



November 29, 2018

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

Members of the Joint Recycled Water Policy Advisory Committee

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

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

### **City of San José**

Council Member, Sylvia Arenas  
Council Member, Lan Diep  
Ms. Kerrie Romanow – Alternate

### **City of Santa Clara:**

Council Member Hon. Debi Davis  
Council Member Hon. Kathy Watanabe - Alternate

### **Supporting Santa Clara Valley Water District Staff Members:**

Norma J. Camacho, Chief Executive Officer  
Stan Yamamoto, District Counsel  
Anthony Fulcher, Senior Assistant District Counsel  
Nina Hawk, Chief Operating Officer  
Rick Callender, Chief of External Affairs  
Darin Taylor, Chief Financial Officer  
Garth Hall, Deputy Operating Officer, Water Supply Division  
Katherine Oven, Deputy Operating Officer, Water Utility Capital  
Rachael Gibson, Deputy Administrative Officer, Government Relations  
Aaron Baker, Assistant Officer, Water Utility  
Jerry De La Piedra, Assistant Officer, Water Supply Deputy's Division  
Bhavani Yerrapotu, Deputy Operating Officer, Treated Water Operations & Maintenance Division  
Deputy's Office  
Hossein Ashktorab, Unit Manager, Recycled and Purified Water Unit  
Medi Sinaki, Senior Engineer-Water Quality, Recycled and Purified Water Unit  
Miguel Silva, Associate Engineer – Civil, Recycled and Purified Water Unit  
Luis Jaimes, Senior Project Manager, Recycled and Purified Water Unit  
Metra Richert, Senior Water Resource Specialist, Water Supply Planning and Conservation Unit  
Elise Latedjou-Durand, Senior Environmental Planner, Water Resources Planning Unit

**Supporting City of San José Staff Members:**

Jeffrey Provenzano, Deputy Director, Water Resources Division  
Michele Young, Program Manager, South Bay Water Recycling  
Chantel Khatchatourian, Administrative Assistant, Environmental Services Department  
Pedro Hernandez, Supervising Environmental Services Specialist, Water Resources Division

**Supporting City of Santa Clara Staff Members:**

Gary Welling, Assistant Director, Water & Sewer Utilities

A special meeting of the Santa Clara Valley Water District Joint Recycled Water Policy Advisory Committee will take place at **10:00 a.m. on Monday, December 3, 2018**, at the City of San Jose, City Manager's Conference Room #1734, 200 East Santa Clara Street, San Jose, California 95113.

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).

Thank you!

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

**JOINT RECYCLED WATER POLICY ADVISORY COMMITTEE MEETING**  
**April 19, 2018**  
**San Jose City Hall**  
**Public Transit and Parking Information**

**PARKING:**

City Hall Garage (located beneath City Hall)  
200 E. Santa Clara Street and 6th Street  
(Entrance located on 6th Street between E. Santa Clara and E. San Fernando)

**PARKING VALIDATION:**

Please bring your parking ticket with you to the meeting to obtain validation after the meeting adjourns.

**GETTING TO CITY HALL:**

**VTA Service - Bus and Light Rail:**

For more information and schedules call (408) 321-2300 or visit [Santa Clara Valley Transportation Authority](http://www.santavta.com)

- Light rail service is available to Santa Clara and First / Second Streets
- Bus Lines
  - 22
  - 63
  - 64
  - 65
  - 73
  - 81
  - 522
  - Highway 17
- Dash Shuttle

**Driving Directions**

**Directions from Highway 87 North:**

1. Take the Santa Clara Street/Julian Street Exit
2. Exit Santa Clara Street/Downtown San José
3. At the light, turn right onto Santa Clara Street
4. heading east
5. Turn right on 6th Street (Look for the parking garage entrance on the right- hand side)

**Directions from Highway 87 South:**

1. Take the Julian Street/St. James Street Exit
2. At the light, turn left onto Julian Street
3. Julian Street becomes East St. James Street
4. Turn right on 6th Street
5. Once you pass Santa Clara Street look for the parking garage entrance on the right-hand side

**Directions from Highway 680 South/280 North and 280 South:**

1. Take Highway 87 North
2. Exit Santa Clara Street/Downtown San José
3. At the light, turn right onto Santa Clara Street heading east
4. Turn right on 6th Street
5. Look for the parking garage entrance on the right-hand side

**Directions from Highway 101 South:**

1. Take Highway 87 South
2. Exit Julian Street/St. James Street
3. At the light, turn left onto Julian Street
4. Julian Street becomes East St. James Street
5. Turn right on 6th Street
6. Once you pass Santa Clara Street, look for the parking garage entrance on the right-hand side

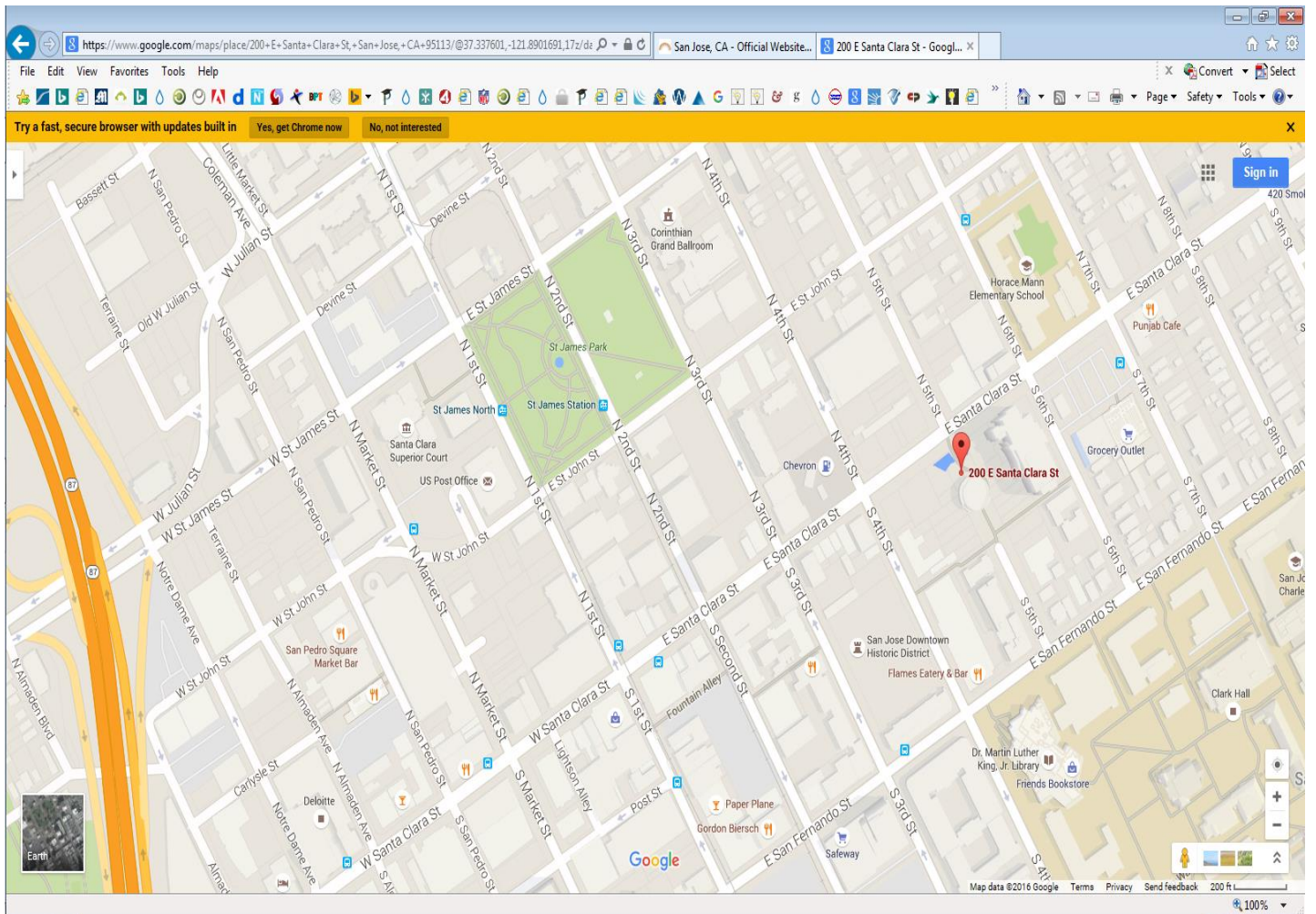
**Directions from Highway 101 North:**

1. Take Highway 280 North
2. Take Highway 87 North
3. Exit Santa Clara Street/Downtown San José
4. At the light, turn right onto Santa Clara Street east east
5. Turn right on 6th Street then look for the parking garage entrance on the right-hand side

**Directions from Highway 880/17:**

1. Take Highway 280 South
2. Take Highway 87 North
3. Exit Santa Clara Street/Downtown San José
4. At the light, turn right onto Santa Clara Street heading east
5. Turn right on 6th Street then look for the parking garage entrance on the right-hand side

**Map of surrounding area:**





## Santa Clara Valley Water District Joint Recycled Water Policy Advisory Committee

City of San Jose,  
City Manager's Conference Room #1734,  
200 East Santa Clara Street,  
San Jose, California 95113.

### SPECIAL MEETING AGENDA

Monday, December 3, 2018  
10:00 AM

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

JOINT RECYCLED WATER POLICY  
ADVISORY COMMITTEE W/ CITY  
OF SAN JOSE, SANTA CLARA/TPAC

Tony Estremera - District 6  
Barbara Keegan - District 2  
Gary Kremen - District 7

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 Advisory Committee with City of SJ, SC/TPAC**  
**SPECIAL MEETING**  
**AGENDA**

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Monday, December 3, 2018

10:00 AM

City of San Jose, City Manager's Conference  
Room #1734, 200 East Santa Clara Street, San  
Jose, California 95113.

