



Valley Water

Clean Water • Healthy Environment • Flood Protection



PRELIMINARY FISCAL YEAR 2023-2027 (FY 23-27)

Capital Improvement Program (CIP) and Groundwater Charges

Presented by
Darin Taylor, Chief Financial Officer (Groundwater Charges)
Jessica Collins, Business Planning and Analysis Unit Manager (Preliminary CIP)



Attachment 3
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BOARD ACTIONS TODAY

1. Review and approve Fiscal Year 2023-2027 (FY 23-27) Preliminary CIP list of projects.
2. Discuss and provide direction on the preliminary FY 2022-23 (FY 23) Groundwater Production Charge analysis prepared by staff.

Preliminary FY 23-27 CIP and Groundwater Charges

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PRESENTATION OUTLINE

1. Annual CIP Process

- a. CIP 5-Year Plan Development – Roles and Responsibilities
- b. CIP Committee – 2022 Workplan
- c. Annual Process Overview

2. Preliminary FY 23-27 CIP

- a. Significant Updates from Prior Fiscal Year
 - i. Fund Impacts with Key Factors
 - ii. Presentation of five (5) Key Factor Project Plan Updates
 - iii. Overview of Project Plan Updates
 - iv. CIP Evaluation Team Recommendations
- b. Project Categories and Summary of Project Costs

3. Preliminary Financial Forecast Overview for Funds 12 and 26

4. FY 23 Groundwater Production Charge Analysis

5. Next Steps

CIP Development – Roles and Responsibilities

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CIP DEVELOPMENT TEAM:

- Leads Project Plan Updates and Change Management Memo processes
- Conducts CIP Evaluation Team Review Meeting
- Prepares Preliminary, Draft and Final CIP 5-Year Plans
- Prepares and presents CIP Committee and Board items
- Supports CIP Committee's Review of Annual Work Plan
- Conducts Annual CIP Process Trainings



Capital Project Managers and Deputies:

- Updates project plans to reflect changes to scope, schedule and cost (July-October or as required or if directed by the Board)
- Proposes new projects for validation and consideration for addition to list of unfunded projects for inclusion in the funded CIP (September)

CIP Evaluation Team (Capital Deputies, Chiefs, ACEO and CEO):

- Reviews Initially Validated Projects and Significant Project Plan Updates, consider feedback received from CIP Committee and Board, and propose funded and unfunded project list for Preliminary CIP

CIP Committee:

- Reviews Initially Validated and Unfunded Projects (October)
- Reviews Significant Project Plan Updates (November)
- Reviews Preliminary CIP (December)

Board of Directors:

- Reviews Initially Validated and Unfunded Projects (November)
- Reviews and Approves Preliminary CIP – key decision point for developing 5-Year Plan (January)
- Reviews and Approves Draft FY 2023-27 CIP for public review period (February)
- Adopts Resolution Approving the FY 2023-27 CIP (May)

