

SOUTH COUNTY REGIONAL  
WASTEWATER AUTHORITY

March 1, 2019

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

Members of the Joint Water Resources Committee (City of Gilroy, City of Morgan Hill, and SCVWD)

#### **Santa Clara Valley Water District (SCVWD):**

Hon. Richard P. Santos, District 3, Committee Chair  
Hon. John L. Varela, District 1

#### **City of Gilroy:**

Hon. Marie Blankley, Mayor Pro Tempore  
Hon. Dion Bracco, Council Member and SCRWA Board Vice Chairman

#### **City of Morgan Hill:**

Hon. Larry Carr, Council Member, District A. SCRWA Board Chairman, and Committee Vice Chair  
Hon. Rich Constantine, Mayor

SCRWA = South County Regional Wastewater Authority

A meeting of the Joint Water Resources Committee (City of Gilroy, City of Morgan Hill, and SCVWD) will take place at 8:30 a.m. (directly following the SCRWA meeting) on Wednesday, March 6, 2019, **at the South County Regional Wastewater Authority Conference Room, 1500 Southside Drive, Gilroy, CA 95020.**

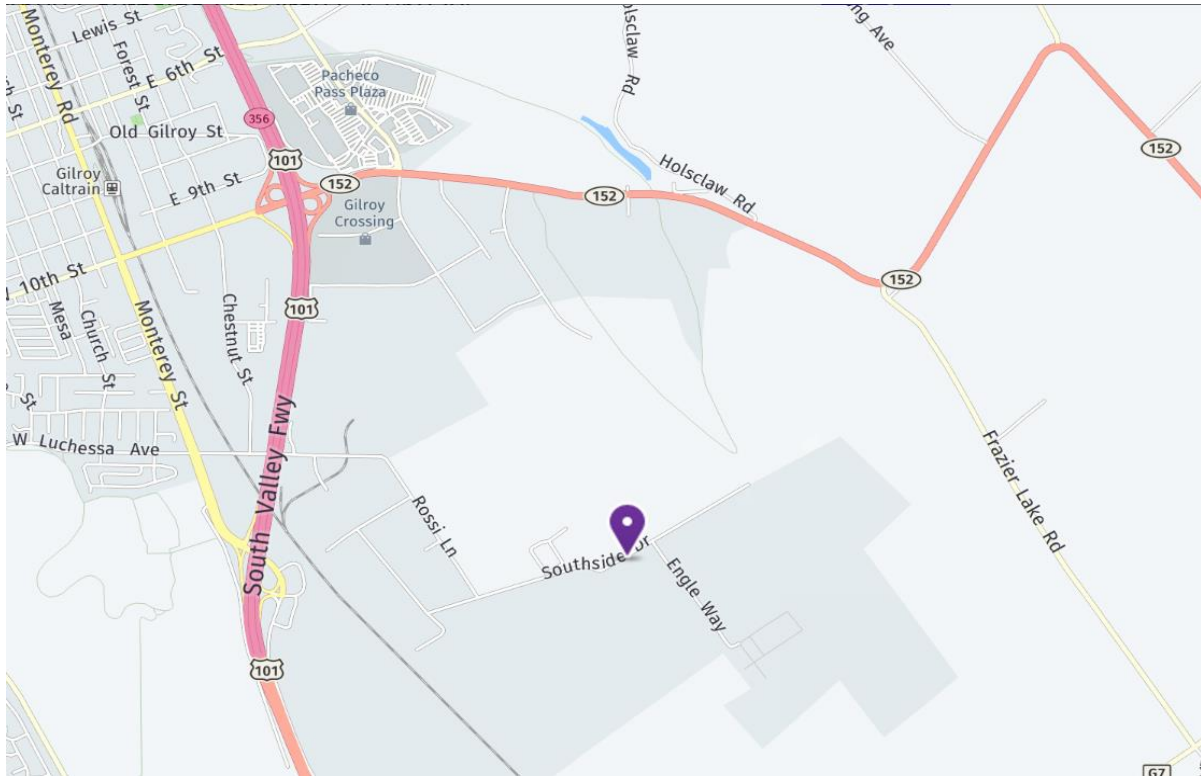
Enclosed for your convenience is a copy of the agenda and corresponding materials. Please bring these materials to the meeting with you.

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)

Santa Clara Valley Water District  
Office of the Clerk of the Board

Enclosures

**SOUTH COUNTY REGIONAL WASTEWATER AUTHORITY MAP  
1500 SOUTHSIDE DRIVE  
GILROY CA 95020  
(408) 848-0480**



**From District:**

Go North on Almaden Expressway  
Turn right onto Hwy 85 South  
To Hwy 101 South to Gilroy  
Take exit 356 toward CA 152 East/10th St.  
Turn right onto East 10th St.  
Turn left onto Automall Parkway  
Turn left onto East Luchessa Ave  
Continue on --name changes to Rossi Ln  
Turn left onto Southside Dr.  
SCRWA is on the right side (1500)  
{cross street Engle Way}



# Santa Clara Valley Water District Joint Water Resources Committee with Cities of Gilroy and Morgan Hill

South County Regional Wastewater Authority  
Conference Room, 1500 Southside Drive  
Gilroy, CA 95020

## REGULAR MEETING AGENDA

Wednesday, March 6, 2019  
8:30 AM

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

Director District 3 Richard Santos

Director District 1 John L. Varela

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 Water Resources Committee with Cities of Gilroy and Morgan Hill**

**REGULAR MEETING  
AGENDA**

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Wednesday, March 6, 2019

8:30 AM

South County Regional Wastewater Authority Conference  
Room, 1500 Southside Drive, Gilroy, CA 95020

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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.

[19-0122](#)

Recommendation: Approve the June 6, 2018, Meeting Minutes

Manager: Michele King, 408-630-2711

Attachments: [Attachment 1: 060618 Jt Water Resources Comm Draft Mins](#)

**4. ACTION ITEMS:**

4.1. Update on Water Supply Master Plan.

[19-0123](#)

Recommendation: Receive and discuss information on the Santa Clara Valley Water District's water supply strategy.

Manager: Jerry De La Piedra, 408-630-2257

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

[Attachment 2: Project List](#)

Est. Staff Time: 15 Minutes

4.2. Update on Countywide Water Reuse Master Plan [19-0124](#)

Recommendation: This is an information only item and no action is required.

Manager: Jerry De La Piedra, 408-630-2257

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

Est. Staff Time: 15 Minutes

4.3. Open Space Credit [19-0126](#)

Recommendation: This is a discussion item and no action is required. However, the Committee may provide comments for Board consideration.

Manager: Darin Taylor, 408-630-3068

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

Est. Staff Time: 20 Minutes

4.4. Review Joint WRC with Cities of Gilroy/Morgan Hill/SCRWA Committee Work Plan, the Outcomes of Board Action of Committee Requests; and the Committee's Next Meeting Agenda. [19-0128](#)

Recommendation: Review the Committee work plan to guide the committee's discussions regarding policy alternatives and implications for Board deliberation.

Recommendation: Review the Committee work plan to guide the committee's discussions regarding policy alternatives and implications for Board deliberation.

Manager: Michele King, 408-630-2711

Attachments: [Attachment 1: 2019 Jt Wtr Resources Work Plan](#)

[Attachment 2: 060519 Jt Wtr Res Comm DRAFT Agenda](#)

**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.:** 19-0122

**Agenda Date:** 3/6/2019  
**Item No.:** 3.1.

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## COMMITTEE AGENDA MEMORANDUM

### Joint WRC with Cities of Morgan Hill/Gilroy/SCRWA

**SUBJECT:**

Approval of Minutes.

**RECOMMENDATION:**

Approve the June 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: 060618 Jt Wtr Res Comm Draft Mins.

**UNCLASSIFIED MANAGER:**

Michele King, 408-630-2711







**JOINT WATER RESOURCES COMMITTEE (CITY OF GILROY, CITY OF MORGAN HILL AND SCVWD)**

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# DRAFT MINUTES

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**WEDNESDAY, JUNE 6, 2018  
8:50 AM**

(Paragraph numbers coincide with agenda item numbers)

A meeting of the Joint Water Resources Committee (City of Gilroy, City of Morgan Hill and SCVWD) (Committee) was held on June 6, 2018, at the South County Regional Wastewater Authority Conference Room, 1500 Southside Dr., Gilroy, California.

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

A meeting of the Joint Recycled Water Committee (City of Gilroy, City of Morgan Hill and SCVWD) was called to order by Committee Chair Hon. Richard P. Santos at 8:50 a.m.

Committee Members in attendance were: City of Gilroy Council Members: Hon. Marie Blankley and Hon. Dion Bracco, City of Morgan Hill Council Members: Hon. Larry Carr and Hon. Rene Spring; SCVWD Directors: Hon. Richard P. Santos, District 3, and Hon. John L. Varela, District 1.

SCVWD Staff members in attendance were: Hossein Ashktorab, Glenna Brambill, Norma J. Camacho, George Cook, Samantha Greene, Garth Hall, Katrina Jessop

City of Gilroy Staff Members in attendance were: Girum Awoke, Andy Faber, Gabriel Gonzalez and Saeid Vaziry and the Mayor of Gilroy: Hon. Roland Velasco.

City of Morgan Hill Staff Members in attendance were: Daniel Cardwell, Anthony Eulo, Chris Ghione and Christina Turner.

Public Attendee: Doug Muirhead of Morgan Hill.

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

There was no one present who wished to speak.

**3. APPROVAL OF MINUTES**

**3.1 Approval of Minutes**

It was moved by Hon. Rene Spring, seconded by Hon. John L. Varela, and unanimously carried, to approve the minutes of the February 7, 2018, Joint Water Resources Committee (City of Gilroy, City of Morgan Hill and SCVWD) meeting, as presented.

**4. ACTION ITEMS**

**4.1 UPDATE ON LLAGAS SUBBASIN GROUNDWATER MANAGEMENT AND USE**

Mr. George Cook reviewed the materials as outlined in the agenda item.

Hon. Rene Spring, Director Richard P. Santos, Hon. Dion Bracco, Hon. Larry Carr, had questions regarding groundwater levels, recharge, Llagas subbasin and recycled water.

Mr. Garth Hall and Mr. Anthony Eulo were available to answer questions.

Mr. Doug Muirhead a member of the public from Morgan Hill spoke on this agenda item.

No action was taken.

**4.2 UPDATE ON PERCHLORATE**

Mr. George Cook reviewed the materials as outlined in the agenda item.

Hon. Larry Carr and Director John L. Varela spoke on perchlorate costs, Olin, wells that are still contaminated. Director Richard P. Santos, reported out on what the district has done and continues to do and we need to send the cities updated reports.

No action was taken.

**4.3 UPDATE ON DISTRICT'S WATER SUPPLY MASTER PLAN**

Ms. Samantha Greene reviewed the materials as outlined in the agenda item

Hon. Rene Spring and Hon. Larry Carr had questions on the Plan.

Mr. Garth Hall was available to answer questions.

No action was taken.

**4.4 UPDATE ON DAM PROJECTS**

Mr. Garth Hall noted that Mr. Hemang Desai was unavailable, but the agenda materials are outlined in the agenda packet and staff could return at a later date to present the information at the Committee's request.

**4.5 HISTORY OF DISTRICT COLLABORATION WITH THE CITIES OF GILROY AND MORGAN HILL ON RECYCLED WATER**

Mr. Hossein Ashktorab and Ms. Norma Camacho reviewed the materials as outlined in the agenda item.

The Committee gave input on collaborative efforts between the cities. Some suggestions: developing a JPA, holistic approach, partnering county-wide, all aspects of water, financial benefits, governance structure, new JPA or work with SCRWA and Joint Water Resource Committee, review of scope, developmental growth concerns, however, more discussion is needed, place on next agenda.

Mr. Doug Muirhead a member of the public from Morgan Hill spoke on a South County Treatment Plant.

Mr. Garth Hall was available to answer questions.

No action was taken.

**4.6 REVIEW OF 2018 JOINT WATER RESOURCES WORK PLAN AND ANY OUTCOMES OF BOARD ACTION OR COMMITTEE REQUESTS AND THE COMMITTEE'S NEXT MEETING AGENDA**

Ms. Glenna Brambill reviewed the materials as outlined in the agenda item. Place agenda item 4.5-History of District Collaboration with the Cities of Gilroy and Morgan Hill on Recycled Water on next meeting's agenda.

**6. CLERK REVIEW AND CLARIFICATION OF COMMITTEE ACTIONS**

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

**7. ADJOURN**

Chair Hon. Richard P. Santos adjourned at 10:29 a.m. to the next quarterly meeting.

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

Approved:



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**File No.:** 19-0123

**Agenda Date:** 3/6/2019

**Item No.:** 4.1.

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## COMMITTEE AGENDA MEMORANDUM

### Joint WRC with Cities of Gilroy/Morgan Hill/SCRWA

**SUBJECT:**

Update on Water Supply Master Plan.

**RECOMMENDATION:**

Receive and discuss information on the Santa Clara Valley Water District's water supply strategy.

**SUMMARY:**

**District Overview**

The Santa Clara Valley Water District (District) provides groundwater management, wholesale water supply, flood protection, and stream stewardship services to Santa Clara County (County). The District was originally formed in 1929 to manage groundwater in response to groundwater overdraft and land subsidence. Maintaining groundwater supplies and avoiding land subsidence continue to be the core function of the District's water supply program.

Originally, the County relied solely on local runoff patterns and natural recharge. However, these were insufficient to maintain groundwater levels. Between the 1930s and 1950s, the District constructed 10 dams to store winter rains for use later in the year. Initially, these efforts were sufficient. However, the post-World War II development boom increased demands, and local supplies were no longer sufficient to meet the County's needs. The District began importing water in the 1960s from the State Water Project through the South Bay Aqueduct from the north and in the 1980s from the federal Central Valley Project via San Luis Reservoir.