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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.

[18-1009](#)

Recommendation: Approve the April 19, 2018, Jt RWPAC Draft Minutes.

Manager: Michele King, 408-630-2711

Attachments: [Attachment 1: 041918 RWPAC DRAFT Mins Final](#)

Est. Staff Time: 5 Minutes

**4. ACTION ITEMS:**

4.1. Water Supply Overview.

[18-1021](#)

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: WS and Planning](#)

Est. Staff Time: 20 Minutes

4.2. District Water Rates Overview.

[18-1022](#)

Recommendation: Receive information and discuss next steps.

Manager: Darin Taylor, 408-630-3068

Attachments: [Attachment 1: PowerPoint](#)

Est. Staff Time: 20 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 to Regular Meeting at 10:00 a.m., on April 18, 2019, in the Santa Clara Valley Water District HQ Boardroom/, 5700 Almaden Expressway, San Jose, California.





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**File No.:** 18-1009

**Agenda Date:** 12/3/2018

**Item No.:** 3.1.

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## COMMITTEE AGENDA MEMORANDUM

### Joint RWPAC with Cities of San Jose/Santa Clara/ TPAC

**SUBJECT:**

Approval of Minutes.

**RECOMMENDATION:**

Approve the April 19, 2018, Jt RWPAC Draft 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: 041918 Jt RWPAC Draft Minutes

**UNCLASSIFIED MANAGER:**

Michele King, 408-630-2711



## JOINT RECYCLED WATER POLICY ADVISORY COMMITTEE CITY OF SAN JOSÉ/SCVWD/CITY OF SANTA CLARA-TPAC

# DRAFT MINUTES

THURSDAY, APRIL 19, 2018  
10:00 AM

(Paragraph numbers coincide with agenda item numbers)

A regularly scheduled meeting of the Joint Recycled Water Policy Advisory Committee City of San José/SCVWD/City of Santa Clara-TPAC was held on April 19, 2018, in the City Manager's Office at San José City Hall, 200 East Santa Clara Street, San José, California.

### 1. CALL TO ORDER/ROLL CALL

Chair Director Tony Estremera called the meeting to order at 10:08 a.m.

SCVWD Board members in attendance were: Director Tony Estremera, District 6, Director Barbara Keegan, District 2, and Director Gary Kremen, District 7.

City of San José members in attendance were: Council Member Sylvia Arenas, District 8, Council Member Lan Diep, District 4, and Ms. Ashwini Kantak, Alternate.

City of Santa Clara members in attendance were: Council Member Debi Davis and Council Member Kathy Watanabe, Alternate.

SCVWD Staff members in attendance were: Hossein Ashktorab, Vicki Elam, Anthony Fulcher, Christopher Hakes, Garth Hall, Luis Jaimes, Michele King, Elise Latedjou-Durand, Tony Mercado, Katherine Oven, Medi Sinaki, Charlene Sun, Darin Taylor and Stan Yamamoto.

City of San José Staff members in attendance were: Chantel Khatchaturian, Jeffrey Provenzano, Rosa Tsongtaatarii, and Michele Young.

City of Santa Clara Staff Member in attendance was: Gary Welling.

### 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**

#### **3.1 Approval of Minutes**

It was moved by Chair Tony Estremera, seconded by Director Gary Kremen, and unanimously carried, to approve the minutes of the April 20, 2017, Joint Recycled Water Policy Advisory Committee City of San José/SCVWD/City of Santa Clara-TPAC meeting, as presented.

### **4. ACTION ITEMS**

#### **4.1 UPDATE ON COUNTYWIDE WATER REUSE (RECYCLED AND PURIFIED WATER) MASTER PLAN**

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

Hon. Sylvia Arenas, Hon. Debi Davis, Hon. Lan Diep inquired about: stakeholder engagement and which community groups are involved, scope of outreach efforts in the City of Santa Clara, potable water rates in relation to recycled water rates and the growth rate in North San Jose and the proposed budget for the project, the correlation between water conservation and increased water rates, the need to see the long-term cost-benefit, and when SCVWD expects to reach a total capacity of 350,000 acre-feet per year (AFY). One further note, the City's Climate Smart Plan that echoes the conservation message was praised.

Directors Gary Kremen and Tony Estremera and Mr. Garth Hall were available to answer questions.

#### **Committee Actions/Agenda 4.1:**

The Committee requested a list of stakeholder groups that have/will be contacted by SCVWD to participate in the stakeholder engagement process, and that current water consumption and projected usage be provided at the next meeting. Also, requested that staff schedule a special meeting to discuss water supply in a public forum at City Hall in San José prior to the October 2018 RWPAC meeting.

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

Mr. Medi Sinaki and Mr. Garth Hall reviewed the materials as outlined in the agenda item and were available to answer questions.

Hon. Debi Davis, Hon. Sylvia Arenas inquired about: discharge into the South Bay, including the management of the reverse osmosis concentrate (ROC), the wetland treatment pilot for ROC management and the current ROC discharge, proposed fiscal impacts to ratepayers, the cost benefit analysis for the project cost, amount of water produced, cost per acre-foot of water, and the benefit per-person or city and a request for regular communications regarding any updates for the management of the ROC, and a list of stakeholders that SCVWD has or will engage.

Mr. Hossein Ashktorab was available to answer questions.

**Staff Action/Agenda 4.2:**

Staff to provide notice to RWPAC members for next ROC management technical panel in Fall 2018 and schedule a tour of the Silicon Valley Advanced Water Purification Center with SCVWD Board of Directors and City Council Members.

**4.3 MEMORANDUM OF UNDERSTANDING BETWEEN CITY OF SAN JOSÉ AND SANTA CLARA VALLEY WATER DISTRICT**

Mr. Christopher Hakes, Mr. Garth Hall reviewed the materials as outlined in the agenda item and were available to answer questions.

Chair Estremera inquired about the outstanding items that staff are working to resolve.

Mr. Jeff Provenzano was available to answer questions and stated that City intends to present items of concern at the Treatment Plant Advisory Committee (TPAC) in June 2018.

No action was taken

**4.4 REVIEW OF THE PROPOSED BUDGETS FY 18-19 FOR SVAWPC AND SBWR SILICON VALLEY ADVANCED WATER PURIFICATION CENTER BUDGET**

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

Hon. Sylvia Arenas inquired about the approximately \$150,000 in labor savings illustrated in the budget table of the presentation.

No action taken

**A. SOUTH BAY WATER RECYCLING BUDGET**

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

Hon. Debi Davis and Hon. Sylvia Arenas requested the reserves for operations and maintenance and capital costs, inquired about the proposed ten percent (10%) rate increase, had concerns about the fiscal impact to ratepayers, and when developing further projects this needs to be considered.

Chair Estremera and Directors Barbara Keegan and Gary Kremen noted that, SCVWD has considered alternative methods to increasing water rates, such as San Francisco, new developments require adequate water supply, and without water supply, cities could have to halt development, the estimated price per acre-foot for the twin tunnel project at \$600, and \$2,400 per acre-foot for the proposed purified water project, and that SCVWD should pursue water supply projects to sustain economic growth in the area.

The P3 SCVWD is pursuing was also discussed and that it is an attempt to keep water rates low and minimize the public investment.

**Committee Action/Agenda 4.4AB:**

It was moved by Chair Estremera, seconded by Director Keegan, and unanimously carried, to recommend that their respective agencies' Board of Directors and City Council, approve the Silicon Valley Advanced Water Purification Center Budget and South Bay Water Recycling Budget as presented.

**5. REVIEW COMMITTEE WORKPLAN AND MEETING SCHEDULE**

Committee Members agreed to meet every six months. The next meeting was scheduled tentatively for October 18, 2018, 10:00 a.m., at the City Hall in San José and could be subject to change.

**Action items for next agenda:**

- Update on the Countywide Recycled and Purified Water Master Plan
- Update on MOU between CSJ and SCVWD
- Update on the ROC Management

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

**Committee Action/Agenda 4.4AB:**

The Committee unanimously carried, to recommend that their respective agencies' Board of Directors and City Council, approve the Silicon Valley Advanced Water Purification Center Budget and South Bay Water Recycling Budget as presented.

**Committee Action/Agenda 4.1:**

SCVWD staff to provide Committee Members with requested list of stakeholder groups that have/will be contacted by SCVWD to participate in the stakeholder engagement process.

Requested current water consumption and projected usage be provided in the next presentation.

Staff to schedule a special session with SCVWD Directors and City Council Members to discuss water supply in a public forum at City Hall in San José prior to the October 2018 RWPAC meeting.

**Staff Action/Agenda 4.2:**

Schedule a Purification Center tour with Committee.

7. **ADJOURN**

Chair Estremera adjourned the meeting at 11:27 a.m., to the next scheduled meeting on Thursday, October 18, 2018, at 10:00 a.m., at City Hall in San José.

Pedro Hernandez

City of San Jose  
Water Resources Division

Approved:





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**File No.:** 18-1021

**Agenda Date:** 12/3/2018

**Item No.:** 4.1.

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## COMMITTEE AGENDA MEMORANDUM

### Joint RWPAC with Cities of San Jose/Santa Clara/ TPAC

**SUBJECT:**

Water Supply Overview.

**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) serves all of Santa Clara County, providing groundwater management, wholesale water supply, flood protection, and stream stewardship services. 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 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, first from the State Water Project through the South Bay Aqueduct from the north and from the federal Central Valley Project via San Luis Reservoir in the 1980s.

