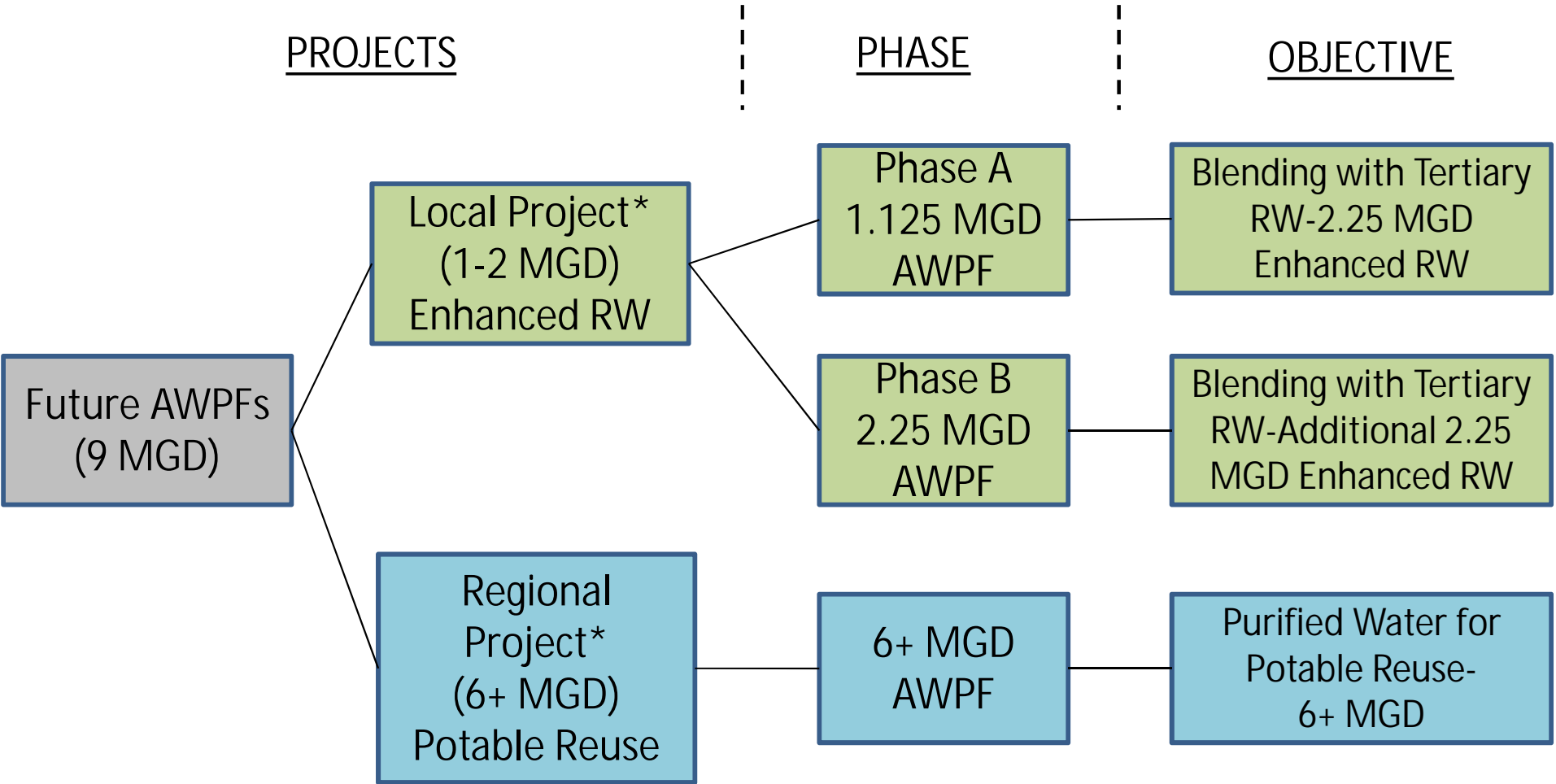
# 4.2 Northwest County Recycled and Purified Water Efforts