With continued expansion in the technology sector in the 1990s further increasing demands, the District initiated water conservation and recycled and purified water programs. The District implements nearly 20 different ongoing water conservation programs. These programs are designed to achieve sustainable, long-term water savings and are implemented regardless of water supply conditions. Recycled and purified water is a local, reliable source of supply that helps meet demands in wet, normal and dry years. In 1977 the District and the City of Gilroy began a partnership to construct and operate a South County Recycled Water system which extends from the South County Regional Waste Water Authority (SCRWA) treatment plant. The facility has been expanded over the years and uses advanced technologies to purify secondary treated wastewater to produce on average 2,000 acre-feet a year (1.8 million gallons per day) of recycled water to irrigators. The District is working with local recycled water producers, retailers, and other stakeholder to develop a Countywide Water Reuse Master Plan that will recommend reliable and efficient projects for potable and non-potable reuse.

### **Water Supply Master Plan**

As the groundwater management agency and primary water resources agency for Santa Clara County, the District has a mission to provide Silicon Valley safe, clean water for a healthy life, environment, and economy. The Water Supply Master Plan (Master Plan) is the District's strategy for providing a reliable and sustainable water supply in a cost-effective manner. It informs investment decisions by describing the type and level of water supply investments the District is planning to make through 2040, the anticipated schedule, the associated costs and benefits, and how Master Plan implementation will be monitored and adjusted annually.

### **Strategy**

The Board adopted the "Ensure Sustainability" strategy in 2012 as part of the Water Supply and Infrastructure Master Plan. The "Ensure Sustainability" strategy is comprised of three elements:

- 1) Secure existing supplies and infrastructure,
- 2) Expand water conservation and reuse, and
- 3) Optimize the use of existing supplies and infrastructure.

Together these elements protect and build on past investments in water supply reliability, leverage those investments, and develop alternative supplies and demand management measures to manage risk and meet future needs, especially during extended droughts in a changing climate. As part of the Master Plan update, on January 14, 2019 the Board adopted to reaffirm the "Ensure Sustainability" strategy.

### **Level of Service**

The water supply reliability level of service goal guides long-term water supply planning efforts and informs Board decisions regarding investments. The level of service goal, which was approved by the Board in June 2012, is an interpretation of Board Policy E-2 that "there is a reliable, clean water supply for current and future generations." The goal was to "develop water supplies designed to meet at least 100 percent of average annual water demand identified in the District's Urban Water Management Plan during non-drought years and at least 90 percent of average annual water demand in drought years." As part of the Master Plan update staff recommended revising the water supply reliability level of service goal to "develop water supplies designed to meet 100 percent of demands identified in the Master Plan in non-drought years and at least 80 percent of average annual water demand in drought years."

Staff recommended using the Master Plan demand projection because it is closer to historic trends than the Urban Water Management Plan projection and will be reviewed and updated annually as part of Master Plan monitoring. Furthermore, staff recommended updating the level of service goal for planning for drought reliability to meeting 80 percent of demands because it strikes a balance between minimizing shortages and the costs associated with the higher level of service. Furthermore, the community was able to reduce water use as much as 28 percent in 2015, indicating that shortages in the range of 20 percent are manageable. As part of the Master Plan update, on January 14, 2019 the Board adopted staff's recommended level of service goal: "develop water supplies designed to meet at least 100 percent of average annual water demand identified in the

District's Water Supply Master Plan during non-drought years and at least 80 percent of average annual water demand in drought years.”

#### Supply and Demand

The Master Plan modeling analysis indicates that droughts are and will continue to be the District's greatest water supply challenge. Modeling of 2040 conditions indicates that the water supply shortfall is approximately 150,000 acre-feet (134 million gallons per day) during drought years and 35,000 acre-feet (31 million gallons per day) during an average non-drought year.

To meet the future water supply needs and promote greater supply diversity, the District continues to explore additional water supply and demand management options. Water supply diversity helps reduce the County's exposure to the risk of any one supply investment not performing up to expectations. In addition, developing alternative supplies reduces the District's reliance on imported water supplies. Examples of the types of projects being considered include additional water conservation, non-potable and potable reuse, surface and groundwater storage, stormwater capture, additional recharge ponds, and dry year options (Attachment 2).

In September 2017, the Board approved planning for a variety of water conservation and stormwater capture projects, referred to as the “No Regrets” package in the Water Master Plan update. These projects would be implemented in all future water supply scenarios and are designed to reduce water demands by about 10,000 acre-feet per year (9 million gallons per day) and increase natural groundwater recharge by about 1,000 acre-feet per year (0.9 million gallons per day). The package, which increases the conservation savings goal to 110,000 acre-feet per year (98 million gallons per day) by 2040, consists of the following water conservation and stormwater capture projects:

- Advanced metering infrastructure;
- Graywater rebate program expansion;
- Leak repair incentives;
- New Development Model Ordinance; and
- Stormwater capture (agricultural land recharge also known as managed aquifer recharge (MAR), stormwater recharge in the City of San Jose and Saratoga, rain barrel rebates, and rain garden rebates).

In December 2017, the Board approved developing up to 24,000 acre-feet per year (21 million gallons per day) of potable reuse capacity. In May 2018, the Board approved participation in the California WaterFix. In June 2018, the Board approved pursuing the Pacheco Reservoir Expansion Project, which conditionally received up to \$484.5 million in State funding.

Staff analyzed the effect of these Board-approved efforts, along with additional recharge in the Llagas Groundwater Subbasin that groundwater modeling indicates is needed to meet future demands, on water supply reliability. The projects that are approved for planning are sufficient to meet the District's water supply reliability level of service goal of developing water supplies designed to meet at least 100 percent of average annual water demand identified in the District Water Supply Master Plan during non-drought years and at least 80 percent of average annual water demand in drought years.

Monitoring and Assessment

There are many unknowns and risks associated with future demands, supplies, and the status of projects and programs in the Master Plan. Therefore, a critical piece of the plan is the development of a monitoring and assessment plan (MAP). The MAP will build on regular reports on projects and annual water supply conditions and will look at how all the different deviations from schedule affect the long-term water supply reliability outlook. Staff will also evaluate how changing external factors such as changes in policy, regulations (e.g., Bay Delta Water Quality Control Plan), and scientific understanding affect the long-term water supply reliability outlook. The MAP involves an annual review of the Master Plan and periodic updates to reflect changed conditions.

The proposed Monitoring and Assessment Plan (MAP) approach for the Master Plan has four steps:

1. Develop an implementation schedule;
2. Manage unknowns and risk;
3. Report to Board annually, or as needed; and
4. Adjust the MAP as needed to serve as input to annual rate forecast, CIP and budget.

Next Steps

The next step for the Master Plan is to prepare a draft based on Board direction from the November 20, 2018 and January 8, 2019 Board meetings. Staff anticipates completing a draft Master Plan for Board and stakeholder review in spring 2019. The intent is to hold at least two workshops as part of this review - one with water retailers and one with other stakeholders. Additional presentations may be made at Board advisory committees. Staff plans to present a final Master Plan to the Board in winter 2019. The next annual report would be presented to the Board in fall 2019 and then any changes would be incorporated into the CIP, budget, and water rates setting processes.

**ATTACHMENTS:**

Attachment 1: Staff PowerPoint  
Attachment 2: Project List

**UNCLASSIFIED MANAGER:**

Jerry De La Piedra, 408-630-2257



# Update on Water Supply Master Plan

Joint Water Resources Committee with Cities of Gilroy and Morgan Hill

March 6, 2019

# SANTA CLARA COUNTY GROUNDWATER AT-A-GLANCE

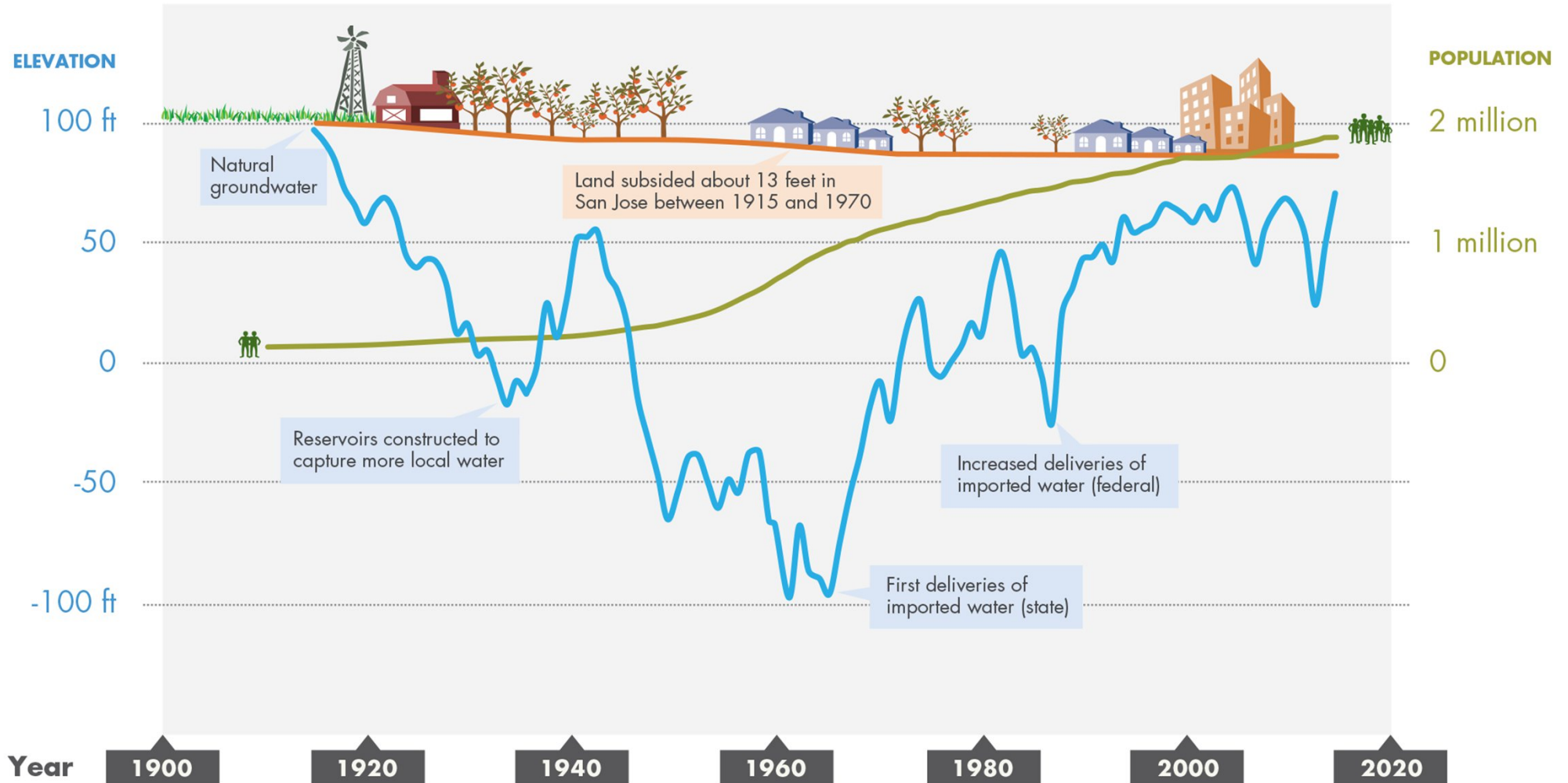
*a graphic representation not intended as a technical exhibit*