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 that use a mix of incentives and rebates, free device installation, one-on-one home visits, site surveys, and educational outreach to reduce water consumption in homes, businesses and agriculture. 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 2014, in partnership with the City of San Jose the District commissioned the Silicon Valley Advanced Water Purification Center, an 8 million gallon per day facility that uses advanced technologies to purify secondary treated wastewater and provides clean high-quality water expected to match California drinking water quality standards. Both agencies continue to work together to investigate expansion of the existing facility. The District is also working with local recycled water producers, retailers, and other stakeholders 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 safe, clean water for the County. In 2012, the Board adopted the Water Supply and Infrastructure Master Plan (Water Master Plan) which outlines the District's strategy for providing a reliable and sustainable future water supply in a cost-effective manner. It describes the new water supply investments the District is planning to make, the anticipated schedule, and the associated costs and benefits. The Water Master Plan is based on an "Ensure Sustainability" strategy comprised of three elements:

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

The District is in the process of updating the Water Master Plan based on current projections regarding future supplies and demands and the costs and benefits of different potential projects.

Long-term in-County water use averages about 350,000 acre-feet per year (AFY), though use is currently down following the drought. Water use in the County would be more than 70,000 acre-feet per year (AFY) higher if not for the District's, cities', water retailers', and community's commitments to water conservation. Water use efficiency programs reduce demand on existing water and energy supplies, helping to lessen the cost and environmental impacts of developing additional supplies.

The Water Master Plan modeling analysis indicates that droughts are and will continue to be the District's greatest water supply challenge. In year 2040, the approximate water supply shortfall is 152,000 AF during drought conditions while only 36,000 AF during an average water supply condition.

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. Projects being considered include additional water conservation, non-potable recycled water, potable reuse, surface and groundwater storage, stormwater capture, additional recharge ponds, dry year options, etc.

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 any future water supply scenario and are designed to reduce water demands by about 10,000 AFY and increase natural groundwater recharge by about 1,000 AFY. The package, which increases the conservation savings goal to 110,000 AFY 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, stormwater recharge in the City of San Jose and Saratoga, rain barrel rebates, and rain garden rebates).

In December 2017, the Board approved pursuing a public-private partnership to develop up to 24,000 AFY of potable reuse capacity using the Los Gatos Ponds to percolate purified water into the groundwater basin. In May 2018, the Board approved participation in the California WaterFix. In June 2018, the Board approved pursuing the Pacheco Reservoir Expansion Project, which is eligible to receive 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 meeting 100 percent of demands in normal years and at least 90 percent of demands in drought years.

All projects have challenges, uncertainties, and risks. These include but are not limited to climate change, policy changes, and regulatory action affecting the Delta (e.g., Bay Delta Water Quality Control Plan). This could result in some projects not materializing or resulting in a lower yield than expected. Therefore, the District continues to identify, analyze, and monitor projects that could serve as an alternative project should change be needed. This uncertainty will be managed through the annual review of the Water Master Plan and its assumptions and periodic updates to reflect changed conditions.

A primary purpose of the Water Master Plan is to inform investment decisions. Therefore, a critical piece of the water supply plan is a process to monitor and report to the Board on the demands, supplies, and status of projects and programs. Monitoring will identify where adjustments to the Water Master Plan might be needed to respond to changed conditions. The proposed Monitoring and Assessment Plan (MAP) approach for the Water 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 steps for the Water Master Plan are to prepare a draft Water Master Plan based on Board direction from the November 20, 2018 and December 11, 2018 Board meetings. Staff anticipates completing a draft Water Master Plan for Board and stakeholder review in early 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 Water Master Plan to the Board in Spring 2019. The next annual report would be

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presented to the Board in Summer 2019 and then any changes would be incorporated into the CIP, budget, and water rates setting processes.