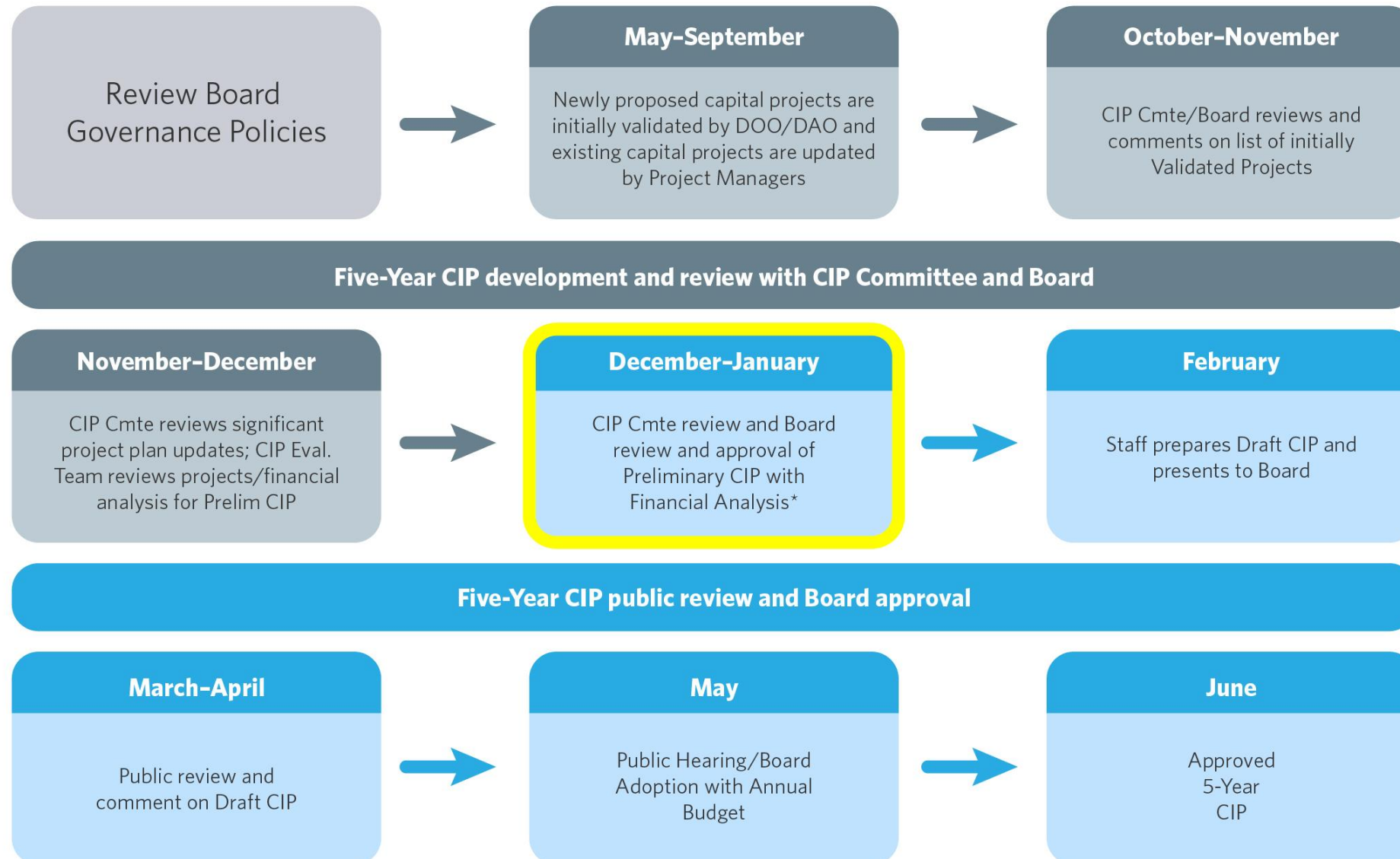
CIP Committee – 2022 Workplan

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2022 CIP Committee Work Plan												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Capital Project Monitoring												
Feasibility/Planning	X			X			X			X		
Design/Permitting	X	X			X			X			X	
Construction	X		X			X			X			X
CIP Implementation												
Consultant Agreement Compliance Process			X									
CIP Development												
CIP Planning Process												
• Annual CIP Process and Integrated Financial Planning Schedule and Review of Initially Validated and unfunded Projects										X		
• Review Significant Project Plan Updates											X	
Preliminary CIP Review												X
Standing Items												
Anderson Dam Tunnel Project Contingency and Change Order Monitoring	X	X	X	X	X	X	X	X	X	X	X	X
Upcoming Consultant Agreement Amendments	X	X	X	X	X	X	X	X	X	X	X	X
Review 2022 CIP Committee Work Plan	X	X	X	X	X	X	X	X	X	X	X	X
Approve Minutes of Previous Meeting	X	X	X	X	X	X	X	X	X	X	X	X
Annual Election of Committee Officers	X											

Annual CIP Process Overview

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Significant Updates from Board Adopted FY22-26 CIP

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FUND IMPACTS

- Water Utility Enterprise Fund (**Fund 61**) **increased** by **\$772.21M**
 - **Key Factors:**
 - Anderson Dam Seismic Retrofit Project: Increased by \$588.75M
 - Pacheco Reservoir Expansion Project: Decreased due to inflation by \$58.18M
 - RWTP Reliability Improvement Project: Increased by \$101.8M
 - Purified Water Project (PWP): Increased by \$113.18M
- Watersheds Stream Stewardship Fund (**Fund 12**) **decreased** by **\$48.96M**
 - **Key Factor:**
 - SF Bay Shoreline: Decreased by \$38.77M
- Safe, Clean Water and Natural Flood Protection Program Fund (**Fund 26**) **decreased** by **\$13.28M**
 - **Key Factor:**
 - Closure of Safe, Clean Water Projects from 2012 program to align with Measure S
- Information Technology Fund (**Fund 73**) **decreased** by **\$1.89M**
 - **Key Factor:**
 - Closure of Telephone System Voiceover IP project (approved for removal in FY 2022-26 CIP)