**Land Surface Elevation**

**Groundwater Elevation**

**Population**



Last updated January 27, 2017

Attachment 1  
Page 2 of 19

# Diversified Portfolio for a Reliable Supply

Imported water



Local surface & groundwater



Conservation

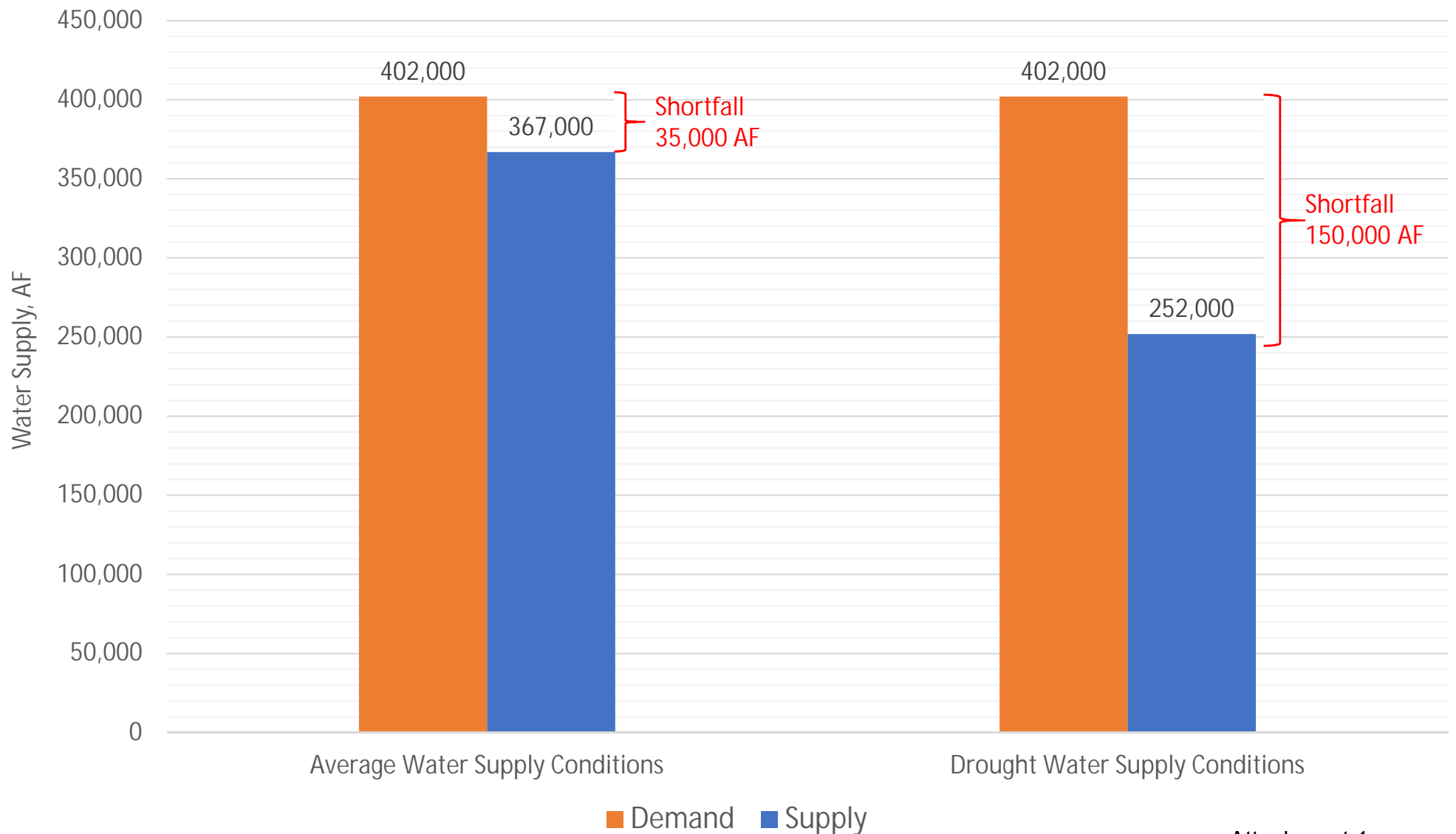


Recycled Water



# Water Supply Master Plan Update

## Analysis shows declining reliability in year 2040



# 2019 Board-Reaffirmed “Ensure Sustainability” Strategy

## Three Elements:

1. Securing existing supplies and infrastructure
2. Expand conservation and reuse
3. Optimize the system



# Level of Service Goal Revision

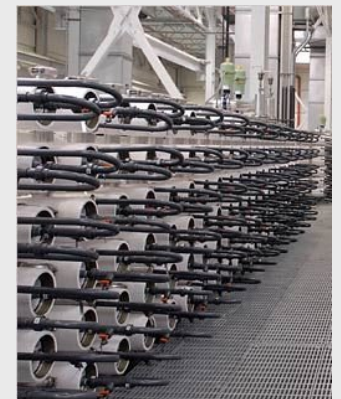
## Adopted January 14, 2019

Develop water supplies designed to meet at least 100 percent of average demands identified in the District's ~~Urban Water Management Plan~~ Water Supply Master Plan during non-drought years and at least ~~90~~ 80 percent of average annual water demand in drought years.

### Rationale

- 2017 Telephone Survey
- Stakeholder Input
- Incremental Costs
- Frequency of Shortage
- Planning for Uncertainty
- Benchmarking

# Many Projects and Portfolios of Projects have been Evaluated for Filling the Gap



# Many Consideration are Analyzed



Sustainability



Climate Change



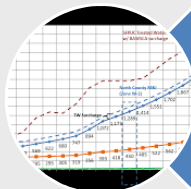
Operational Flexibility



Cost



Yield



Rate Impacts



Local vs. Regional Supply



Regulatory Restrictions



Environmental Impacts



And more...

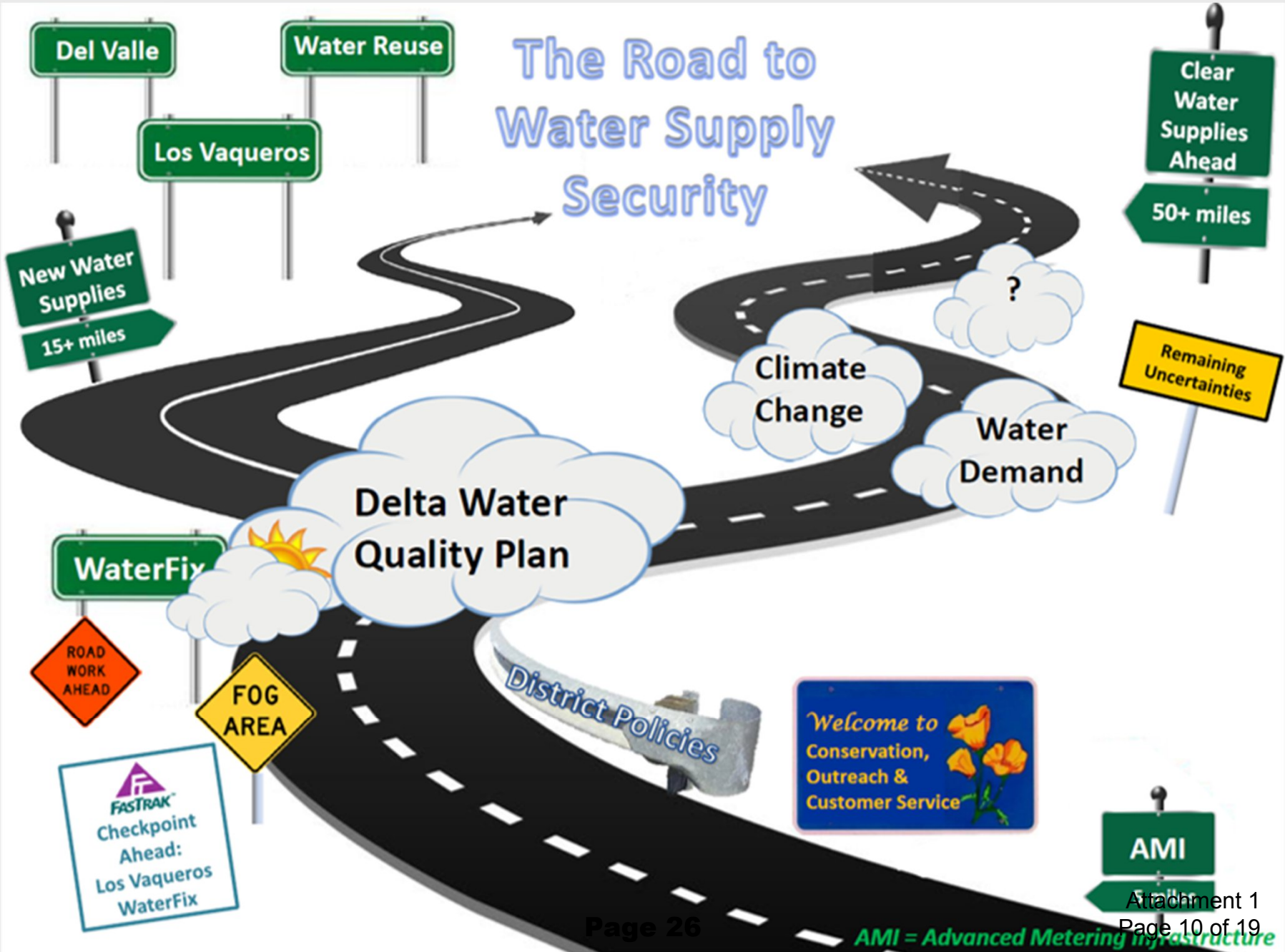


# WSMP Project Portfolio Scenario Review\*

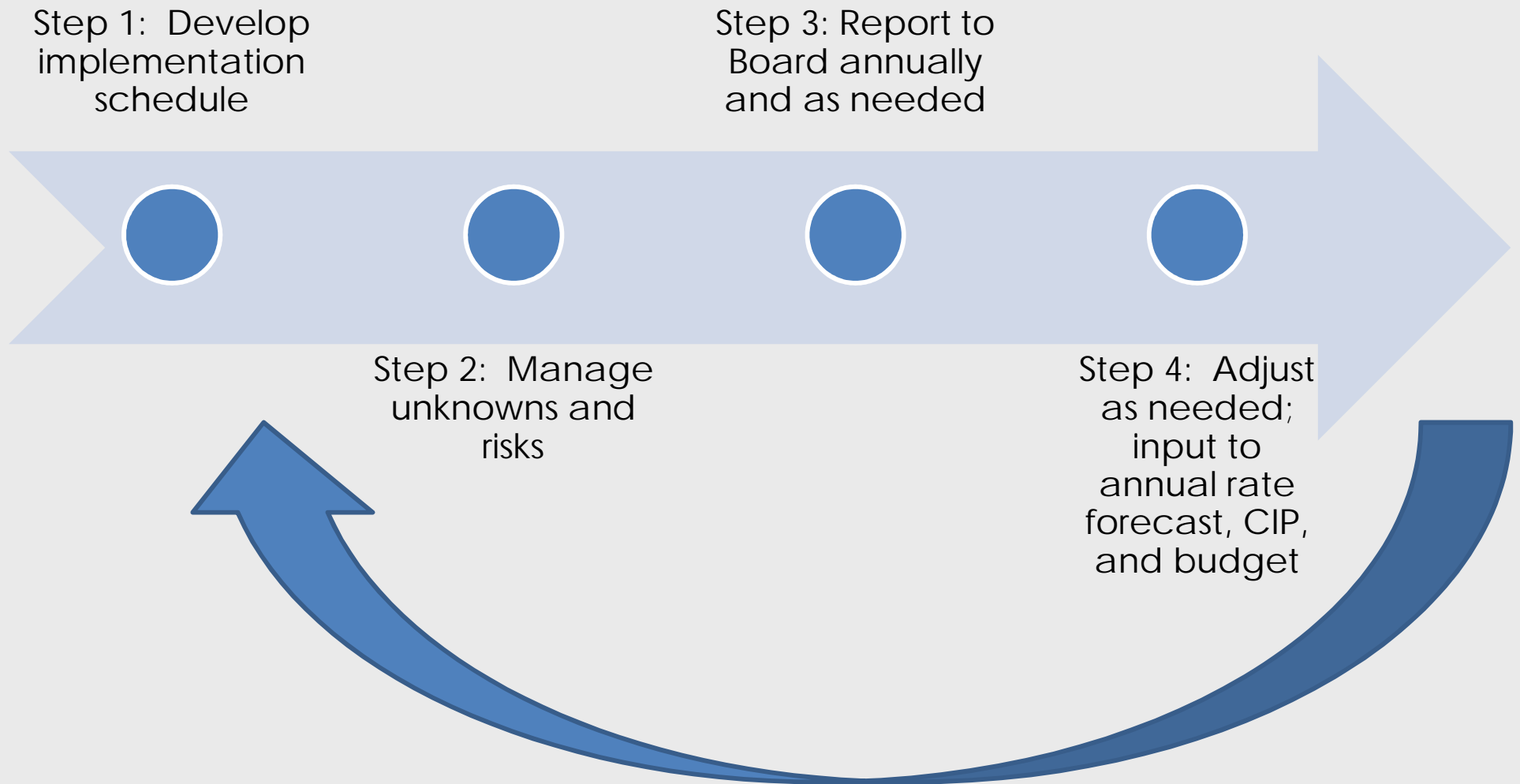
- Baseline Projects
- California WaterFix (State side)
- “No Regrets” Conservation and Stormwater Projects
- 24,000 acre-feet (21 MGD) of Potable Reuse by 2028
- Pacheco Reservoir
- Transfer-Bethany Pipeline
- South County Recharge

Rate: North 6.6%, South 6.9% average annual increase

# Manage Unknowns and Risks



# RoadMAP (Monitoring & Assessment Plan)



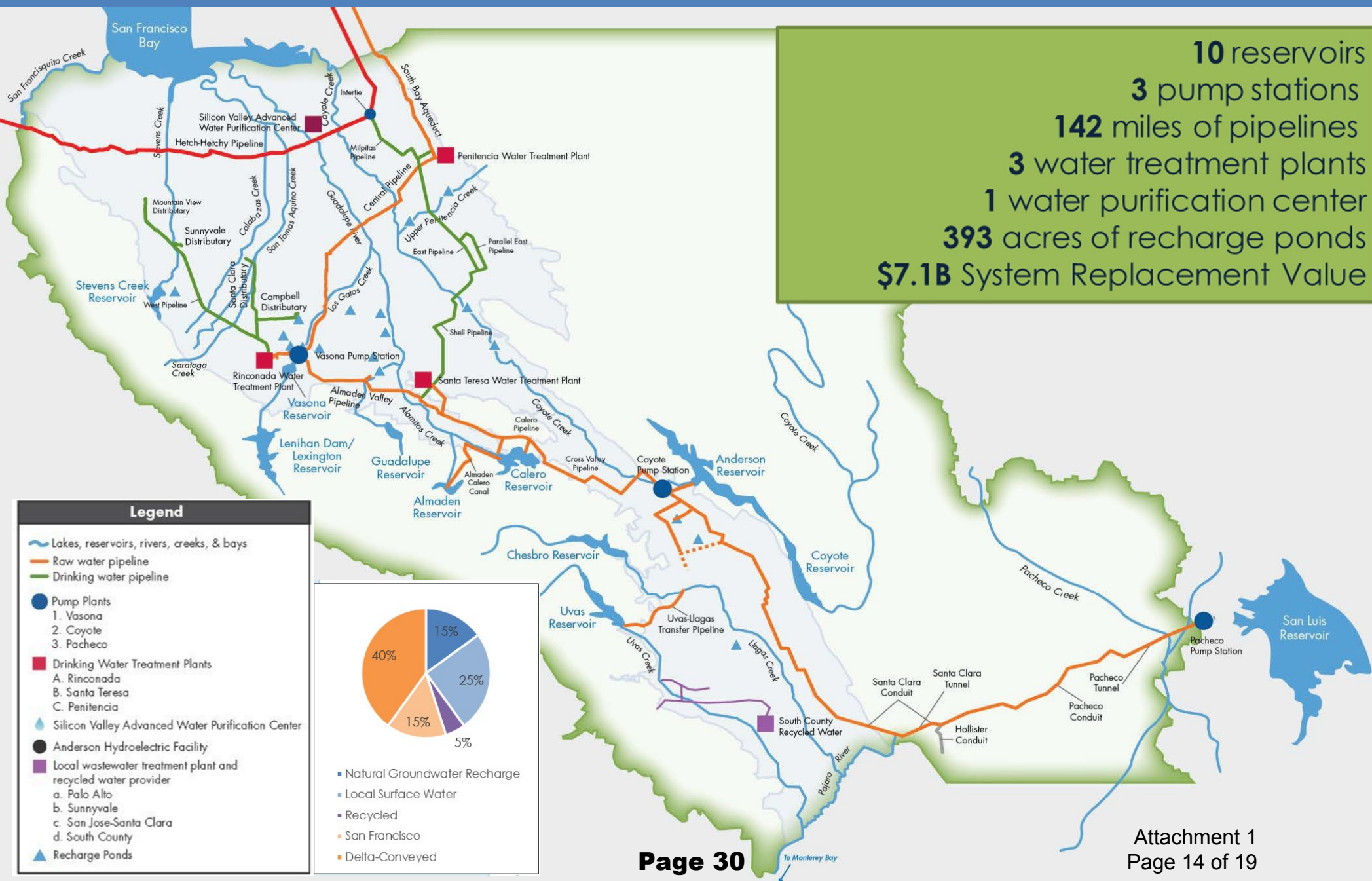
# Next Steps

- Incorporate Board input into draft Water Supply Master Plan, water rate setting process, and CIP
- Present Draft Water Supply Master Plan – Spring 2019
- Solicit stakeholder input on draft Water Supply Master Plan – Spring/Summer 2019
- Present Final Water Supply Master Plan – Winter 2019