**ATTACHMENTS:**

Attachment 1: PowerPoint Presentation

**UNCLASSIFIED MANAGER:**

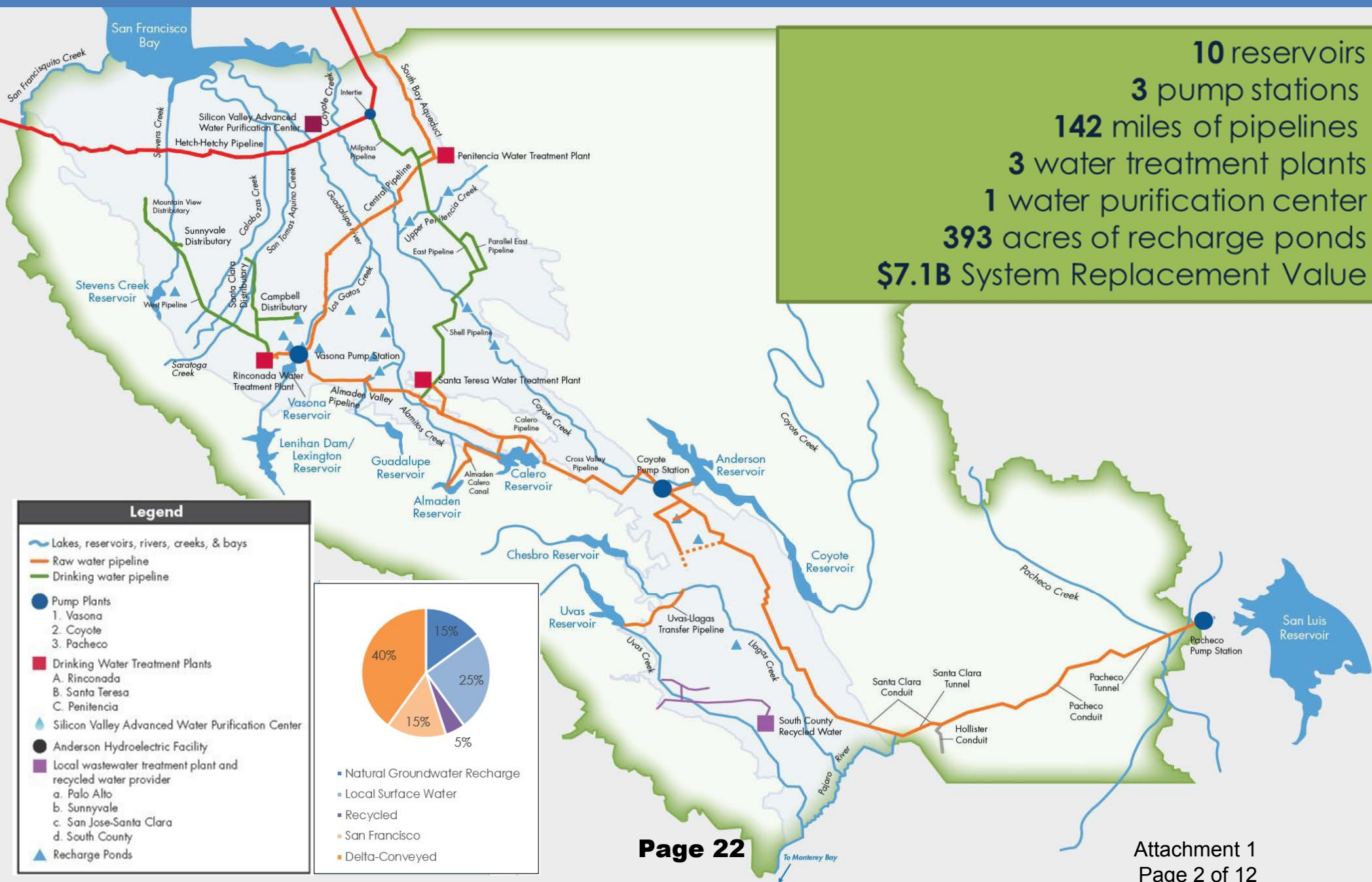
Jerry De La Piedra, 408-630-2257

# District Water Supply Overview

December 3, 2018

# 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





# Diversified Portfolio for a Reliable Supply

Imported water



Local surface & groundwater



Conservation

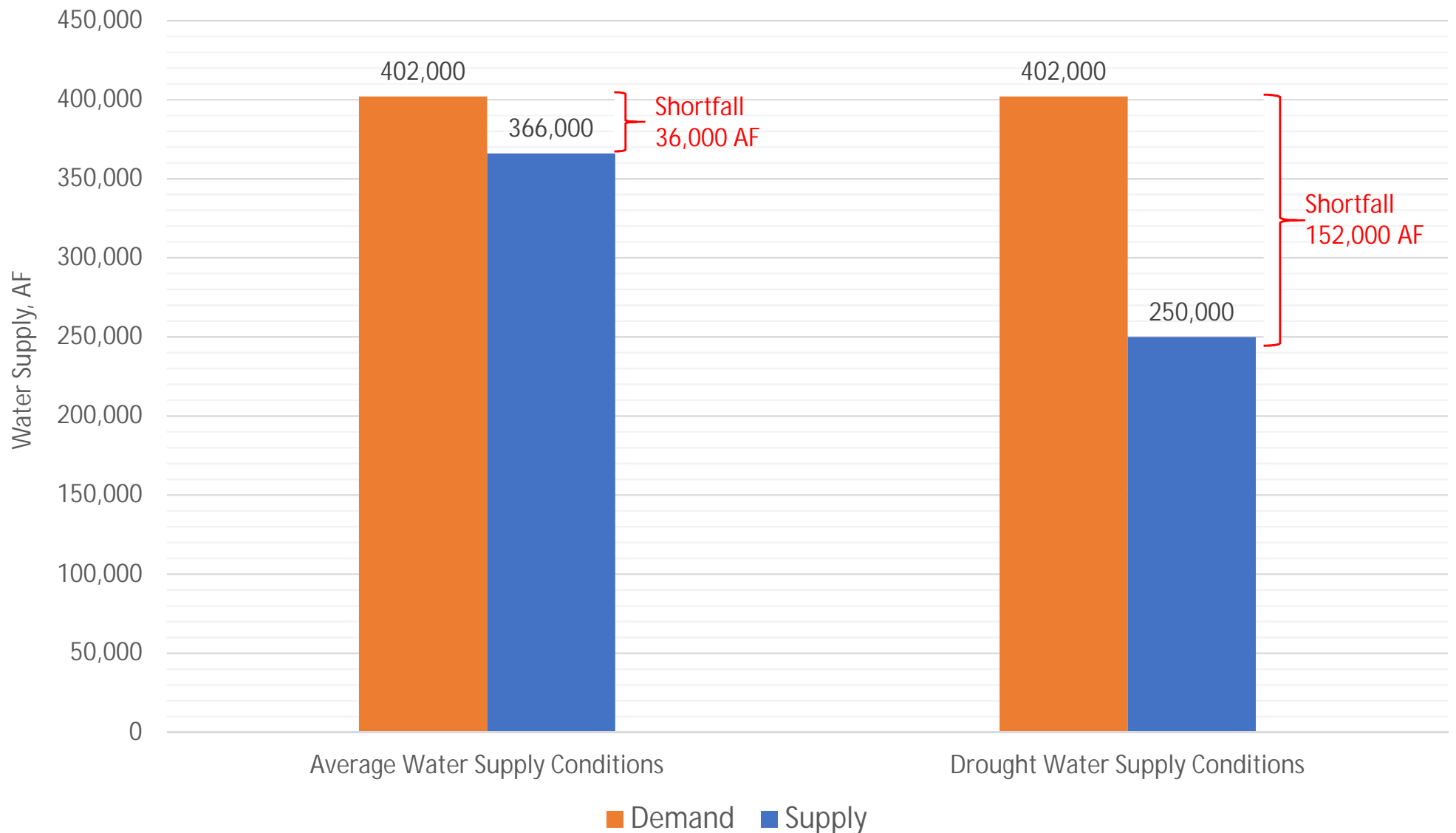


Recycled Water



# Water Supply Master Plan Update

## Analysis shows declining reliability in year 2040





# Board-Adopted “Ensure Sustainability” Strategy

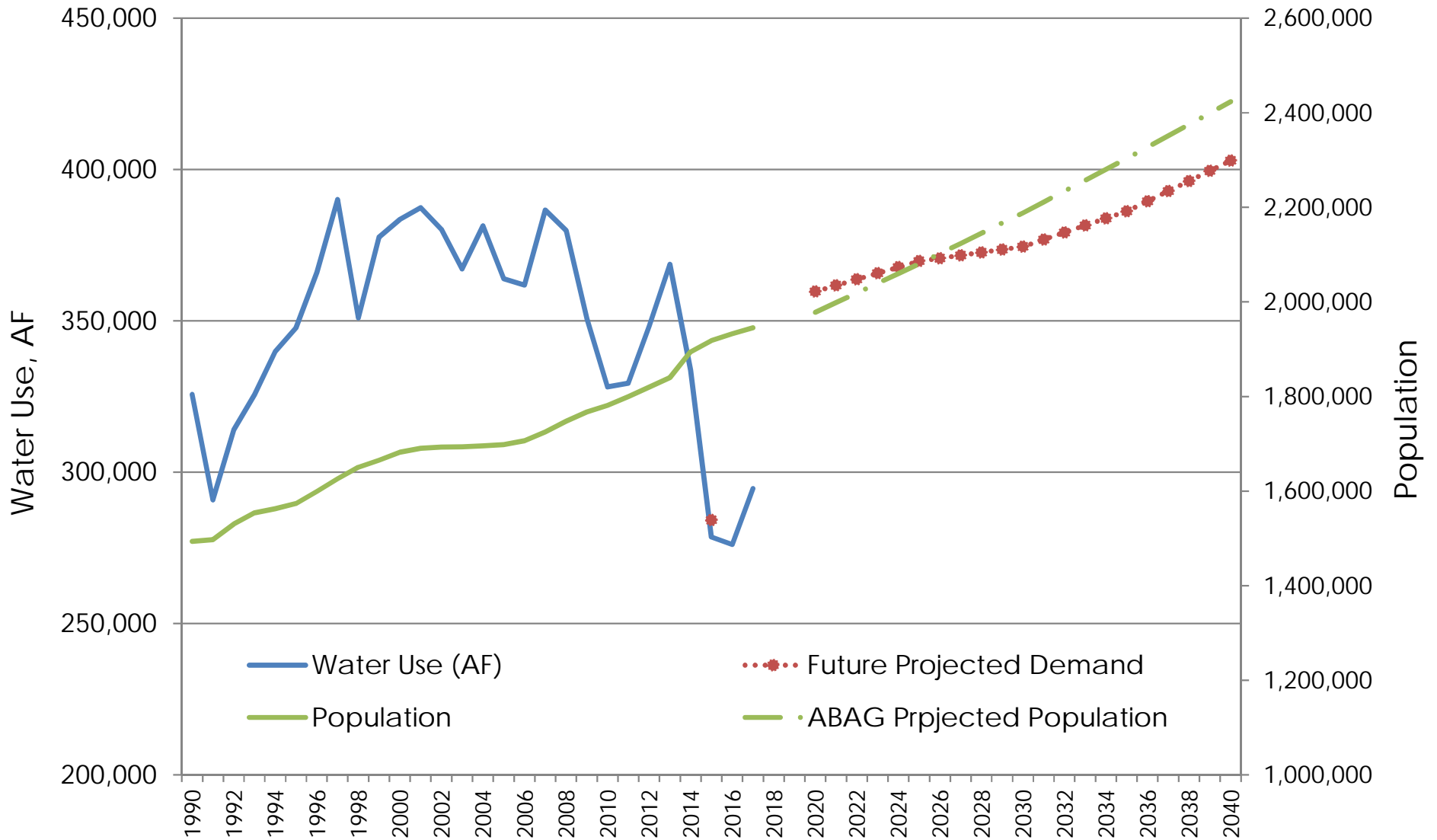
## Three Elements:

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

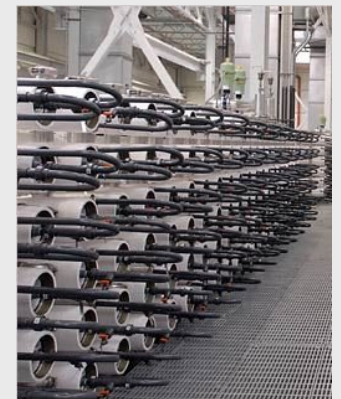
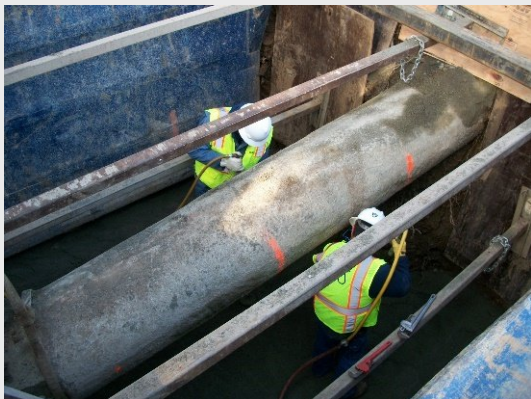


# Water Supply Master Plan Update

## Historical and Projected Water Use



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





# Project Costs Vary

Project	Average Annual Yield (AFY)	District Lifecycle Cost (present value, 2017)	Unit Cost
California WaterFix	41,000	\$620 million	\$600/AF
Dry Year Options/Transfers	2,000	\$100 million	\$1,400/AF
No Regrets Package	11,000	\$100 million	\$400/AF
Groundwater Banking	2,000	\$60 million	\$1,300/AF
Groundwater Recharge	1,000 – 2,000	\$20 million - \$50 million	\$400 - \$1,300/AF
Los Vaqueros <sup>1</sup> Storage	1,000	\$22.5 million	\$600/AF
Los Vaqueros <sup>1</sup> Transfer-Bethany	1,000	\$22.5 million	\$600/AF
Pacheco Reservoir <sup>1</sup>	6,000	\$470 million	\$2,700/AF
Potable Reuse - Ford Pond	3,000	\$300 million	\$2,800/AF
Potable Reuse – Injection Wells	12,000	\$1.18 billion	\$3,100/AF
Potable Reuse - Los Gatos Ponds	19,000	\$1.22 billion	\$2,000/AF
Sites Reservoir <sup>1</sup>	8,000	\$250 million	\$1,200/AF
Water Contract Purchase	12,000	\$360 million	\$800/AF