Significant Updates from Board Adopted FY22-26 CIP

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KEY FACTORS TO THE FUND IMPACTS

Presentation of five (5) Project Plan Updates

- Anderson Dam Seismic Retrofit Project
- Pacheco Reservoir Expansion Project
- Rinconada Water Treatment Plant Reliability Improvement Project
- Purified Water Project
- San Francisco Bay Shoreline Project



Anderson Dam Seismic Retrofit Project

Presented by
Christopher Hakes, Deputy Operating Officer of Dam Safety & Capital Delivery

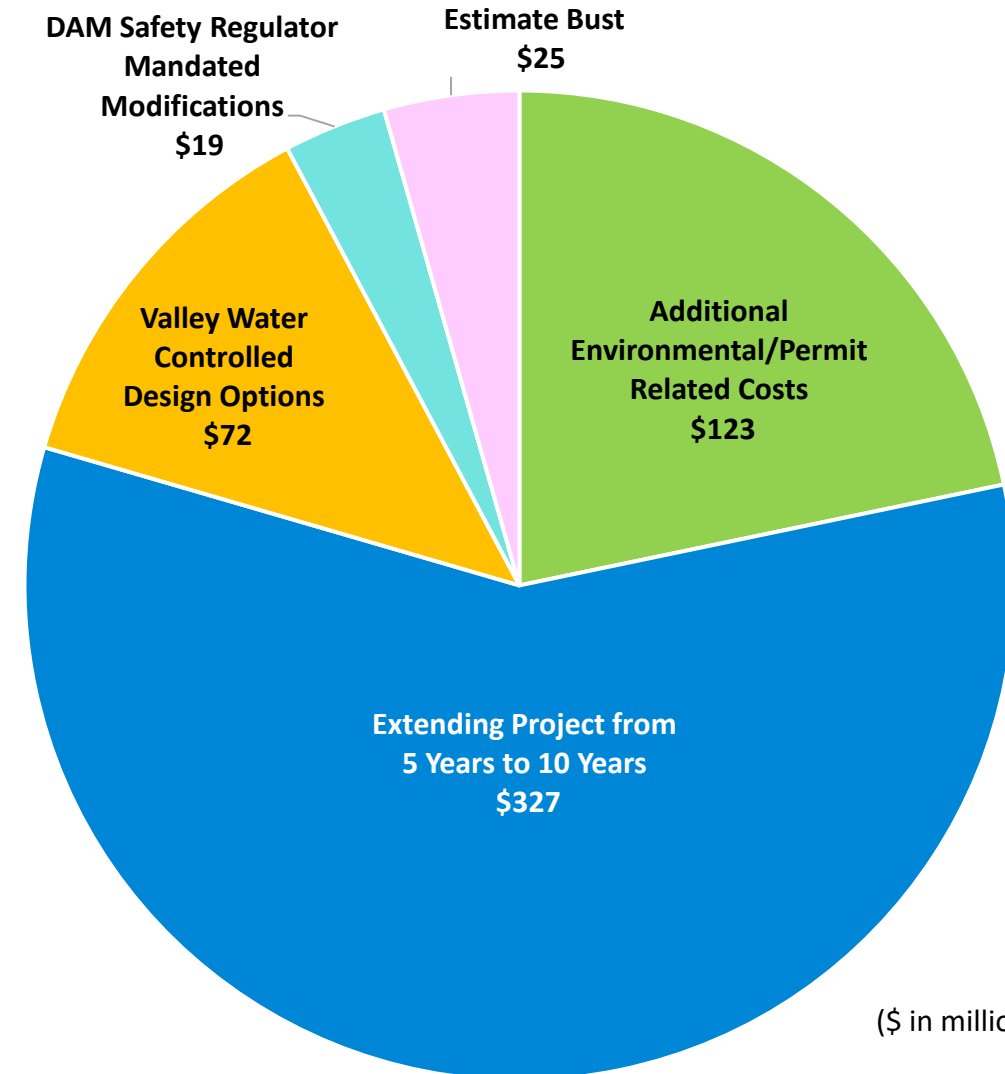


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Anderson Dam Seismic Retrofit Project