# Extra Slides

# A Comprehensive, Flexible Water System

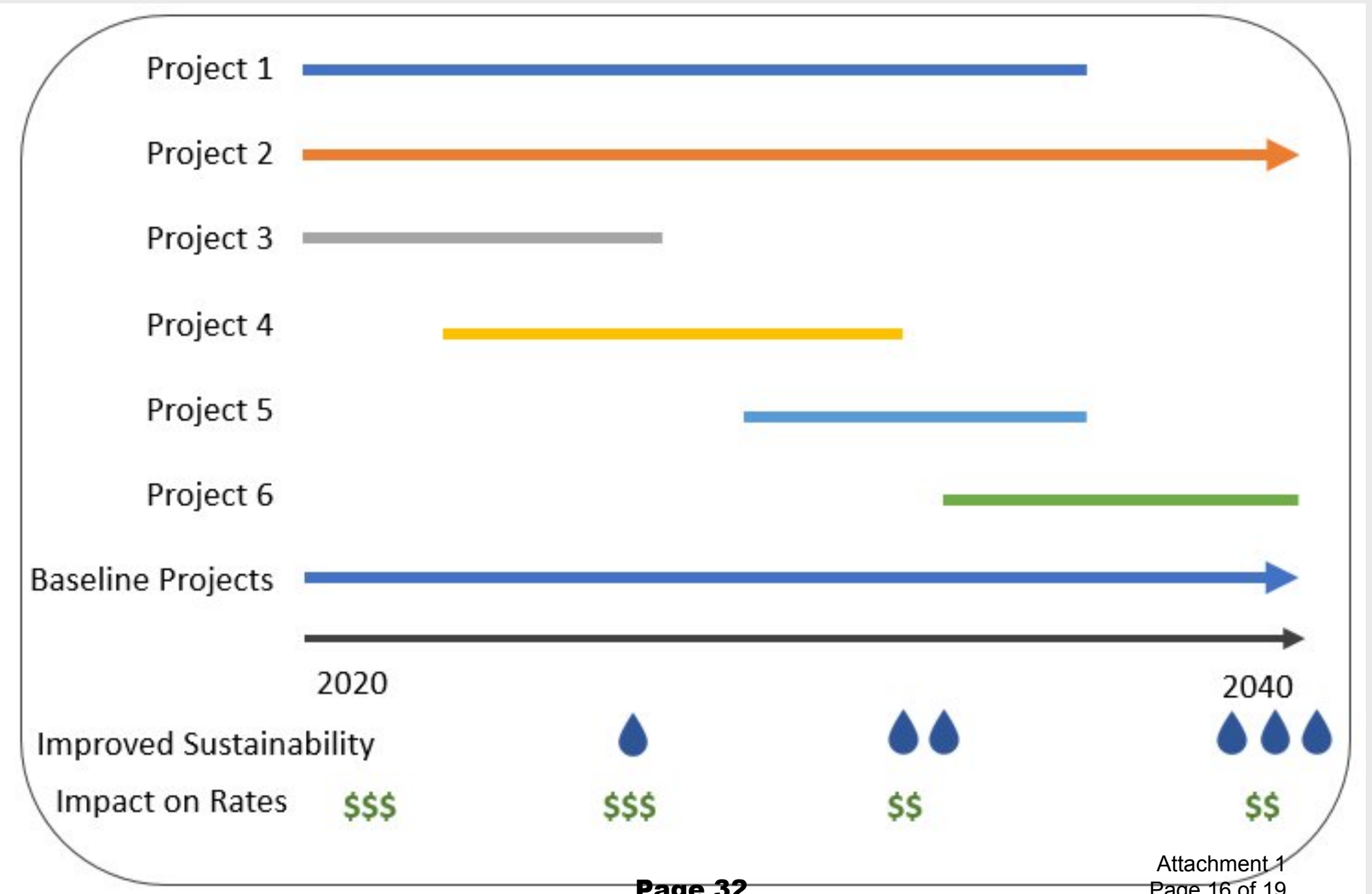
**10** reservoirs  
**3** pump stations  
**142** miles of pipelines  
**3** water treatment plants  
**1** water purification center  
**393** acres of recharge ponds  
**\$7.1B** System Replacement Value



# “No Regrets” Package Status

Program	Status
Advanced Metering Infrastructure (AMI)	Working with retailers on program definition
Graywater Rebate Program Expansion	Working with Ecology Action on direct installations
Leak Repair Incentives	Will be implemented based on AMI results
Model Water Efficient New Development Ordinance	Consultant in process of finalizing model ordinance
Stormwater-Ag Land Recharge	Pilot project being scoped
Stormwater- Rain Barrels and Cisterns	Implementing
Stormwater – Rain Gardens	Implementing
Stormwater – San Jose	Future project
Stormwater - Saratoga	Future project

# Step 1: Develop Implementation Schedule





# Step 2: Manage Unknowns and Risks

Monitoring Category	Example Metrics
Demands	<ul style="list-style-type: none"><li>• Water use</li><li>• Conservation savings</li><li>• Risks and opportunities</li></ul>
Existing Supplies	<ul style="list-style-type: none"><li>• Local surface water availability</li><li>• Imported water availability</li><li>• Recycled water use</li><li>• Risks and opportunities</li></ul>
Ongoing Projects	<ul style="list-style-type: none"><li>• Scope</li><li>• Schedule</li><li>• Budget</li><li>• Risks and opportunities</li></ul>
Alternative Projects	<ul style="list-style-type: none"><li>• Status</li><li>• Risks and opportunities</li></ul>
Policies and Regulations	<ul style="list-style-type: none"><li>• Impact to water supply reliability/level of service</li><li>• Risks and opportunities</li></ul>

# Step 3: Report to the Board

Suggested Master Plan Projects	Alternative or Additive Projects (Partial List)
<ul style="list-style-type: none"> <li>• Baseline Project</li> <li>• California Water Fix</li> <li>• No Regrets Conservation and Stormwater</li> <li>• Potable Reuse Phase 1 (24KAF by FY28)</li> <li>• Transfer-Bethany Pipeline</li> <li>• South County Recharge***</li> </ul>	<ul style="list-style-type: none"> <li>• Sites Reservoir</li> <li>• Refinery Recycled Water Exchange</li> <li>• Los Vaqueros Reservoir</li> <li>• Countywide Water Reuse Master Plan</li> <li>• California WaterFix Long-Term Transfers</li> <li>• Bay Area Brackish Water Treatment</li> <li>• Lexington Pipeline</li> <li>• North County Recharge</li> <li>• Groundwater Banking</li> <li>• South County Water Treatment Plant</li> <li>• Morgan Hill Recycled Water</li> </ul>

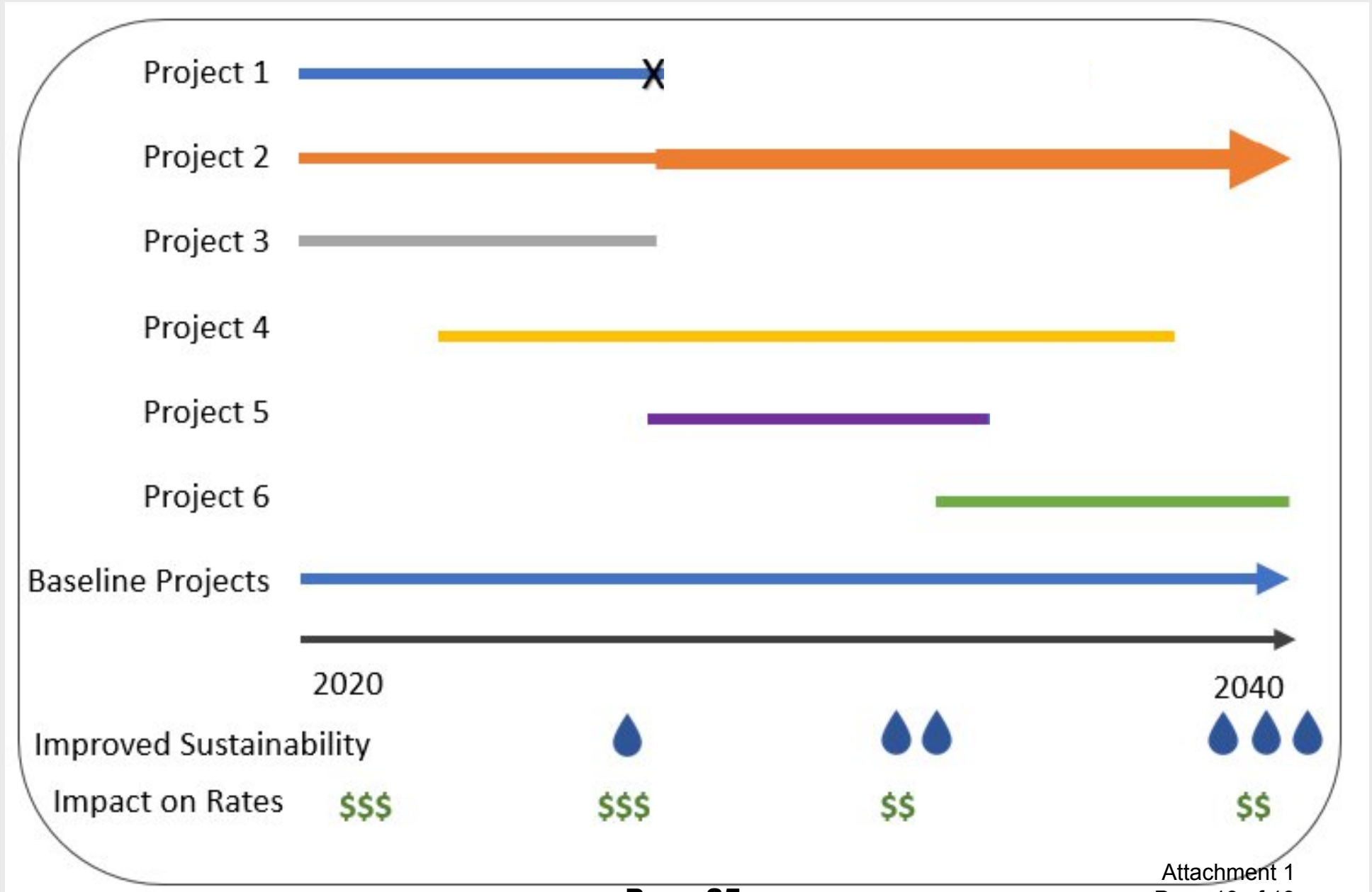


## Considerations for Moving Projects

- Change in level of service
- Cost and rate impacts
- Change in risk level
- Relationships between projects
- Needs and opportunities
- Stakeholder input

\*\*\*Not in 10-year rate forecast

# Step 4: Adjust as Needed



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Water Supply Master Plan Update 2018  
Potential Projects (as of December 2018)

Projects with Preliminary Cost and Yield Estimates					
Project	District Lifecycle Cost (Present Value, 2017) <sup>1</sup>	Average Annual Yield (AFY) <sup>2</sup>	Cost/AF	Relative Risk <sup>3</sup>	
Anderson Reservoir Expansion: Increases reservoir storage by 100,000 AF to about 190,000 AF, increasing the District’s ability to capture and store local runoff. Planning for reconstruction of Anderson Reservoir to meet seismic standards is currently underway. Consideration of also expanding the reservoir would likely delay the required work.	\$1.2 billion	10,000	\$5,000	---	
Bay Area Brackish Water Treatment: Secures a partnership with other Bay Area agencies to build a brackish water treatment plant in Contra Costa County. District would receive up to 5 MGD of water in critical dry years. There are concerns about the complexity of permitting a desalination plant and the availability of water rights during dry periods when such a facility would be most needed. This project will require collaboration among multiple agencies and requires partners for moving forward. The District is a member of Bay Area Regional Reliability and will continue to work on regional solutions to water reliability.	\$80 million	1,000	\$2,900	---	
Calero Reservoir Expansion: Expands Calero Reservoir storage by about 14,000 AF to 24,000 AF. Planning and design for Calero Reservoir Seismic Retrofit project is currently underway. Consideration of also expanding the reservoir would likely delay the required work.	\$180 million	3,000	\$2,200	---	

<sup>1</sup> The District Lifecycle Cost (Present Value, 2017\$) includes capital, operations, maintenance, rehabilitation, and replacement costs, as applicable, for a 100-year period, discounted back to 2017 dollars. All costs are subject to change pending additional planning and analysis.