## ***Northwest County Recycled Water Strategic Plan***

Item	Date
Draft Business Plan and Preliminary Design Report for Phase III	Completed
Groundwater Assessment Report and IPR Evaluation	October 2018
Funding for 1.125, 2.25 and 6.75 MGD AWPf <ul style="list-style-type: none"><li data-bbox="107 943 1398 1003">• Title XVI (WIIN) Application to USBR submitted</li><li data-bbox="107 1032 1346 1092">• Title XVI (WIIN) Cross Walk Memo submitted</li><li data-bbox="107 1122 1434 1247">• 1.125 and 2.25 MGD AWPf Considered for next round of WIIN funding</li><li data-bbox="107 1276 1350 1401">• 6.75 MGD AWPf Determination of Feasibility pending feedback from USBR</li></ul>	Completed Completed September 2018 TBD

# 4.2 Northwest County Recycled and Purified Water Efforts

## Funding Strategies



\*Local and Regional Projects require completion of Comprehensive Agreement for any District funding

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**File No.:** 18-0817

**Agenda Date:** 9/26/2018

**Item No.:** 4.3.

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## COMMITTEE AGENDA MEMORANDUM

### Joint RWPC with Cities of Palo Alto/E. Palo Alto/Mtn View

**SUBJECT:**

Update on Countywide Water Reuse Master Plan.

**RECOMMENDATION:**

Receive information and discuss next steps on the Countywide Water Reuse Master Plan.

**SUMMARY:**

The Countywide Water Reuse Master Plan (Master Plan) will facilitate the integration and expansion of recycled water as well as the development of purified water systems in Santa Clara County. It will guide the strategic investment of public funds on recycled and purified water projects over the next 20 years as a local, reliable, environmentally adaptive, and drought-resistant water supply.

Since the last update to the Joint Recycled Water Committee (Palo Alto/SCVWD) on March 6, 2018, the project team has drafted Baseline Analysis and Conceptual Alternatives. The Master Plan will identify how much treated wastewater will be available for potential potable reuse and non-potable reuse expansion, system integration options, recommendations for potable reuse projects and building upon non-potable reuse projects, and recommendations for governance model alternatives.

Development of the Master Plan includes extensive stakeholder engagement including recycled water producers, wholesalers, retailers, users, environmental and nongovernmental organizations, business interests, regulatory agencies and community groups. Representatives from City of Palo Alto and City of Mountain View participated in the July 2018 Stakeholder Task Force Meeting #1 at the District. The next Master Plan meeting including City of Palo Alto and City of Mountain View is Project Partner Group Meeting #2 planned for October 2018.

The project team will be developing additional work products including hydraulic modeling and feasible alternatives. These activities will be guided by feedback received from the stakeholder engagement process. A summary of conceptual alternatives is planned for December 2018. The final Master Plan is on schedule to be delivered in July 2019.

**ATTACHMENTS:**

Attachment 1: PowerPoint Presentation.