In prior 10-year rate forecast

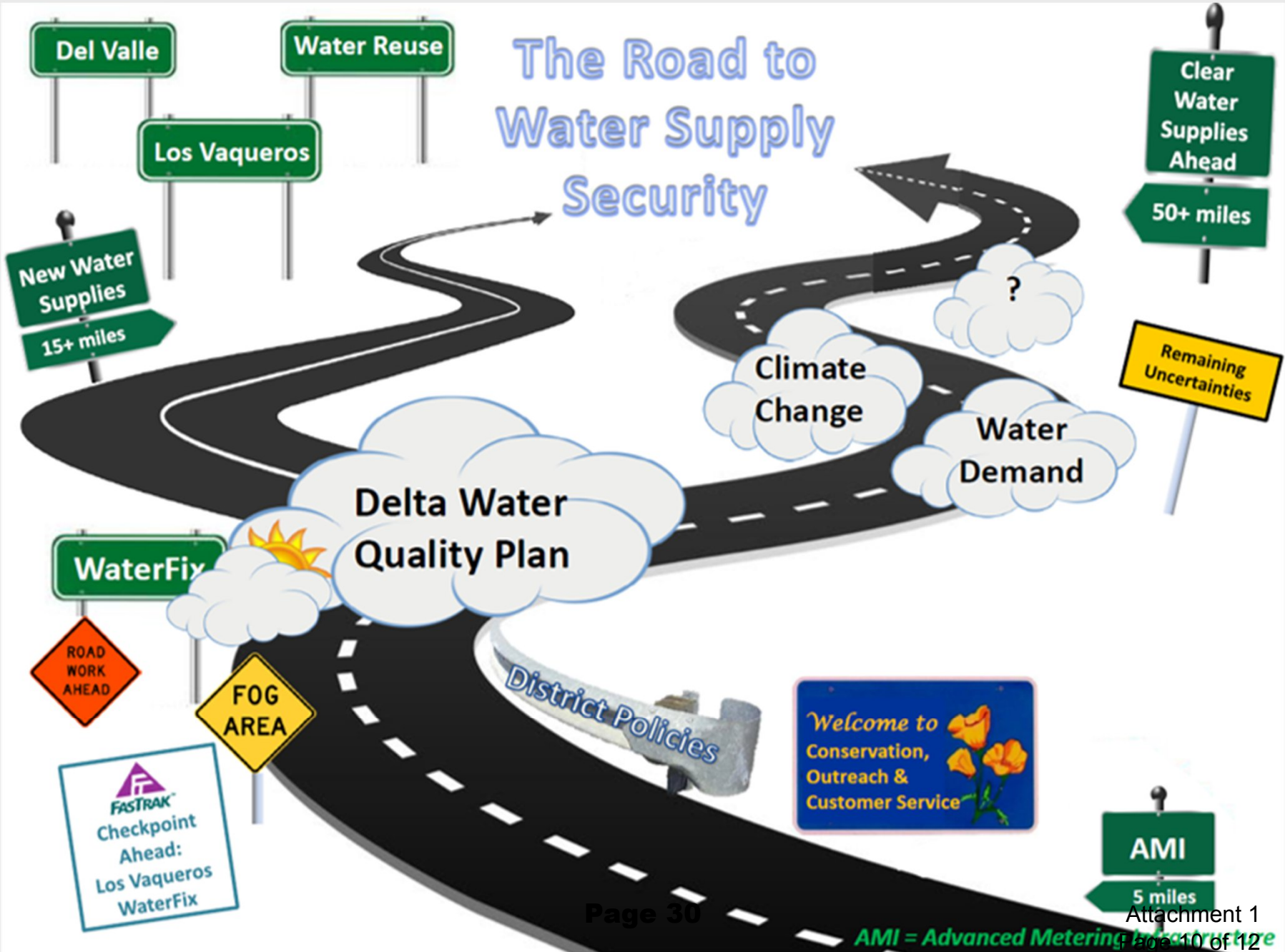
1. Assumes Prop 1 Water Storage Investment Program funding. Costs would roughly double without funding.

# Suggested Projects Achieve Recommended Level of Service Goal

Scenario	Base Case	With Some Suggested Master Plan Projects	With All Suggested Master Plan Projects
Minimum Drought Reliability	Meets 50% of demands	Meets 80% of demands	Meets 90% of demands
Present Value Benefits (2017\$)	Not applicable	\$2,480,000,000	\$2,700,000,000
Present Value Cost to District (2017\$)	Not applicable	\$1,600,000,000	\$2,450,000,000
Benefit:Cost Ratio	Not applicable	1.6	1.1

- Baseline Projects
- Baseline Projects
- Baseline Projects
- No Regrets Package
- No Regrets Package
- No Regrets Package
- Potable Reuse
- Potable Reuse
- Potable Reuse
- South County Recharge
- South County Recharge
- South County Recharge
- CWF (State Side)
- CWF (State Side)
- CWF (State Side)
- CWF (Federal Side)
- CWF (Federal Side)
- CWF (Federal Side)
- Pacheco
- Pacheco
- Pacheco
- Transfer-Bethany Pipeline
- Transfer-Bethany Pipeline
- Transfer-Bethany Pipeline

# 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
- Solicit input on draft Water Supply Master Plan – January 2019
- Present Final Water Supply Master Plan – Spring 2019



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**File No.:** 18-1022

**Agenda Date:** 12/3/2018

**Item No.:** 4.2.

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## COMMITTEE AGENDA MEMORANDUM

### Joint RWPAC with Cities of San Jose/Santa Clara/ TPAC

**SUBJECT:**

District Water Rates Overview.

**RECOMMENDATION:**

Receive information and discuss next steps.

**SUMMARY:**

The District is the groundwater management agency and primary wholesale water provider in Santa Clara County (County). The District actively manages the groundwater basins by replenishing them with local and imported water, and by operating surface water treatment plants that provide “in-lieu” recharge. A complex system that includes 10 reservoirs, 142 miles of pipelines, 4 water treatment plants, and 3 pump stations, helps keep water flowing across the County. The cost to operate and maintain this system is reimbursed primarily through groundwater charges and treated water charges paid by water retail customers. Groundwater charges differ depending on the “zone of benefit.” The North County (Zone W-2) is defined as the portion of the County north of the Coyote Valley. The South County (Zone W-5) is defined as the portion of the County extending from Coyote Valley to Gilroy.

Resolution 99-21 guides staff in the development of the overall pricing structure based on principles established in 1971. The general approach is to charge the recipients of the various benefits for the benefits received. More specifically, pricing is structured to manage surface water, groundwater supplies and recycled water conjunctively to prevent the over use or under use of the groundwater basin.

Each year, the Board establishes groundwater production charges as well as surface water charges, recycled water charges, treated water surcharges, and the amount of the State Water Project cost to be recouped through the State Water Project tax. The Board adopted groundwater charge increase for North County Zone W-2 for Fiscal Year 2018-19 equates to an increase of \$3.92 per month to the average household and is driven by critical infrastructure repair and replacement needs, and efforts to bolster water supply reliability (this does not include any increase from the retail provider).

The groundwater charge setting process has many opportunities for stakeholder engagement between the months of January and May of each year, including engaging the Water Retailers Committee and several Board Advisory Committees. A public hearing process extends over several meetings each April. The Board typically adopts the budget and groundwater production charges in

early May, which become effective on July 1.

**ATTACHMENTS:**

Attachment 1: PowerPoint

**UNCLASSIFIED MANAGER:**

Darin Taylor, 408-630-3068

# SCVWD Water Charge Overview

December 3, 2018



# Why do well owners pay SCVWD to pump water from the ground?

Construction at Anderson Reservoir, 1951



\$550M Seismic Retrofit under way at Anderson

- ▶ Local rainfall cannot sustain Santa Clara County water needs
- ▶ Planning in early 1900's called for construction of reservoirs to capture rainwater to percolate into the ground
- ▶ Groundwater Production Charge is a reimbursement mechanism
  - ▶ pays for efforts to protect and augment water supply

# A comprehensive, flexible water system serves 1.9 million people



- 10 Reservoirs
- 393 acres of recharge ponds
- 142 miles of pipelines
- 3 water treatment plants
- 1 water purification center
- 3 pump stations
- \$7.1B system replacement value



# Many activities ensure safe, reliable groundwater supplies

- ▶ Plan & construct improvements to infrastructure
- ▶ Operate & maintain local reservoirs
- ▶ Purchase imported water
- ▶ Operate & maintain raw & recycled water pipelines
- ▶ Monitor & protect groundwater from pollutants





# Key Water Supply Projects



Dam Seismic Retrofits/Improvements  
(\$780 Million)



RWTP Reliability Improvements  
(\$290 Million)