<sup>2</sup> The average annual yield of many projects depends on which projects they are combined with and the scenario being analyzed. For example, groundwater banking yields are higher in portfolios that include wet year supplies. Similarly, they would be lower in scenarios where demands exceed supplies and excess water is unavailable for banking.

<sup>3</sup> District staff complete risk ranking analyses in September 2017 and December 2018. Not all the potential projects were included in the analysis. “---” indicates the project was not included in either of the risk ranking analysis.

Water Supply Master Plan Update 2018  
Potential Projects (as of December 2018)

Projects with Preliminary Cost and Yield Estimates				
Project	District Lifecycle Cost (Present Value, 2017) <sup>1</sup>	Average Annual Yield (AFY) <sup>2</sup>	Cost/AF	Relative Risk <sup>3</sup>
California WaterFix: Constructs alternative conveyance (one or two tunnels) capable of diverting up to 9,000 cubic feet-per-second from the Sacramento River and delivering it to the federal and state pumps. This would result in less impactful diversions, help maintain existing deliveries, improve the ability to do transfers, and protect water quality from sea level rise. The project has implementation complexity, uncertainty, and stakeholder opposition.	\$620 million	41,000	\$600	High - Extreme
Church Avenue Pipeline: Diverts water from the Santa Clara Conduit to the Church Avenue Ponds. The Morgan Hill recharge projects provide the same or better yields at a lower cost.	\$30 million	1,000	\$900	---
Dry Year Options / Transfers: Provides 12,000 AF of State Water Project transfer water during critical dry years. Amount can be increased or decreased. Can also include long-term option agreements. There are uncertainties with long-term costs and ability to make transfers in critical dry years.	\$100 million	2,000	\$1,400	Low
Groundwater Banking: Provides 120,000 AF of banking capacity for Central Valley Project and State Water Project contract water. Sends excess water to a groundwater bank south of the Delta during wet years and times of surplus for use during dry years and times of need. Amount could be increased or decreased. There are uncertainties with the ability to make transfers in critical dry years and Sustainable Groundwater Management Act implementation.	\$60 million	2,000	\$1,300	Low

Water Supply Master Plan Update 2018  
Potential Projects (as of December 2018)

Projects with Preliminary Cost and Yield Estimates				
Project	District Lifecycle Cost (Present Value, 2017) <sup>1</sup>	Average Annual Yield (AFY) <sup>2</sup>	Cost/AF	Relative Risk <sup>3</sup>
Lexington Pipeline: Constructs a pipeline between Lexington Reservoir and the raw water system to provide greater flexibility in using local water supplies. The pipeline would allow surface water from Lexington Reservoir to be put to beneficial use elsewhere in the county and increase utilization of existing water rights, especially in combination with the Los Gatos Ponds Potable Reuse project. In addition, the pipeline will enable the District to capture some wet-weather flows that would otherwise flow to the Bay. Water quality issues would require pre-treatment/management. An institutional alternative could include an agreement to use some of the District's Lexington Reservoir water right at San Jose Water Company's Montevina Water Treatment Plant.	\$90 million	3,000	\$1,000	Low
Local Land Fallowing: Launches program to pay growers not to plant row crops in critical dry years. This would primarily save water in the South County. The South County recharge projects have similar or greater yields at a lower cost and are more consistent with County land use policy and grower interests.	\$50 million	1,000	\$2,400	---
Los Vaqueros Reservoir: Secures an agreement with Contra Costa Water District and other partners to expand the off-stream reservoir by 115 TAF (from 160 TAF to 275 TAF) and construct a new pipeline (Transfer-Bethany) connecting the reservoir to the South Bay Aqueduct. Assumes District's share is 30 TAF of storage, which includes an emergency storage pool of 20 TAF for use during droughts. Would require funding and operating agreements with multiple parties, likely including formation of a Joint Powers Authority.	\$90 million	2,000	\$1,200	Medium
Morgan Hill Recycled Water: Constructs a 2.25 MGD scalping plant in Morgan Hill. Would need to replace a lower cost recycled water project in Gilroy due to capacity constraints on the system.	\$80 million	3,000	\$1,100	---

Water Supply Master Plan Update 2018  
Potential Projects (as of December 2018)

Projects with Preliminary Cost and Yield Estimates					
Project	District Lifecycle Cost (Present Value, 2017) <sup>1</sup>	Average Annual Yield (AFY) <sup>2</sup>	Cost/AF	Relative Risk <sup>3</sup>	
No Regrets Package	\$100 million	11,000	\$400	Medium	
Advanced Metering Infrastructure (AMI): Implements a cost share program with water retailers to install AMI throughout their service area. AMI would alert customers of leaks and provide real-time water use data that allows users to adjust water use.	\$30 million	4,000	\$200	Low	
Graywater Rebate Program Expansion: Expand the District's existing rebate program for laundry-to-landscape graywater systems. Potentially could include a direct installation program and/or rebates for graywater systems that reuse shower and sink water.	\$1 million	< 1,000	\$2,200	Low	
Leak Repair Incentive: Provides financial incentivizes homeowners to repair leaks.	\$2 million	< 1,000	\$7,800	Low	
New Development Model Ordinance: Encourages municipalities to adopt an ordinance for enhancing water efficiency standards in new developments. Components include submetering multi-family residences, onsite water reuse (rainwater, graywater, black water), and point-of use hot water heaters.	\$1 million	5,000	\$100	Medium	
Stormwater - Agricultural Land Recharge: Flooding or recharge on South County agricultural parcels during the winter months.	\$10 million	1,000	\$1,000	Low	
Stormwater - Rain Barrels: Provides rebates for the purchase of a rain barrels.	\$40 million	< 1,000	\$15,100	Low	
Stormwater - Rain Gardens: Initiates a District rebate program to incentivize the construction of rain gardens in residential and commercial landscapes.	\$10 million	< 1,000	\$2,800	Low	
Stormwater - San Jose: Constructs a stormwater infiltration system in San Jose. Assumes 5 acres of ponds. Potential partnership with City of San Jose.	\$4 million	1,000	\$100	Low	
Stormwater – Saratoga #1: Constructs a stormwater infiltration system in Saratoga. Assumes 5 acres of ponds. Assumes easement rather than land purchase. Close to Stevens Creek Pipeline, so could also potentially be used as a percolation pond.	\$4 million	< 1,000	\$1,100	Low	



Water Supply Master Plan Update 2018  
Potential Projects (as of December 2018)

Projects with Preliminary Cost and Yield Estimates					
Project	District Lifecycle Cost (Present Value, 2017) <sup>1</sup>	Average Annual Yield (AFY) <sup>2</sup>	Cost/AF	Relative Risk <sup>3</sup>	
Pacheco Reservoir: Enlarges Pacheco Reservoir to about 140,000 AF. Assumes local inflows and ability to store Central Valley Project supplies in the reservoir. Construction would be in collaboration with Pacheco Pass Water District and San Benito County Water District. The project would be operated to provide water for fisheries downstream of the reservoir and increase in-county storage. Other potential benefits could include managing water quality impacts from low-point conditions in San Luis Reservoir and downstream flood protection. Potentially significant environmental and cultural impacts are associated with the project.	\$470 million	6,000	\$2,700	Medium	
Potable Reuse – Ford Pond: Constructs potable reuse facilities for 4,000 AFY of groundwater recharge capacity at/near Ford Ponds. Potable reuse water is a high-quality, local drought-proof supply that is resistant to climate change impacts. The project would require agreements with the City of San Jose and may require moving existing water supply wells.	\$290 million	3,000	\$2,800	Medium	
Potable Reuse – Injection Wells: Constructs potable reuse facilities for 15,000 AFY of groundwater injection capacity. Potable reuse water is a high-quality, local drought-proof supply that is resistant to climate change impacts. The injection wells could be constructed in phases and be connected to the pipeline carrying purified water to the Los Gatos Ponds. The project would require agreements with the City of San Jose and reverse osmosis concentrate management. Injection well operations are more complex than recharge pond operations.	\$1.2 billion	12,000	\$3,100	High	

Water Supply Master Plan Update 2018  
Potential Projects (as of December 2018)

Projects with Preliminary Cost and Yield Estimates				
Project	District Lifecycle Cost (Present Value, 2017) <sup>1</sup>	Average Annual Yield (AFY) <sup>2</sup>	Cost/AF	Relative Risk <sup>3</sup>
Potable Reuse - Los Gatos Ponds: Constructs a facility to purify water treated at wastewater treatment plants for groundwater recharge. Potable reuse water is a high-quality, local drought-proof supply that is resistant to climate change impacts. Assumes up to 24,000 AFY of advanced treated recycled water would be available for groundwater recharge at existing recharge ponds in the Los Gatos Recharge System. Some of the outstanding issues with the project are reverse osmosis concentrate management and agreements with the City of San Jose.	\$1.2 billion	19,000	\$2,000	Medium
Saratoga Recharge: Constructs a new groundwater recharge facility in the West Valley, near the Stevens Creek pipeline. Would help optimize the use of existing supplies. Land availability and existing land uses limit potential project locations.	\$50 million	1,000	\$1,300	Low
Sites Reservoir: Establishes an agreement with the Sites JPA to build an off-stream reservoir (up to 1,800 TAF) north of the Delta that would collect flood flows from the Sacramento River and release them to meet water supply and environmental objectives. Assumes District's share is 24 TAF of storage, which is used to prorate yields from the project. The project would be operated in conjunction with the SWP and CVP, which improves flexibility of the statewide water system but would be subject to operational complexity. The project would increase reliance on the Delta.	\$250 million	8,000	\$1,200	High
South County Recharge – Butterfield Channel: Extends the Madrone Pipeline from Madrone Channel to Morgan Hill's Butterfield Channel and Pond near Main Street. Would help optimize the use of existing supplies. Would need to be operated in conjunction with the City's stormwater operations.	\$20 million	2,000	\$400	Low

Water Supply Master Plan Update 2018  
Potential Projects (as of December 2018)

Projects with Preliminary Cost and Yield Estimates					
Project	District Lifecycle Cost (Present Value, 2017) <sup>1</sup>	Average Annual Yield (AFY) <sup>2</sup>	Cost/AF	Relative Risk <sup>3</sup>	
South County Recharge - San Pedro Ponds: Implements a physical or institutional alternative to enable the ponds to be operated at full capacity without interfering with existing septic systems in the vicinity.	\$10 million	1,000	\$400	---	
South County Water Treatment Plant: Provides in-lieu groundwater recharge by delivering treated surface water to the Cities of Morgan Hill and Gilroy. Would require a connection to the Santa Clara Conduit or other raw water pipeline and pipelines from the plant to the cities' distribution systems. The District owns two properties that could potentially be used for this project. The South County recharge projects provide similar benefits at significantly lower cost.	\$110 million	2,000	\$2,300	---	
Stormwater – Saratoga #2: Constructs a stormwater infiltration system on a parcel in Saratoga. Assumes 5 acres of ponds. Currently zoned as ag land; assumes land purchase. About 0.6 miles from the Stevens Creek Pipeline. The cost-effectiveness is low due to the land purchase requirement. Other stormwater projects are included in the “No Regrets” package.	\$50 million	<1,000	\$10,700	---	
Transfer-Bethany Pipeline: Constructs a pipeline between CCWD’s Transfer Facility to Bethany Reservoir that serves the South Bay Aqueduct and the California Aqueduct. Would provide an alternative to through-Delta conveyance of supplies from projects such as the Bay Area Brackish Water Treatment and Refinery Recycled Water Exchange projects. Also, it would facilitate conveyance of Delta surplus supplies or transfers from CCWD and East Bay Municipal Utility District. The pipeline is one element of the larger Los Vaqueros Reservoir Expansion Project. Would require funding and operating agreements with multiple parties, likely including formation of a Joint Powers Authority.	\$50 million	1,000	\$1,200	Medium	

Water Supply Master Plan Update 2018  
Potential Projects (as of December 2018)

Projects with Preliminary Cost and Yield Estimates					
Project	District Lifecycle Cost (Present Value, 2017) <sup>1</sup>	Average Annual Yield (AFY) <sup>2</sup>	Cost/AF	Relative Risk <sup>3</sup>	
Uvas Pipeline: Captures excess water (e.g., water that would spill) from Uvas Reservoir and diverts the water to Church Ponds and a 25 acre-foot pond near Highland Avenue. The new pond would be adjacent to and connected by a pipe to West Branch Llagas Creek. The South County recharge projects provide similar or better yields at a lower cost.	\$80 million	1,000	\$2,500	---	
Uvas Reservoir Expansion: Would expand Uvas Reservoir by about 5,100 AF to 15,000 AF, reducing reservoir spills. Project would be located on Uvas Creek, which currently provides good steelhead habitat. Other water storage options under consideration provide better yield for the cost.	\$330 million	1,000	\$21,200	---	
Water Contract Purchase: Purchase 20,000 AF of SWP Table A contract supply from other SWP agencies. Would increase reliance on the Delta and be subject to willing sellers' availability. Could also include Long-Term Transfers being considered along with California WaterFix.	\$360 million	12,000	\$800	Medium	

## Water Supply Master Plan Update 2018 - Project Descriptions (as of August 2018)

### Other Potential Projects

**Conservation Rate Structures:** Many retailers implement conservation rate structures. Given recent court rulings on rate structure, retailers are reluctant to add new conservation rate structures at this time.