**UNCLASSIFIED MANAGER:**

Garth Hall, 408-630-2750



# 4.3 Update on Countywide Water Reuse Master Plan



# Countywide Master Plan Objectives

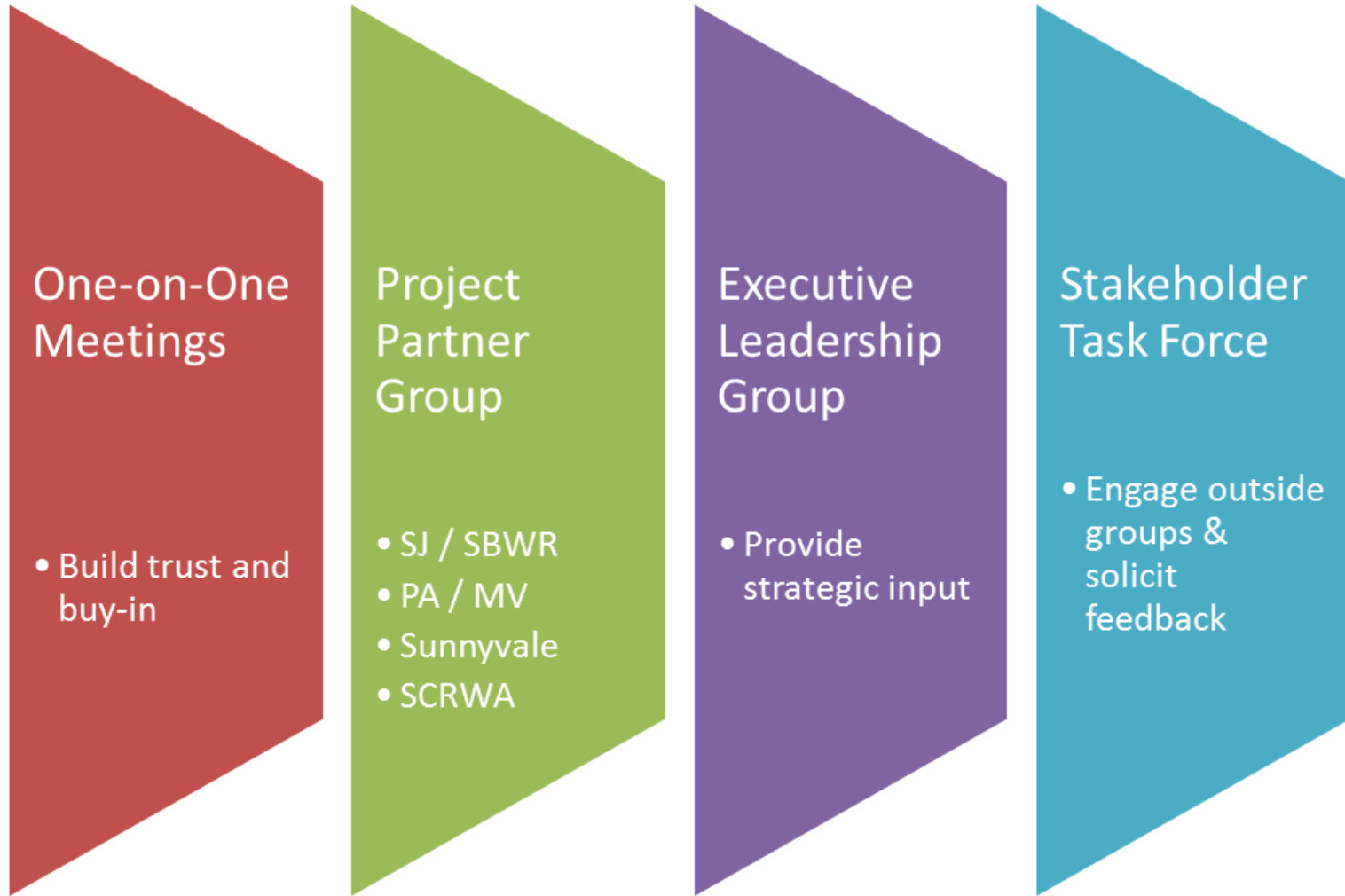
- Identify sources and amounts of water available for reuse
- Determine NPR & PR split
- Evaluate governance roles & responsibilities and provide recommendations
- Evaluate potential regional integration
- Conduct stakeholder engagement