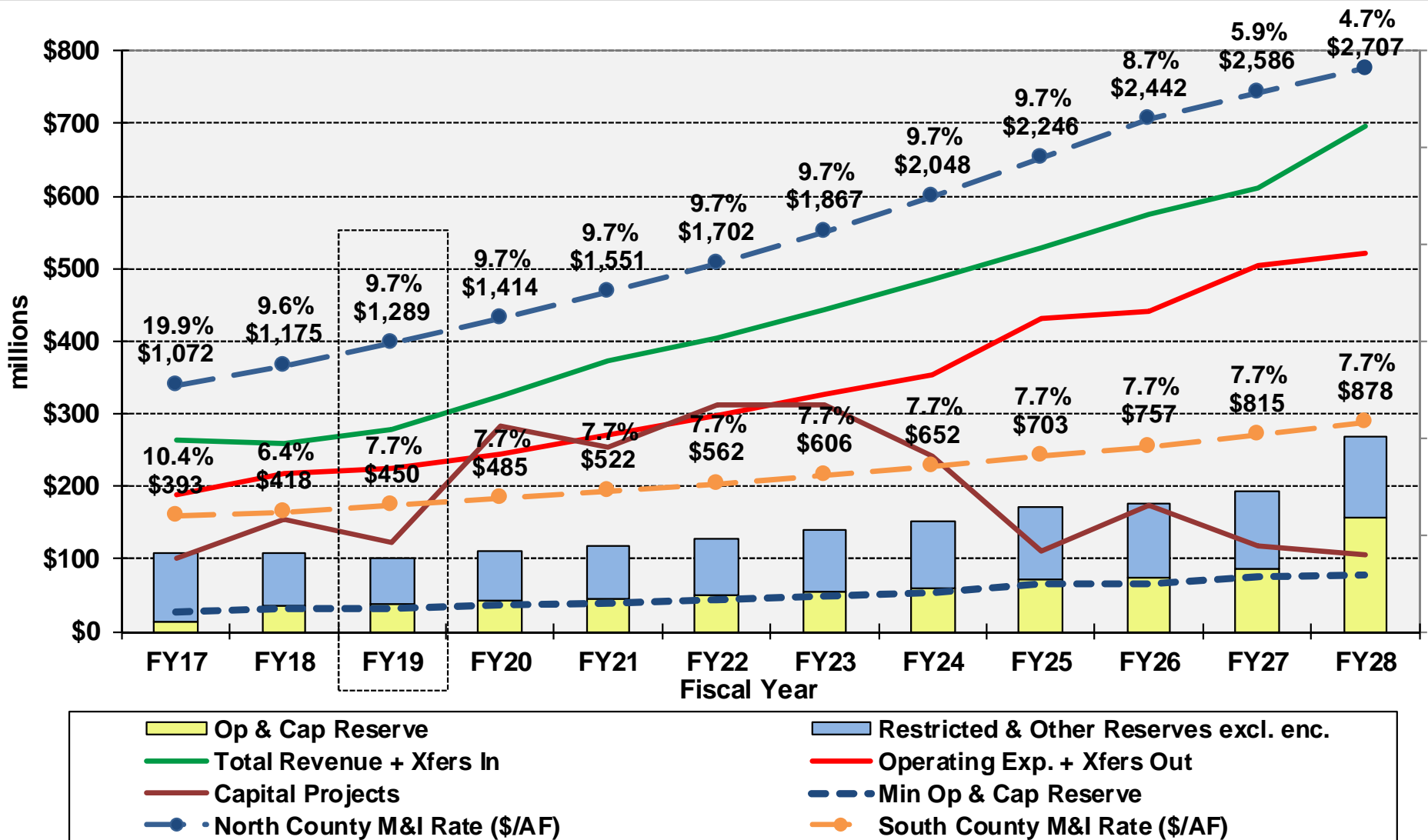


Expedited Purified  
Water Program  
(\$1 Billion,  
\$630M via P3)

# Groundwater Production Charge Projection

(\$ in millions)

## Water Utility Enterprise Fund



Note: This projection does not account for impacts associated with the Bay Delta Water Quality Control Plan or Pacheco Reservoir Expansion

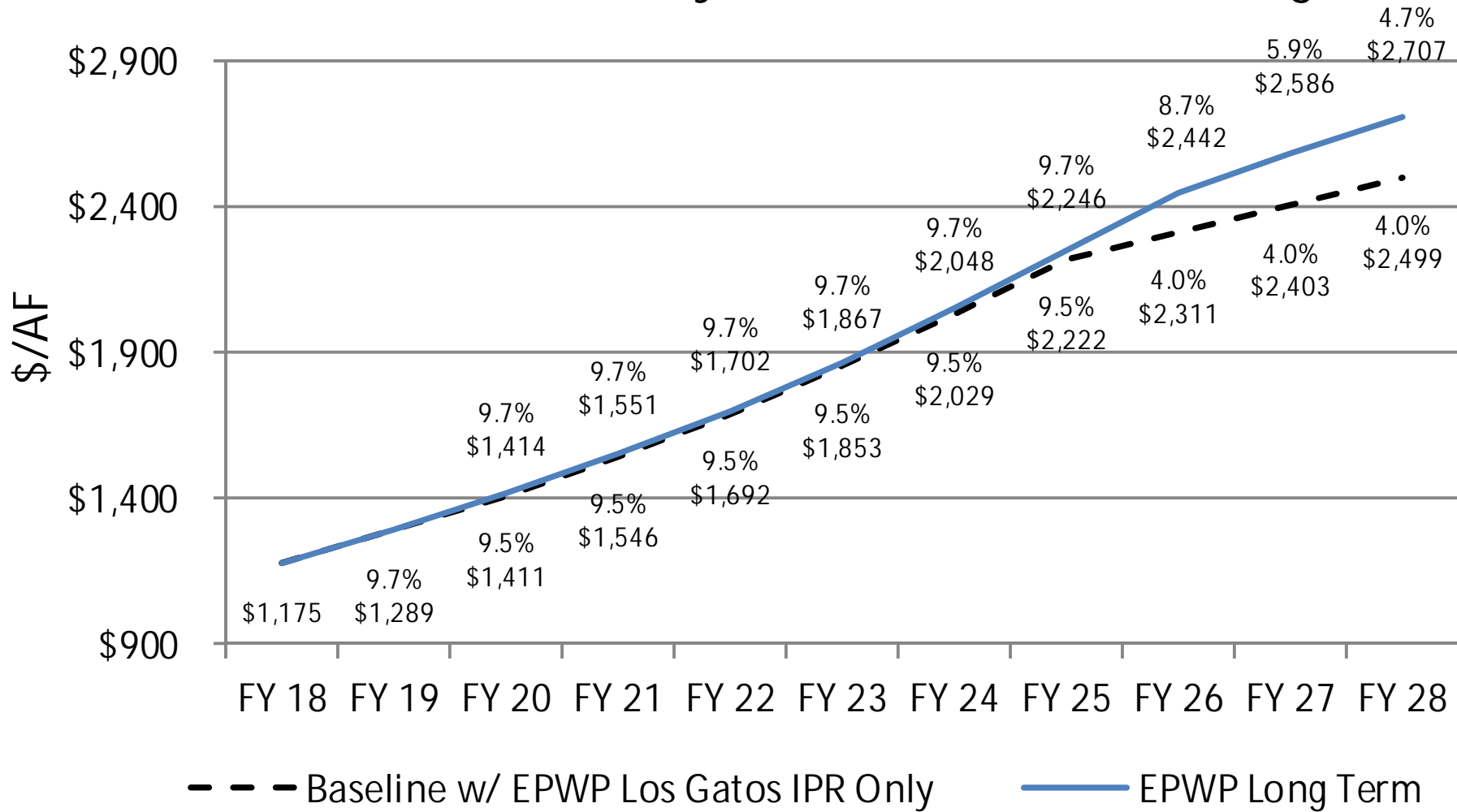


# Groundwater Production Charge Projection

(\$ in millions)

## Water Utility Enterprise Fund

### North County M&I Groundwater Charge



EPWP = Expedited Purified Water Program

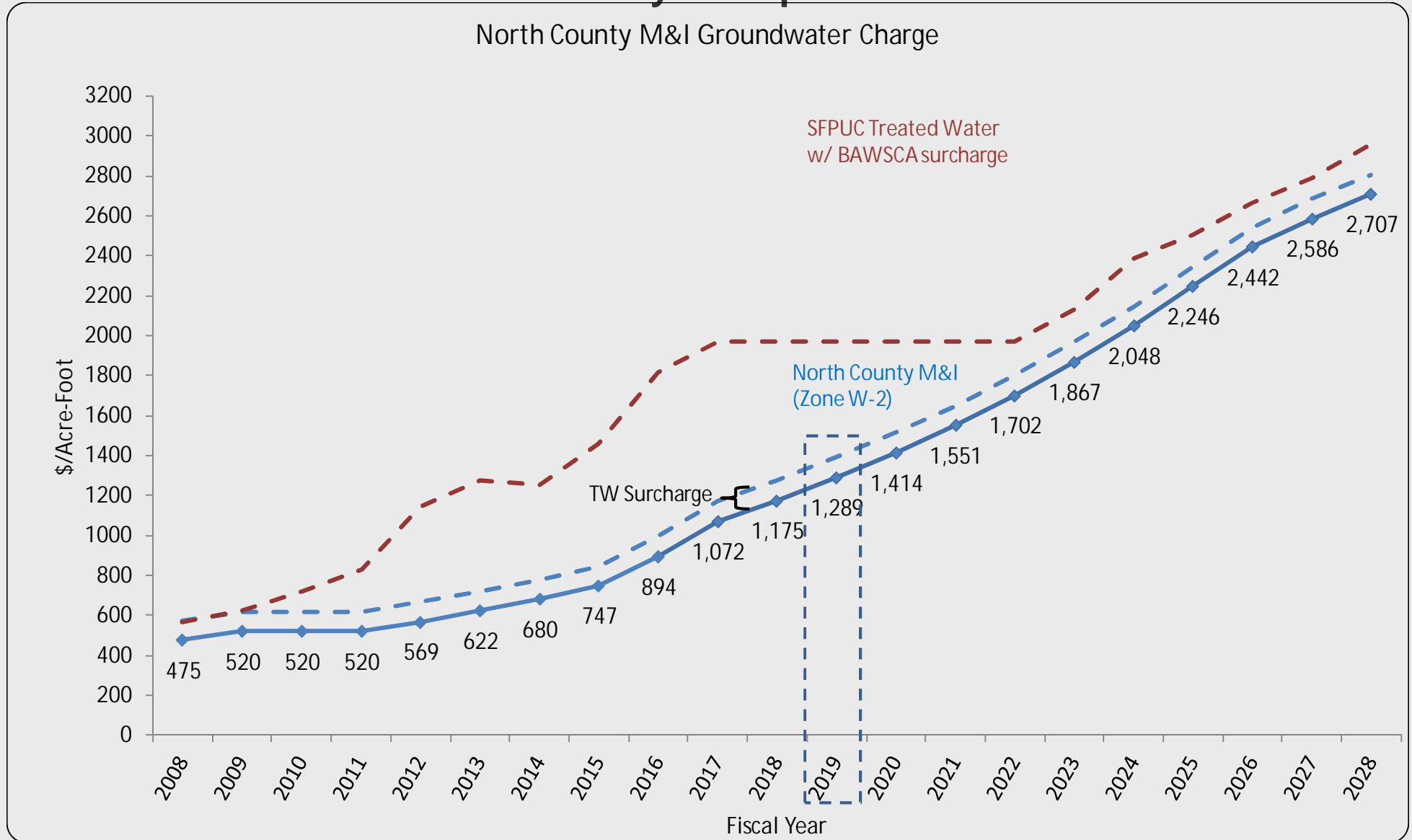
Note: This projection does not account for impacts associated with the Bay Delta Water Quality Control Plan or Pacheco Reservoir Expansion