**Countywide Water Reuse Master Plan:** The District is working with local recycled water producers, retailers, and other stakeholders to develop a Countywide Water Reuse Master Plan (CWRMP) that will address key challenges in potable water reuse, including: (1) identification of how much water will be available for potable reuse and non-potable recycled water expansion, (2) evaluation of system integration options, (3) identification of specific potable reuse and recycled water projects, and (4) development of proposals for governance model alternatives including roles and responsibilities. The CWRMP will also incorporate proposed infrastructure upgrades that would improve capacity; analyze seasonal, daily, and hourly demand trends to determine the opportunities to optimize flows during peak periods; update the existing and projected future demands of users and retailers; identify land requirements; and prioritize actions and improvements needed to meet the projected demands, including cost estimates of recommended improvements.

**Del Valle Reoperations:** This project, as currently envisioned, would allow for more storage in Lake Del Valle, a State Water Project facility in Del Valle Regional Park that is operated by East Bay Regional Park District. The benefits of the additional storage are primarily related to operational flexibility and water quality. The project may not increase long-term water supply yields or drought year yields. Staff is continuing to evaluate Del Valle reoperations in partnership with Alameda County Water District and Zone 7 Water Agency. If long-term water supply benefits are identified, staff will evaluate it as part of the Water Supply Master Plan.

**Refinery Recycled Water Exchange:** Central Contra Costa Sanitary District (Central San) is a wastewater agency in Contra Costa County. It currently produces about 2,000 acre-feet per year (AFY) of recycled water, but has wastewater flows that could support more than 25,000 AFY of recycled water production. The conceptual program would involve delivering recycled water to two nearby refineries that are currently receiving about 22,000 AFY of CCWD Central Valley Project (CVP) water; in exchange the District would receive some of CCWD's CVP water.

**Retailer System Leak Detection/Repair:** Recent legislation requires retailers to complete annual water loss audits, which will then be used by the State to establish water loss standards. Staff will reconsider this alternative after the standards are developed.

**Shallow Groundwater Reuse:** A feasibility study for the recovery and beneficial use of shallow groundwater was completed in 2009. Although potential sites for shallow groundwater reuse were identified, staff has identified several concerns. These concerns include water quality, sustainable yields, and lack of infrastructure for storage and conveyance. In addition, several reuse sites are in areas where recycled water is already delivered for non-potable use. Staff are continuing to look for opportunities to incorporate shallow groundwater reuse into the Water Supply Master Plan.

## Water Supply Master Plan Update 2018 - Project Descriptions (as of August 2018)

### Other Potential Projects

Shasta Reservoir Expansion: A Feasibility Study and Environmental Impact Statement have been completed for a Shasta Reservoir Expansion. The United States Bureau of Reclamation concluded the project is technically feasible, but that non-federal partners would need to pay for project implementation. State law prohibits Prop 1 storage funding for the project and restricts funding for any studies. Staff will continue to monitor opportunities related to Shasta Reservoir Expansion.

Temperance Flat Reservoir: Temperance Flat Reservoir would be located upstream of Friant Dam on the San Joaquin River. Staff's current analysis is that any water supply benefits to the District from the project would be indirect, largely manifested by lowered requirements for Delta pumping for delivery to the San Joaquin Exchange contractors at the Delta-Mendota Pool.

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**File No.:** 19-0124

**Agenda Date:** 3/6/2019

**Item No.:** 4.2.

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## COMMITTEE AGENDA MEMORANDUM

### Joint WRC with Cities of Gilroy/Morgan Hill/SCRWA

**SUBJECT:**

Update on Countywide Water Reuse Master Plan

**RECOMMENDATION:**

This is an information only item and no action is required.

**SUMMARY:**

This item provides an update on Valley Water's Countywide Water Reuse Master Plan (Reuse Master Plan), an integral component of the Water Supply Master Plan which describes our strategy to provide a reliable and sustainable water supply.

The Reuse Master Plan aims to improve water supply reliability through water reuse for Santa Clara County (County) in collaboration with recycled water producers, wholesalers, retailers, users, and other interested parties. The Reuse Master Plan will identify: the volume of water available for potential potable reuse (PR) development and non-potable reuse (NPR) expansion; the optimal allocation between PR and NPR; options for system integration; recommendations for building upon NPR projects and potential new PR projects; and proposals for governance alternatives, including roles and responsibilities.

**BACKGROUND:**

Valley Water, the South County Regional Wastewater Authority (SCRWA), the City of Gilroy and the City of Morgan Hill have a long history of collaborating on the expansion of recycled water in South County, including the development of a South County Recycled Water Master Plan to guide these efforts.

Valley Water Board policy sets an objective to meet at least 10% of the County's total water demands using recycled and purified water. To achieve this objective, Valley Water is developing a Reuse Master Plan that will initially provide up to 24,000 acre feet per year of potable water reuse. The Reuse Master Plan builds upon existing planning studies (including the South County Recycled Water Master Plan) by integrating information and evaluating the potential for collaboration. Studies and analysis are being developed into a series of technical memoranda (TMs), which will eventually be assembled into a final Reuse Master Plan. The Reuse Master Plan team has developed the following TMs as summarized below:

Project Definition, Roles and Responsibilities Technical Memorandum

This TM establishes the project purpose, describes roles and responsibilities of Valley Water and

Partner Agencies, and provides a basis for subsequent deliverables.

#### Regulatory Framework Technical Memorandum

This TM provides a brief history and overview of water reuse policy in California, including relevant regulations, regulatory agencies' responsibilities, recycled water in the County and recycled water regulatory structure. The Regulatory Framework TM will inform future decision making and permitting for Reuse Master Plan finalization and potential implementation.

#### Baseline Analysis Technical Memorandum

This TM describes the current state of water reuse in the County. Demand projections using 2015 Urban Water Management Plans as well as updates from Partner Agencies provide a basis for developing portfolios to meet future reuse demands. Valley Water analyzed these current and projected conditions at each of the four recycled water producers to calculate the volume of water available for future potable reuse. The Baseline Analysis TM will identify key countywide water reuse assumptions and existing conditions for the Reuse Master Plan to build upon.

#### Project Portfolio Development

This TM describes conceptual water reuse projects developed with stakeholders to achieve shared objectives of sustainable water supply. The process used to develop these potential projects included developing guiding principles with stakeholders, identifying project elements, and grouping elements into Portfolios. Based on Partner Agency feedback, Valley Water combined 18 potential project elements into five portfolios for further evaluation. These Portfolios may include a mix of potential projects, including some previously proposed projects (from recycled water master plans) and some new elements.

#### Direct Potable Reuse (DPR) Evaluation

Although regulatory framework for DPR is still under development by California regulators, individual case-by-case permitting is possible. In concept, DPR alternatives could utilize existing drinking water treatment and distribution systems and avoid the cost and environmental impact of constructing dedicated IPR facilities. In October 2018, the Project Partner Group expressed general support for potable reuse alternatives including DPR. Based on this discussion, additional consideration for DPR will be incorporated into the continuing Portfolio analysis.

#### **NEXT STEPS:**

Leading to completion of the Reuse Master Plan, the highest ranked portfolios will be further refined with hydraulic modeling, cost analysis, and preliminary engineering (10% design). Other factors such as energy usage and greenhouse gas emissions will be considered to further evaluate the portfolios. Since each of the Portfolios identified will require reverse osmosis concentrate management, they will be further examined in Valley Water's Reverse Osmosis Concentrate Management Planning process, which is being developed in parallel with this Reuse Master Plan.

Additional feedback from stakeholders and Partner Agencies will help refine these portfolios. Additional meetings of the Stakeholder Task Force and Project Partner Group are planned throughout 2019 for this purpose. These meetings will allow the South County Partners to continue further evaluate and provide feedback regarding future opportunities for IPR and DPR expansion



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within their service areas. The Reuse Master Plan is anticipated to be completed by the end of 2019.

**ATTACHMENTS:**

Attachment 1: PowerPoint Presentation

**UNCLASSIFIED MANAGER:**

Jerry De La Piedra, 408-630-2257



# Countywide Water Reuse Master Plan Update

Joint Water Resources Committee

March 6, 2019

# Objectives

- Identify **water available** for potable and non-potable reuse
- Evaluate options for **system integration**
- Guide expansion via **interagency agreements and governance structures**
- Generate support by **engaging stakeholders**



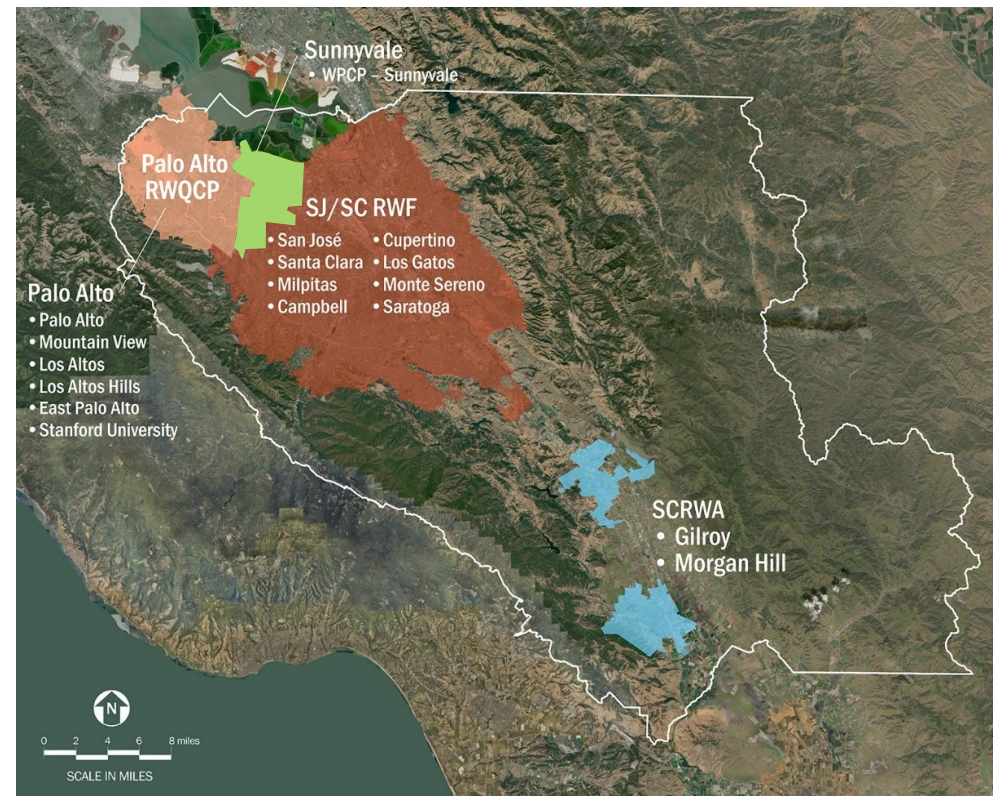
Stakeholders at a 2018 meeting in District HQ

## Drivers

- Fulfillment of CEO Interpretation of **Board Governance Policy**:
  - Meet 10% of County's total water demands using water reuse
- Alignment with **Water Supply Master Plan** update:
  - Investment in water recycling (24,000 AFY of potable reuse)
  - Diversity of water supply alternatives (local control)
  - Meeting service area demands (resiliency during drought)

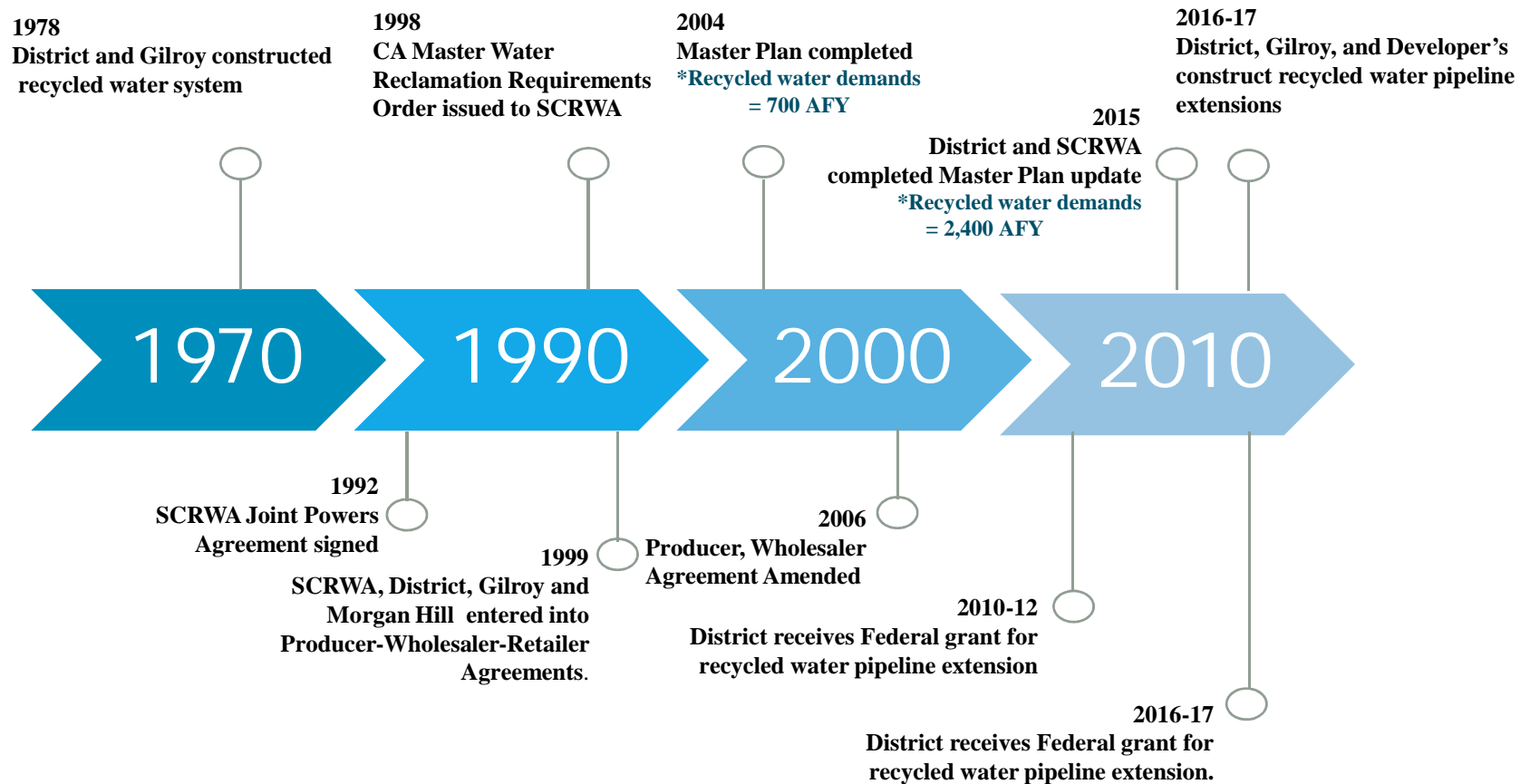
# Potential Water Reuse Partners

- Palo Alto Regional Water Quality Control Plant (RWQCP)
- Sunnyvale Water Pollution Control Plant (WPCP)
- San José-Santa Clara Regional Wastewater Facility (SJ/SC RWF)
- South County Regional Wastewater Authority (SCRWA) WWTP



\* Figure is for illustration purposes. Boundaries are not exact.