NPR = Non-Potable Reuse

PR = Potable Reuse



# Palo Alto & Mountain View Engagement



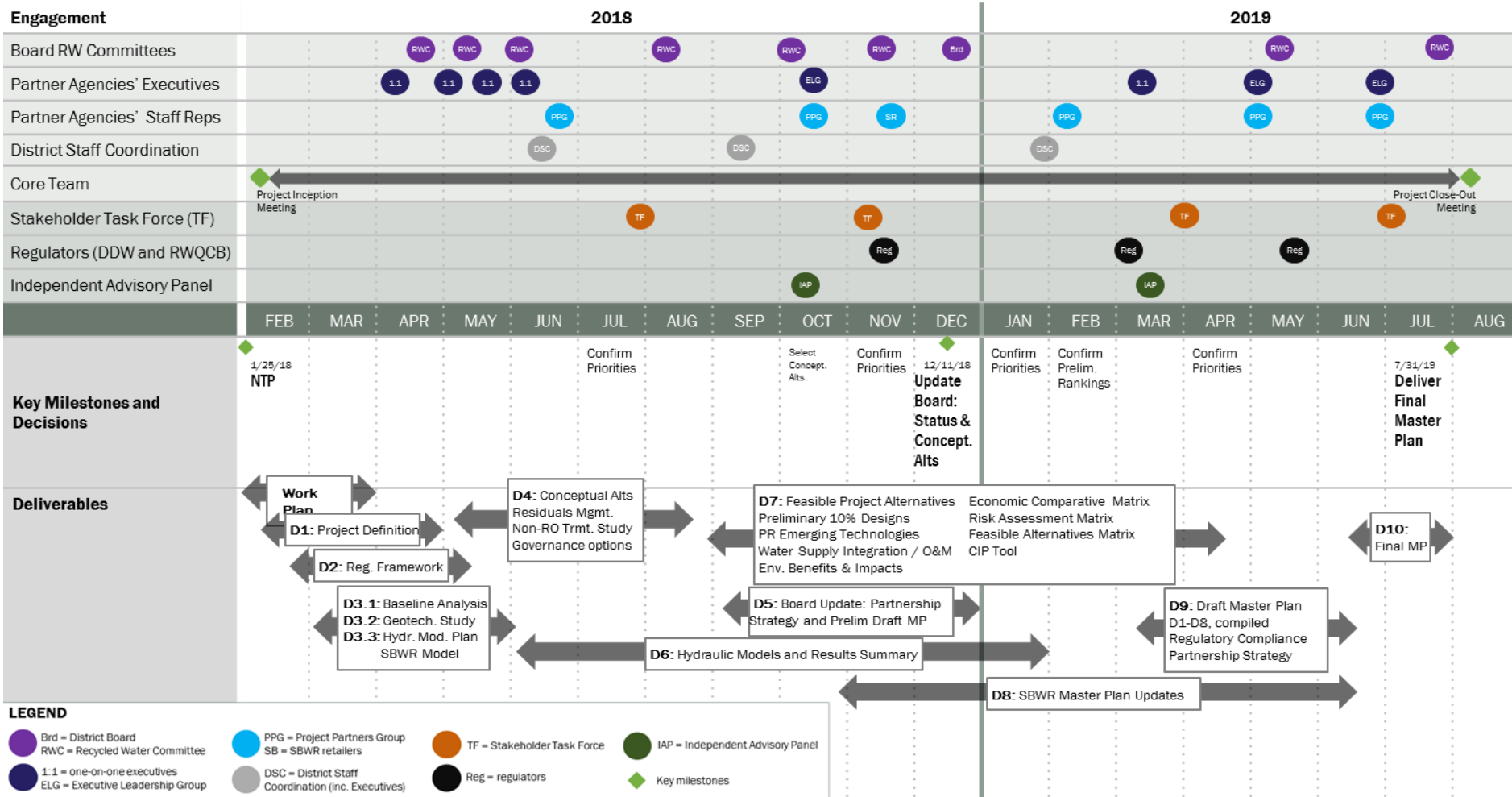
# Palo Alto & Mountain View Engagement

- Upcoming Stakeholder Workshops
  - Project Partner Group (PPG) #2
  - Stakeholder Task Force (TF) #2



Project Partner Group #1 in June 2018

# Countywide Master Plan Schedule



**LEGEND**

- Brd = District Board
- RWC = Recycled Water Committee
- 1:1 = one-on-one executives
- ELG = Executive Leadership Group
- PPG = Project Partners Group
- SB = SBWR retailers
- DSC = District Staff Coordination (Inc. Executives)
- TF = Stakeholder Task Force
- Reg = regulators
- IAP = Independent Advisory Panel
- Key milestones

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**File No.:** 18-0818

**Agenda Date:** 9/26/2018

**Item No.:** 4.4.

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## COMMITTEE AGENDA MEMORANDUM

### Joint RWPC with Cities of Palo Alto/E. Palo Alto/Mtn View

**SUBJECT:**

Update on Reverse Osmosis Concentrate Management (ROCM) Project.