# Groundwater Production Charge Projection

(\$ in millions)

## Water Utility Enterprise Fund

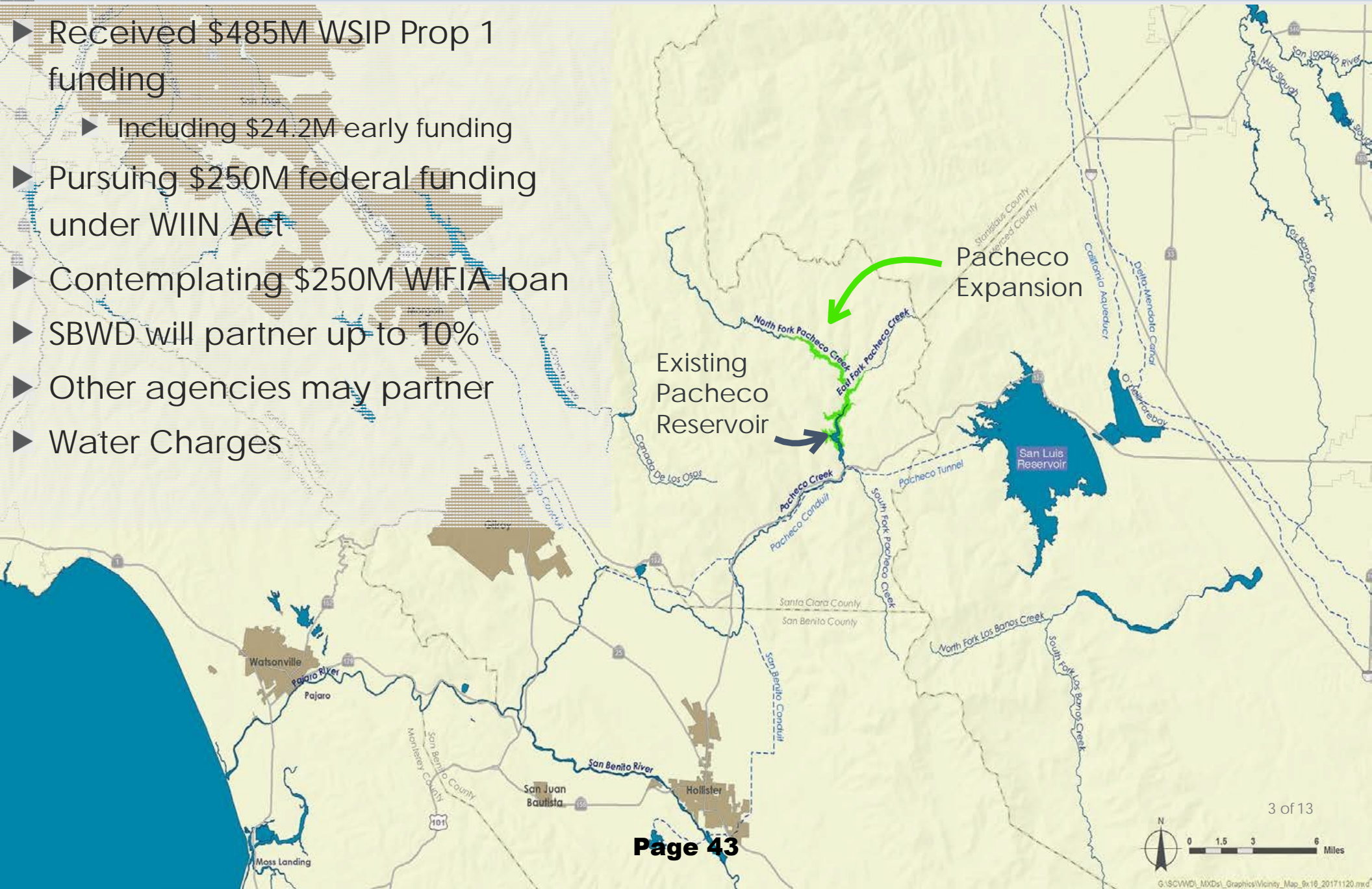
### North County M&I Groundwater Charge



Note: This projection does not account for impacts associated with the Bay Delta Water Quality Control Plan or Pacheco Reservoir Expansion

# Pacheco Reservoir Expansion Funding Strategy

- ▶ Received \$485M WSIP Prop 1 funding
  - ▶ Including \$24.2M early funding
- ▶ Pursuing \$250M federal funding under WIIN Act
- ▶ Contemplating \$250M WIFIA loan
- ▶ SBWD will partner up to 10%
- ▶ Other agencies may partner
- ▶ Water Charges



# District Act Defines Purposes for Groundwater Charges

1

Imported Water Facilities

2

Imported Water Purchases

3

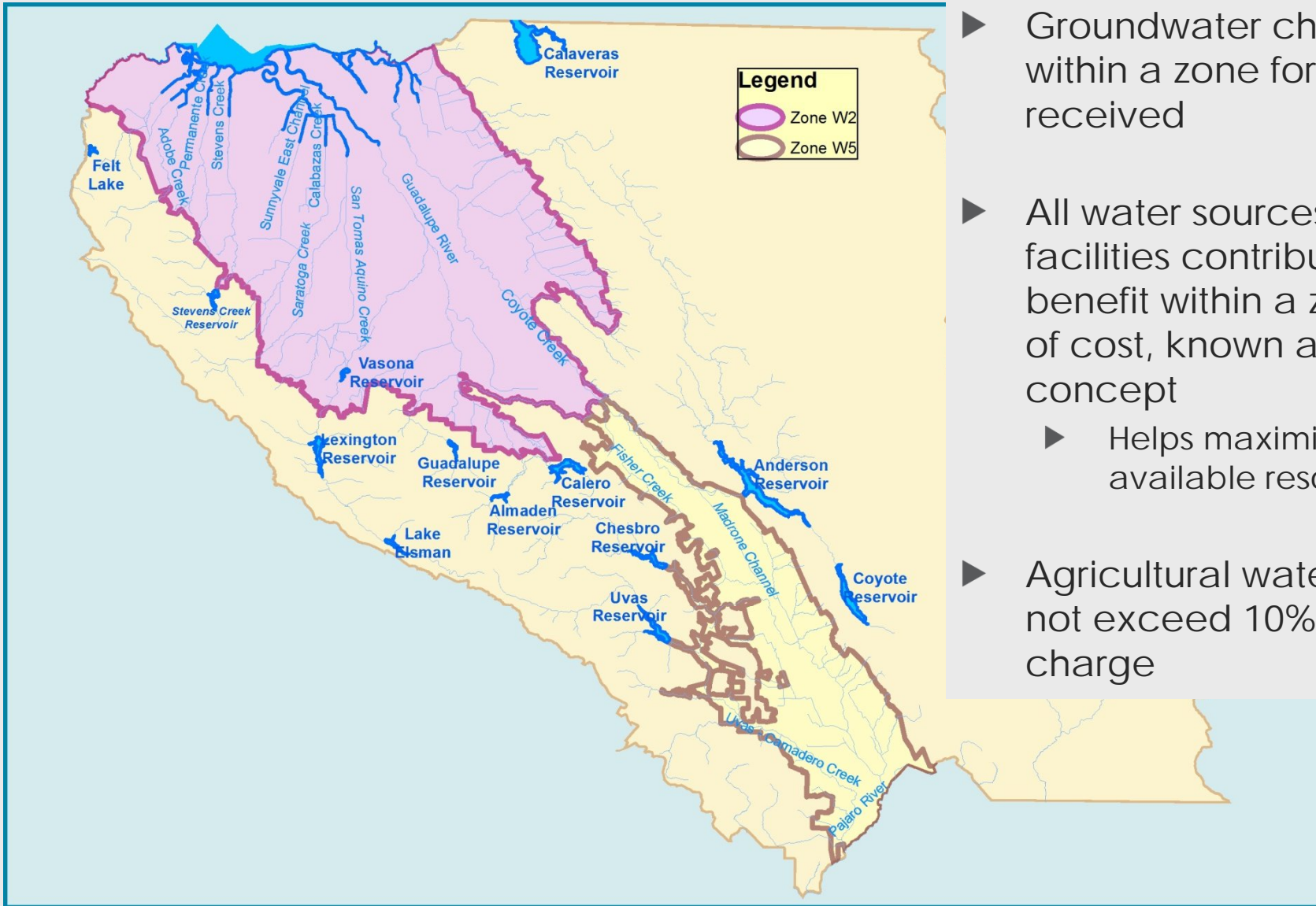
All Facilities which will “conserve or distribute water including facilities for groundwater recharge, surface distribution, and purification and treatment”