# History and Timeline



# Stakeholder Engagement

32 meetings/workshops planned

Project Start  
(2018)

Final Report  
(Fall 2019)



## Stakeholder Task Force

Representing interests/organizations:

- Business/economy
- Chambers of Commerce
- Planning
- Public policy
- Environment
- Environmental justice
- Medical community
- Diversity
- Stormwater
- Groundwater
- Ratepayers
- Other water and recycled water suppliers/agencies/organizations

## Board of Directors

### Board committees

- Recycled Water Committee (RWC)  
(District Board only)
- Joint Committees  
(District Board and Partner Agency city council members)

### Executives

- One-on-one meetings
- Executive Leadership Group (ELG)

### Staff

- Project Partner Group (PPG)

## Regulators

## Independent Advisory Panel (IAP)

## Public



# Planning Framework (developed through stakeholders)

- Develop 24,000 AFY of potable reuse supply
- Expand countywide reuse (non-potable and/or potable reuse) with Partner Agencies
- Consider new projects and previously explored projects
- Leverage existing infrastructure where possible
- Reflect a combination of non-potable reuse and potable reuse projects

## Next Steps for the Reuse Master Plan include:

1. Develop Portfolios (Winter 2019)
2. Refine Portfolios (Spring 2019)
3. Draft Reuse Master Plan Report (Summer 2019)
4. Finalize Reuse Master Plan Report (Fall 2019)

## Final Report Will Addresses Key Challenges

1. Identify how much water is available
2. Identify system integration opportunities
3. Identify potable reuse and non-potable reuse projects
4. Evaluate governance roles and responsibilities

# South County Master Planning



- ❑ 2004 Master Plan and 2015 Master Plan Update
- ❑ Market Assessment – Project Alternatives
- ❑ Emerging Technologies - IPR and DPR Alternatives
- ❑ Capital Improvement Program & Implementation Costs

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**File No.:** 19-0126

**Agenda Date:** 3/6/2019  
**Item No.:** 4.3.

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## COMMITTEE AGENDA MEMORANDUM

### Joint WRC with Cities of Gilroy/Morgan Hill/SCRWA

**SUBJECT:**

Open Space Credit

**RECOMMENDATION:**

This is a discussion item and no action is required. However, the Committee may provide comments for Board consideration.

**SUMMARY:**

The purpose of this item is to obtain stakeholder comments and input on the Board's Open Space Credit Policy, specifically a staff proposal to implement an Agricultural Charge Adjustment for Williamson Act and Conservation Easement Properties.

**Background**

The District Board has historically recognized that agriculture brings value to Santa Clara County in the form of open space and local produce. In an effort to help preserve this value, the District Act limits the agricultural charge to be no more than 25% of the M&I charge. In 1999, to further its support for agricultural lands, a policy was put into place further limiting the agricultural groundwater production charge to no more than 10% of the M&I charge. The agricultural community currently benefits from low groundwater charges that are 2% of M&I charges in North County and 6% of M&I charges in South County. According to Section 26.1 of the District Act, agricultural water is "water primarily used in the commercial production of agricultural crops or livestock."

The credit to agricultural water users has become known as an "Open Space Credit." It is paid for by fungible, non-rate related revenue. To offset lost revenue that results from the difference between the adopted agricultural groundwater production charge and the agricultural charge that would have resulted at the full cost of service, the District redirects a portion of the 1% ad valorem property taxes generated in the Water Utility, General and Watershed Stream Stewardship Funds. The South County Open Space Credit is currently estimated to be \$8.0 million in FY 2018-19 and projected to continually increase in the years that follow.

Since 2013, the Board has continued the past practice of setting the agricultural charge at 6.0% of the South County M&I charge. On September 18, 2017, in response to the President's Day Flood event, the Board's Capital Improvement Program Committee analyzed scenarios to decrease the Open Space Credit and therefore provide more funding for flood protection projects. Accordingly, alternatives were prepared to reduce the Open Space Credit by increasing the agricultural charge to 10% or 25% of the M&I charge over a multi-year timeframe. For FY 2018-19, staff recommended

increasing the agricultural charge to 6.8% of the M&I charge. On May 8, 2018, the Board chose to continue the past practice of setting the agricultural charge at 6.0% of the South County M&I charge for FY 2018-19.

**Background on the Williamson Act and Conservation Easement Classification**

The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. Under these voluntary contracts, landowners gain substantially reduced property tax assessments. A land owner whose property is devoted to agricultural use and is within an agricultural preserve may file an application for a Williamson Act contract with the County. Per the Santa Clara County of Ordinances section C13-12, to be eligible for a Williamson Act contract:

1. The property proposed for inclusion in the contract is at least ten acres in size in the case of prime agricultural land, and 40 acres in size in the case of nonprime agricultural land;
2. All parcels proposed for inclusion in the contract are devoted to agricultural use; and
3. There are no existing or permitted uses or development on the land that would significantly displace or interfere with the agricultural use of the land.

Even if all of the criteria are met, the Board of Supervisors may, in its discretion, choose not to approve the application.

Conservation easement is a power invested in a qualified organization or government to constrain, as to a specified land area, the exercise of rights otherwise held by a landowner so as to achieve certain conservation purposes. For example, a land owner whose property constitutes open-space land as defined in Government Code §§ 51075(a) and 65560 may file an application for an agreement with the County.

Per the Santa Clara County of Ordinances section C13-36, to be eligible for an Open Space Easement Agreement with the County:

1. The land proposed for inclusion in the agreement is at least 20 acres in size;
2. All parcels proposed for inclusion in the agreement are devoted to open-space;
3. There are no other existing or permitted uses or development on the land that would significantly impair the open-space value of the land; and
4. The Board of Supervisors makes the required findings in Government Code § 51084.

Even if all of the criteria in are met, the Board of Supervisors may, in its discretion, choose not to approve the application.

There are also three open space authorities that have jurisdiction to enter into conservation easements in Santa Clara County.

There are 174 Williamson Act parcels and 10 conservation easement parcels in the combined Zone W-2 and Zone W-5. The parcels comprise roughly 33% of total agricultural water use on average.

**Consideration of an Agricultural Water Charge Adjustment**

An agricultural water charge adjustment could be predicated on Williamson Act or conservation easement participation and paid for by the Open Space Credit. Staff recommends implementing an adjustment such that if the District were to increase the agricultural water charge to something greater than 6% of the M&I charge, then an adjustment would be applied to all Williamson Act and conservation easement properties, that would result in a net agricultural charge of 6% of M&I charges for those properties. The Williamson Act or Conservation Easement property classification would be determined by the authorities managing those programs, not the District. There would be no need for an application process, and as such the incremental costs associated with the adjustment would be negligible. The District currently receives from the County the list of Williamson Act properties and would use properties of record in February and August for the upcoming billing cycle. Staff would obtain the conservation easement property information direct from the open space organizations in parallel during the February and August timeframe. Property status changes occurring after staff data collection would be handled on a case-by-case basis for the potential proration of rates, if applicable. Agricultural wells are predominately charged bi-annually in arears in January and June.

If the District were to increase the agricultural charge to 10% of the M&I charge over a 7-year timeframe, and adjust back to 6% of the M&I charge for Williamson Act and conservation easement properties, then staff anticipates a cumulative savings to the Open Space Credit of roughly \$2.1 million over that 7-year timeframe. Savings would be \$1.4M if the transition occurred over a 5-year timeframe, and would be \$3.4M if the transition occurred over a 10-year timeframe. The savings could be reduced if additional eligible properties were to change status to be classified as Williamson Act or Conservation Easement properties. Staff estimates that there are 245 agricultural properties that may qualify, but are not classified as Williamson Act or Conservation Easement properties.

**ATTACHMENTS:**

Attachment 1: PowerPoint Presentation.