**RECOMMENDATION:**

Receive information and discuss next steps.

**SUMMARY:**

The ROCM is an integral part of the Countywide Master Plan. The main objective of this project is to evaluate viable alternatives for managing Reverse Osmosis Concentrate (ROC) generated from advanced water purification facilities (AWPFs) to be potentially built throughout the County (e.g., San José, Sunnyvale, Palo Alto, Gilroy, and Morgan Hill). District staff continues working on ROCM strategies to ensure a feasible solution is achieved.

In February 2018, the District met with local recycled water producers (Palo Alto Regional Water Quality Control Plant, Sunnyvale Water Pollution Control Plant, San Jose/Santa Clara Regional Wastewater Facility and South County Regional Waste Authority) to discuss the shortlisted ROCM options. The purpose of these meetings was to refine the list of options to a single preferred ROCM strategy for each of the advanced water treatment facilities under consideration.

Staff also continues to work on research efforts for Engineered Treatment Cells (ETC) which simulate a natural wetland, with its research partners: Stanford University, University of California Berkeley, and San Francisco Estuary Institute (SFEI).

At the request of the San Francisco Regional Water Quality Control Board, staff is also conducting a comprehensive Hydrodynamic Modeling analysis of the South Bay. The results will further evaluate ROCM discharge options in the Lower South Bay and could potentially supplement Palo Alto's modeling efforts of discharges to the Bay.

Next steps of the ROCM project include conducting two additional workshops (No. 3 and No. 4) to present the results of collaborative studies with the University of California at Berkeley and Stanford University on the economic and technical feasibility of ROC treatment by ETC, as well as a final project report with detailed alternatives review and preferred management options per site. Noteworthy project deliverables will include a pilot engineered-treatment system draft technical memorandum and feasible alternatives report in August 2019 and a final ROCM plan report in December 2019.