4

Debt



# Resolution 99-21 is the Board's Pricing Policy



- ▶ Groundwater charges are levied within a zone for benefits received
- ▶ All water sources and water facilities contribute to common benefit within a zone regardless of cost, known as "pooling" concept
  - ▶ Helps maximize effective use of available resources
- ▶ Agricultural water charge shall not exceed 10% of M&I water charge

# Infrastructure differences drive different groundwater production charges in each zone

## North County

- 3 water treatment plants
- Reservoirs – Almaden, Calero, Guadalupe, Lexington, Stevens Creek, Vasona
- Silicon Valley Advanced Water Purification Center
- Imported Water – State Water Project

## Shared

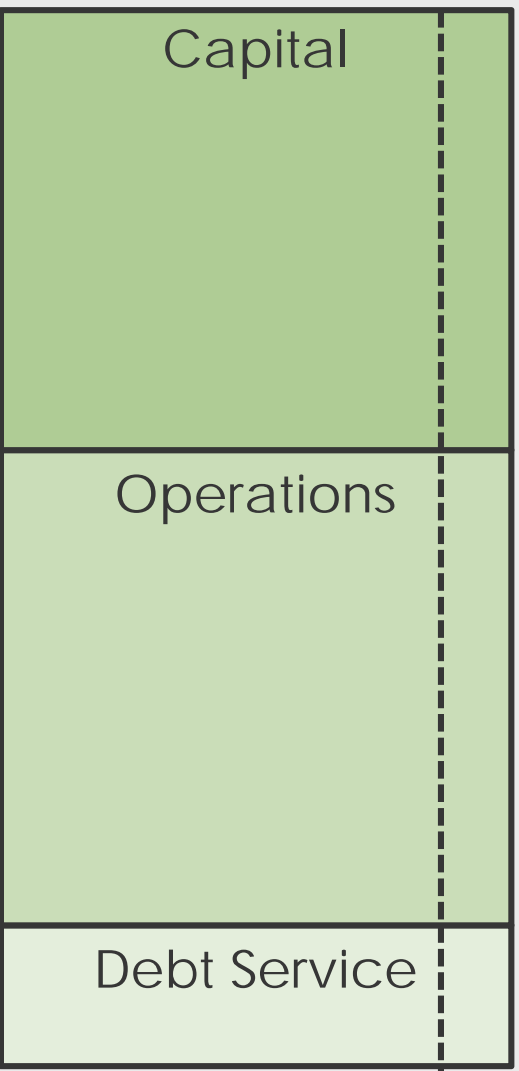
- Reservoirs – Anderson & Coyote
- Imported Water – Central Valley Project

## South County

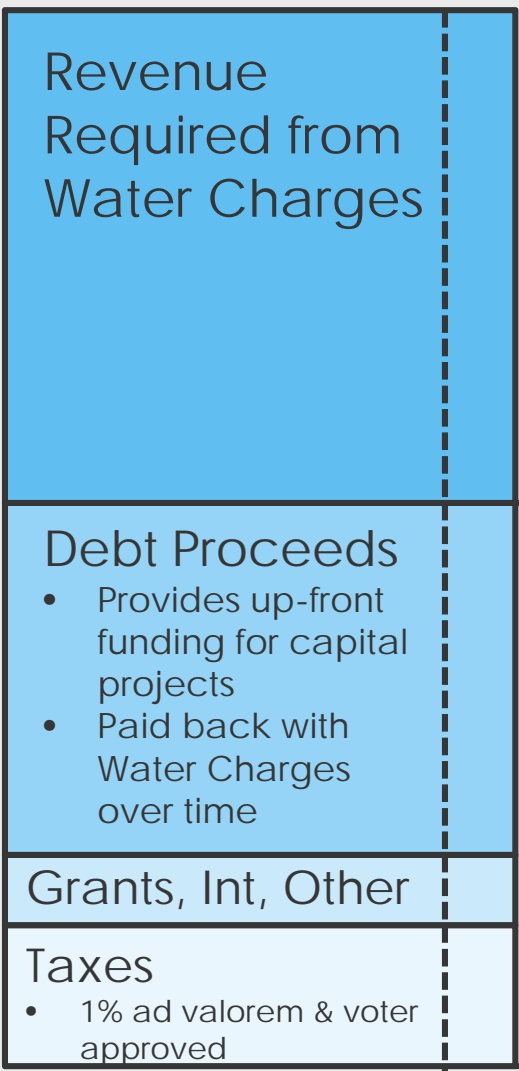
- Reservoirs – Chesbro, Uvas
- SCRWA Recycled Water System

# "Revenue Requirements" approach used to determine revenue required from water charges

## Revenue Requirements (Cost of Service)



## Funding Sources



- Debt Proceeds**
- Provides up-front funding for capital projects
  - Paid back with Water Charges over time

Non-water charge funding sources



North Zone W-2

South Zone W-5

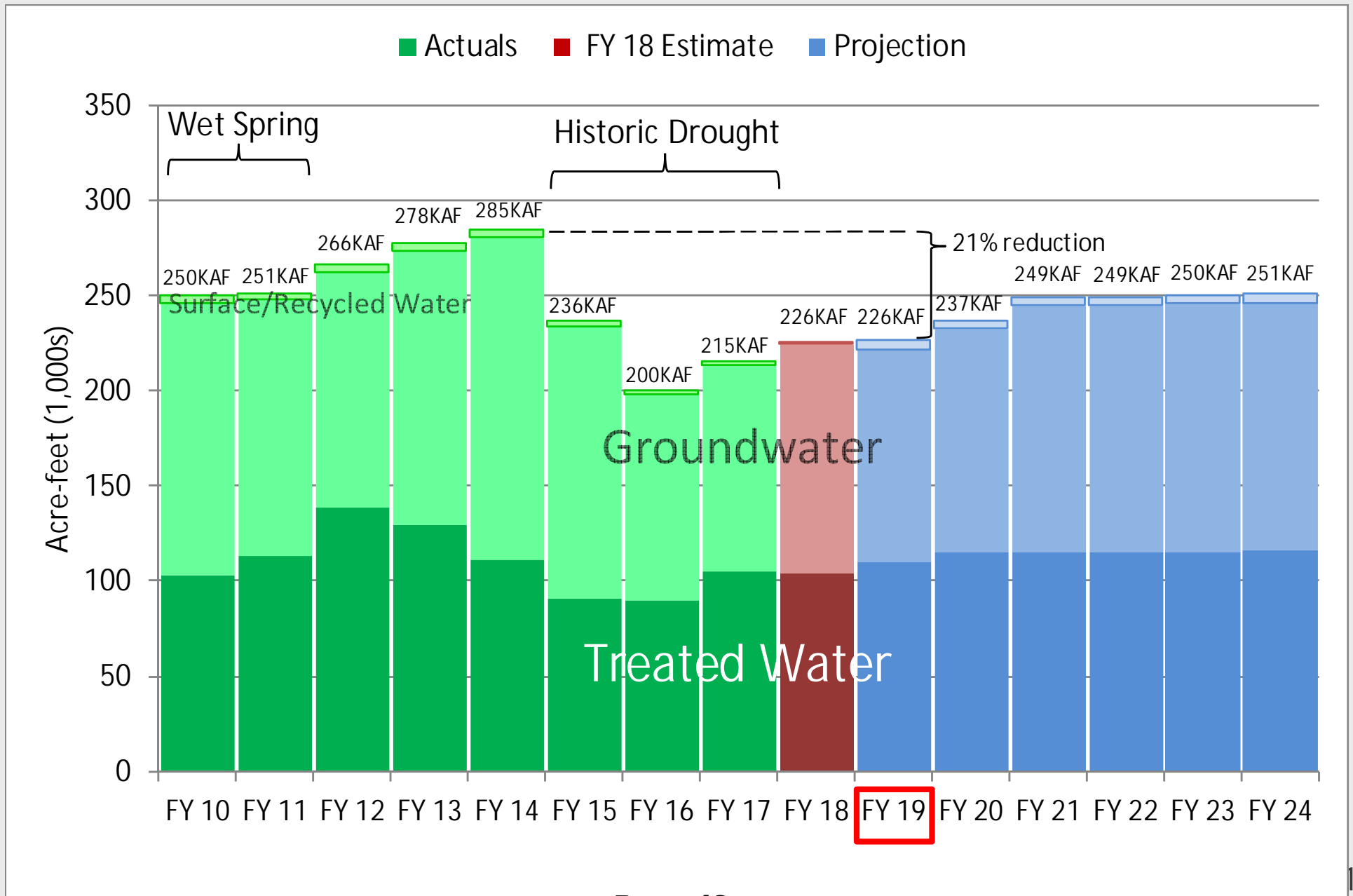
North Zone W-2

South Zone W-5

North Zone W-2

South Zone W-5

# Water Usage (District Managed)





# FY 2019-2020 Schedule (Tentative)

- Jan 8 Board Meeting: Preliminary Groundwater Charge Analysis
- Jan 16 Water Retailers Meeting: Preliminary Groundwater Charge Analysis
- Jan 23 Water Commission Meeting: Prelim Groundwater Charge Analysis
  
- Feb 12 Board Meeting: Review draft CIP & Budget development update
- Feb 22 Mail notice of public hearing and file PAWS report
  
- Mar 20 Water Retailers Meeting: FY 19 Groundwater Charge Recommendation
  
- Apr 1 Ag Water Advisory Committee
- Apr 2 Landscape Committee Meeting
- Apr 9 Open Public Hearing
- Apr 10 Water Commission Meeting
- Apr 11 Continue Public Hearing in South County
- Apr 23 Conclude Public Hearing
- Apr 24-26 Board Meeting: Budget work study session
  
- May 14 Adopt budget & groundwater production and other water charges

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