**UNCLASSIFIED MANAGER:**

Darin Taylor, 408-630-3068





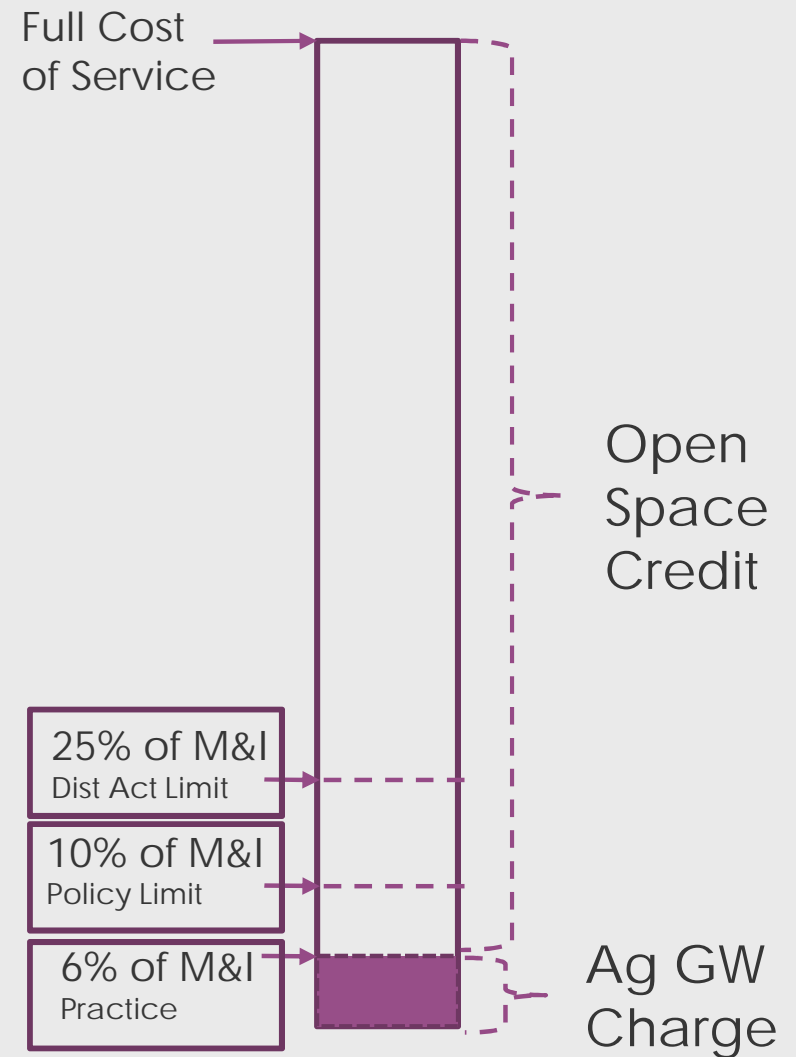
# Open Space Credit Policy Discussion

March 6, 2019

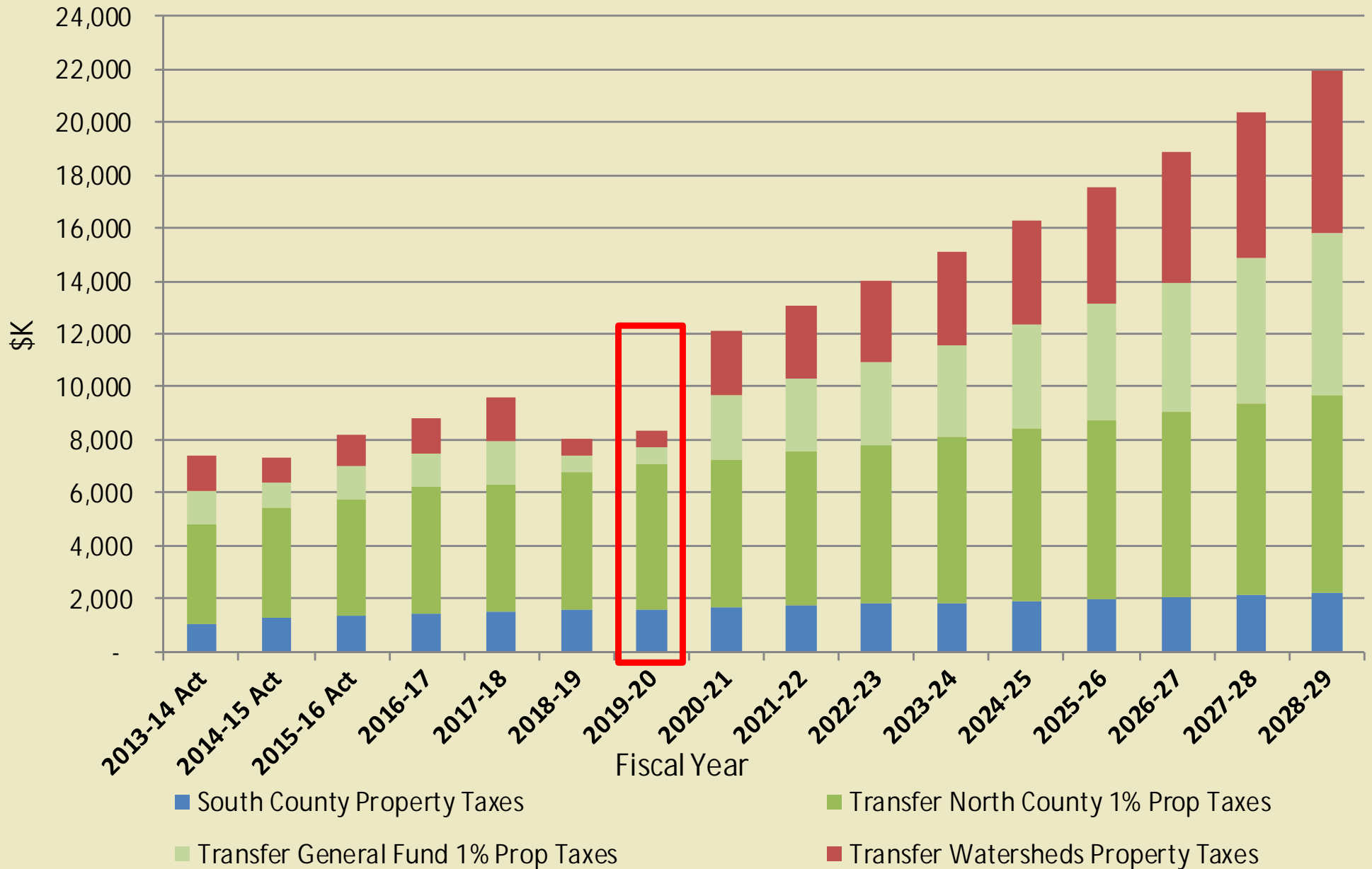


# What is the Open Space Credit (OSC)?

- ▶ Formal definition: “The use of non-rate related revenue to offset reduced agricultural revenue as a result of keeping agricultural rates lower than needed to recoup the full cost of service”
- ▶ Applies to agricultural water users only, not to all open space



# Open Space Credit: Preliminary Projection



# Background on OSC Policy Discussions

April 2018

▶ Board directs staff to:

1. Analyze ag water usage trend scenarios and potential impact on Open Space Credit projection
2. Research feasibility of a reduced ag charge for Williamson Act participants
3. Seek contributions from local private companies or other governmental agencies to fund Open Space Credit

# Williamson Act & Conservation Easements

- ▶ Williamson Act provides tax benefits to property owners who do not develop their land
- ▶ Conservation Easements permanently extinguish development rights

	Williamson Act Parcels	Conservation Easement Parcels	Average % of Total Ag Water Use
North County	3	0	1%
South County	171	10	32%
Total	174	10	33%

# Williamson Act & Conservation Easements

- ▶ Ag Charge Adjustment Program Alternative for Consideration
  - ▶ Predicated on Williamson Act or Conservation Easement participation
  - ▶ If: Ag charge increased to >6% of M&I
  - ▶ Then: Adjust back to 6% for Williamson Act and Conservation Easement properties
  - ▶ Staff could implement with minimal effort

# Williamson Act & Conservation Easements

## 5-Year Transition

Current 6% of M&I

	FY 19	FY 24
<b>South County</b>		
Municipal & Industrial	\$450	\$652
Ag Rate % of M&I Rate	6.0%	6.0%
Agricultural	\$27.02	\$39.15

10% of M&I by FY 24

	FY 19	FY 24
<b>South County</b>		
Municipal & Industrial	\$450	\$652
Ag Rate % of M&I Rate	6.0%	10.0%
Agricultural	\$27.02	\$65.39

Total Anticipated 5-Year Savings to Open Space Credit \$1.4M

25% of M&I by FY 24

	FY 19	FY 24
<b>South County</b>		
Municipal & Industrial	\$450	\$652
Ag Rate % of M&I Rate	6.0%	25.0%
Agricultural	\$27.02	\$163.07

Total Anticipated 5-Year Savings to Open Space Credit \$6.5M

# Williamson Act & Conservation Easements

## 7-Year Transition

Current 6% of M&I

	FY 19	FY 26
<b>South County</b>		
Municipal & Industrial	\$450	\$757
Ag Rate % of M&I Rate	6.0%	6.0%
Agricultural	\$27.02	\$45.41

10% of M&I by FY 26

	FY 19	FY 26
<b>South County</b>		
Municipal & Industrial	\$450	\$757
Ag Rate % of M&I Rate	6.0%	10.0%
Agricultural	\$27.02	\$75.65

Total Anticipated 7-Year Savings to Open Space Credit \$2.1M

25% of M&I by FY 26

	FY 19	FY 26
<b>South County</b>		
Municipal & Industrial	\$450	\$757
Ag Rate % of M&I Rate	6.0%	25.0%
Agricultural	\$27.02	\$189.08

Total Anticipated 7-Year Savings to Open Space Credit \$9.8M



# Williamson Act & Conservation Easements

## 10-Year Transition

Current 6% of M&I

	FY 19	FY 29
<b>South County</b>		
Municipal & Industrial	\$450	\$898
Ag Rate % of M&I Rate	6.0%	6.0%
Agricultural	\$27.02	\$53.87

10% of M&I by FY 29

	FY 19	FY 29
<b>South County</b>		
Municipal & Industrial	\$450	\$898
Ag Rate % of M&I Rate	6.0%	10.0%
Agricultural	\$27.02	\$89.95

Total Anticipated 10-Year Savings to Open Space Credit \$3.4M

25% of M&I by FY 29

	FY 19	FY 29
<b>South County</b>		
Municipal & Industrial	\$450	\$898
Ag Rate % of M&I Rate	6.0%	25.0%
Agricultural	\$27.02	\$224.72

Total Anticipated 10-Year Savings to Open Space Credit \$16.0M

# Open Space Credit: 2013 Economic Study Overview

- ▶ Study prepared by ERA Economics LLC
- ▶ Constructed an economic model of agriculture in Santa Clara County
  - ▶ 3 scenarios with 10 year phase-in
    - ▶ Baseline (Maintain Ag Charge at 6% of M&I rate)
    - ▶ 10 % of M&I rate
    - ▶ 25 % of M&I rate
- ▶ Economic Evaluation Conclusions:
  - ▶ A 10% increase in Ag Rates over 10 years would cause permanent fallow of 0.11% of irrigated acres
  - ▶ A 25% increase in Ag Rates over 10 years would cause permanent fallow of 3.5% of irrigated acres

# Open Space Credit: 2013 Economic Study Overview

## ► Staff Analysis of Economic Evaluation Conclusions:

Calendar Year	Fruit and Nuts	Field Crops	Onions and Garlic	Vegetables	Processed Tomatoes	Grapes	Dryland Hay	Total
	Acres Harvested							
2011	1,197	1,339	520	9,248	1,060	1,550	3,510	18,424
2017	1,613	1,195	784	13,224	322	1,601	4,044	22,783
Acres Delta	416	(144)	264	3,976	(738)	51	534	4,359
Acres Delta %	35%	-11%	51%	43%	-70%	3%	15%	24%

## ► Potential factors contributing to the 24% increase in harvested acreage:

- Drought
- Central Valley water management
- Transition to higher value crops
- Irrigation efficient technologies
- SCVWD Ag Rates

# Staff Recommendation

- ▶ Increase Agricultural Rates to 10% of M&I over a 7-Year period
- ▶ Proceed with an adjustment program for Williamson Act and Conservation Easement participants that would hold their agricultural water charge to 6% of M&I

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**File No.:** 19-0128

**Agenda Date:** 3/6/2019

**Item No.:** 4.4.

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## COMMITTEE AGENDA MEMORANDUM

### Joint WRC with Cities of Gilroy/Morgan Hill/SCRWA

**SUBJECT:**

Review Joint WRC with Cities of Gilroy/Morgan Hill/SCRWA Committee Work Plan, the Outcomes of Board Action of Committee Requests; and the Committee's Next Meeting Agenda.

**RECOMMENDATION:**

Review the Committee work plan to guide the committee's discussions regarding policy alternatives and implications for Board deliberation.

**SUMMARY:**

The attached Work Plan outlines the Board-approved topics for discussion to be able to prepare policy alternatives and implications for Board deliberation. The work plan is agendaized at each meeting as accomplishments are updated and to review additional work plan assignments by the Board.

**BACKGROUND:**

**Governance Process Policy-8:**

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

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

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

**ATTACHMENTS:**

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**File No.:** 19-0128

**Agenda Date:** 3/6/2019  
**Item No.:** 4.4.

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Attachment 1: Joint WRC with Cities of Gilroy/Morgan Hill/SCRWA Committee Work  
Plan Committee 2019 Work Plan

Attachment 2: Joint WRC with Cities of Gilroy/Morgan Hill/SCRWA Committee Next  
Meeting's Draft Agenda

**UNCLASSIFIED MANAGER:**

Michele King, 408-630-2711

## 2019 Work Plan: Joint Water Resources Committee (City of Gilroy, City of Morgan Hill, SCVWD)

Update: February 2019

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.

ITEM	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHMENT DATE AND OUTCOME
1	Review of 2018 Joint Water Resources Committee's Accomplishments Report	3-6-19	Information Item	
2	Update on District's Water Supply Master Plan	3-6-19	Discussion/Action Item	
3	Update on Countywide Water Reuse Master Plan	3-6-19	Discussion/Action Item	
4	South County Water Treatment Plant	3-6-19	Discussion/Action Item	
5	Open Space Credit	3-6-19	Discussion/Action Item	
6	Review of 2019 Joint Water Resources Work Plan and the Outcomes of Board Action of Committee Requests	3-6-19	Discussion/Action Item	
7	Update on Dam Projects	6-5-19	Discussion/Action Item	
8	Update History of District Collaboration with the Cities of Gilroy and Morgan Hill on Recycled Water ( <i>this topic should be addressed once the Reuse Master Plan is complete</i> )	TBD	Discussion/Action Item	

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

Attachment 1  
Page 1 of 1

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SOUTH COUNTY REGIONAL  
WASTEWATER AUTHORITY

**JOINT WATER RESOURCES COMMITTEE**

*Hon. Marie Blankley, Mayor Pro Tempore, City of Gilroy*

*Hon. Dion Bracco, Council Member, City of Gilroy and SCRWA Board Vice Chairman*

*Hon. Larry Carr, Council Member-District A, City of Morgan Hill, SCRWA Chairman and Committee Vice Chair*

*Hon. Rich Constantine, Mayor, City of Morgan Hill*

*Hon. Richard P. Santos, Director-District 3, 2018 Board Chair, Santa Clara Valley Water District (SCVWD) and Committee Chair*

*Hon. John L. Varela, Director-District 1, Santa Clara Valley Water District (SCVWD)*

SCRWA = South County Regional Wastewater Authority

**AGENDA**

**WEDNESDAY, JUNE 5, 2019**

**8:35 AM**

**JOINT WATER RESOURCES COMMITTEE  
(CITY OF GILROY, CITY OF MORGAN HILL, AND SCVWD)  
South County Regional Wastewater Authority Conference Room  
1500 Southside Drive, Gilroy CA 95020**

**Time Certain:**

**8:35 a.m.**

- 1. Call to Order/Roll Call.**
- 2. Time Open for Public Comment on Any Item Not on the Agenda.**  
*Comments should be limited to two minutes. If the Committee wishes to discuss a subject raised by the speaker, it can request placement on a future agenda.*
- 3. Approval of Minutes**  
3.1 Approval of Minutes – March 6, 2019, meeting.
- 4. Action Items:**
  - 4.1 Update on Dam Projects (Hemang Desai)  
**Recommendation: This is an information only item and no action is required. However, the Committee may provide comments for Board consideration.**
  - 4.2. Review of 2019 Joint Water Resources Work Plan and any Outcomes of Board Action or Committee Requests and the Committee’s next meeting agenda (Committee Chair)  
**Recommendation: Review the Committee work plan to guide the Committee’s discussions regarding policy alternatives and implications for Board deliberation.**
- 5. Clerk Review and Clarification of Committee Actions**  
*This is a review of the Committee’s Actions (from Item 4).*
- 6. Adjourn:** Adjourn to next regularly scheduled meeting at 8:35 a.m. (immediately following SCRWA meeting), **September 4, 2019**, South County Regional Wastewater Authority Conference Room, 1500 Southside Drive, Gilroy CA 95020.

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 Jose, CA 95118

City of Gilroy  
City Clerk  
735 Rosanna Street  
Gilroy, CA 95020

City of Morgan Hill  
City Clerk  
17575 Peak Avenue  
Morgan Hill, CA 95037

**Joint Water Resources Committee Purpose:** Advance common South County water interests and receive input from stakeholders and interested parties when undertaking the following: 1. Reviewing current practices and future needs for groundwater management in the Llagas groundwater sub-basin, 2. Facilitating policy discussion and sharing of technical information on water supply planning for South County, 3. Identifying the current and future demand for recycled water as well as jointly identifying funding sources for implementation of the South County Recycled Water Master Plan, 4. Facilitating policy discussion and sharing of technical information on furthering development and use of recycled water in South County, 5. Facilitating policy discussion and sharing of socio-economic homelessness in South County