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**File No.:** 18-0818

**Agenda Date:** 9/26/2018  
**Item No.:** 4.4.

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**ATTACHMENTS:**

Attachment 1: PowerPoint Presentation

**UNCLASSIFIED MANAGER:**

Garth Hall, 408-630-2750

# 4.4 Update on Reverse Osmosis Concentrate Management Project





# 4.4 Reverse Osmosis Concentrate Management

## ROCMP Components:

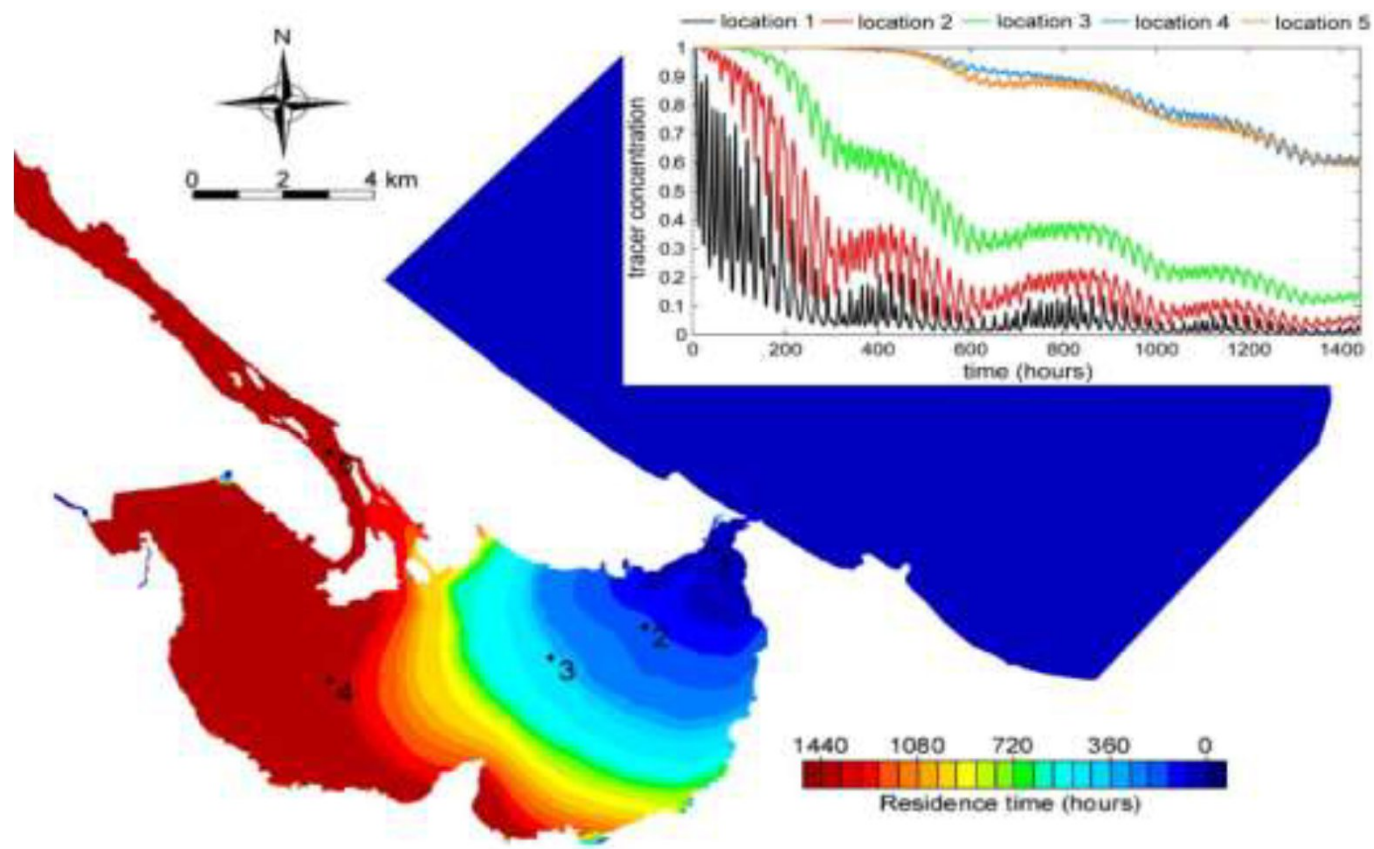
- Review of potential treatment options
- Site specific evaluations of ROC water quality and blending options
- Stakeholder workshops
- Engineered treatment cell pilot testing
- Develop and recommend ROC management plans for each site





# 4.4 Reverse Osmosis Concentrate Management

- **Hydrodynamic Modeling of the South San Francisco Bay**



# 4.4 Reverse Osmosis Concentrate Management

- **Hydrodynamic Modeling analysis and results (April 2019)**
- **Two additional stakeholder workshops (May 2019 and Nov. 2019)**
- **Engineered Treatment Cell results and final report (Aug.2019)**
- **Final ROCM Plan (Dec. 2019)**



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**File No.:** 18-0819

**Agenda Date:** 9/26/2018

**Item No.:** 4.5.

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## COMMITTEE AGENDA MEMORANDUM

### Joint RWPC with Cities of Palo Alto/E. Palo Alto/Mtn View

**SUBJECT:**

Next Meeting and Tentative Items.

**RECOMMENDATION:**

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

**SUMMARY:**

Consider and select dates for remaining 2018 calendar year.

**ATTACHMENTS:**

None.

**UNCLASSIFIED MANAGER:**

Garth Hall, 408-630-2750