COST INCREASE

- FY 21: \$576M (inflated)
- FY 22: \$647M (inflated) + \$660M
- FY 23: \$1.236B (inflated)



(\$ in millions, uninflated)



Pacheco Reservoir Expansion Project

Presented by
Christopher Hakes, Deputy Operating Officer of Dam Safety & Capital Delivery



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Pacheco Reservoir Expansion Project

EXPENDITURE PLAN (UNINFLATED)

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Proposed Planned Expenditure (\$ in thousands)

	Actuals - FY20	Open Enc.	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
A) Planned Annual Expenditures	\$ 22,353	\$ 30,017	\$ 27,779	\$ 30,676	\$ 41,750	\$ 42,612	\$ 207,294	\$ 267,957
B) Proposed Annual Expenditures	\$ 22,353	\$ 19,431	\$ 14,220	\$ 15,411	\$ 29,860	\$ 40,203	\$ 241,223	\$ 287,737
C) Variance (B - A = C)	\$ -	\$ (10,586)	\$ (13,559)	\$ (15,265)	\$ (11,890)	\$ (2,409)	\$ 33,929	\$ 19,780

\$ (53,709)

\$ 53,709

	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	TOTAL
A) Planned Annual Expenditures	\$ 241,331	\$ 262,924	\$ 224,121	\$ 278,767	\$ 293,616	\$ 233,530	\$ 2,204,727
B) Proposed Annual Expenditures	\$ 241,331	\$ 262,924	\$ 224,121	\$ 278,767	\$ 293,616	\$ 233,530	\$ 2,204,727
C) Variance (B - A = C)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Rinconada WTP Reliability Improvement Project

Presented by
Heath McMahon, Deputy Operating Officer of Water Utility Capital



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Rinconada WTP Reliability Improvement Project

BACKGROUND

- **Construction contract** awarded to BBII on May 26, 2015
- **Amendment 1** reduced scope of work on March 10, 2020
- **Notice of Completion for reduced scope of work** on January 12, 2021 (Phases 1 and 2)
- **Remaining Phases 3 thru 6**
 - Liquid Oxygen Building, Ozone Generation Building, Filters, Chemical Facilities, Reservoir Liner Replacement, Demolition of Existing Clarifiers and Filters, Chlorine Contact Basins



Phases 1 and 2



Project Cost Increase: \$101.8M

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DESIGN IMPROVEMENTS

- Updates per current codes
- Plant water system modification
- Additional control algorithms
- Underground infrastructure for future planned improvements

ENHANCEMENTS

- EOR Construction Presence
- 3rd Party Constructability review
- Phase 1 and 2 lessons learned
- Workshops & Trainings with Operations staff
- Additional subsurface investigations

DELAY IN CONSTRUCTION

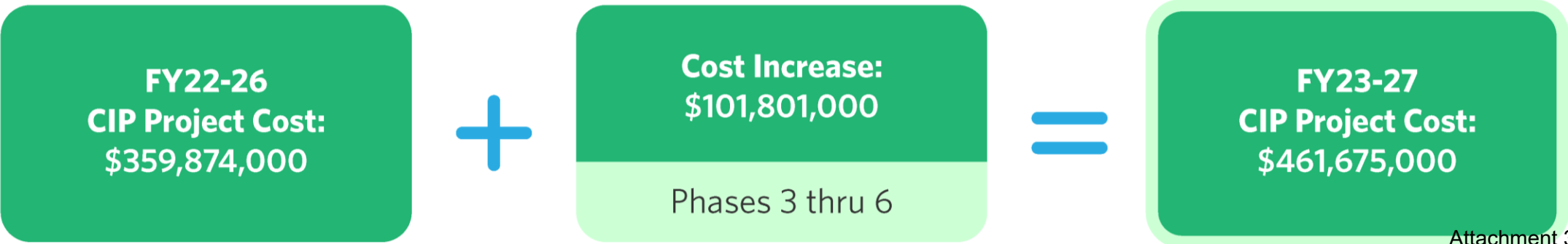
- Significant inflation and material escalation over 8-year span
- Labor and supply shortages
- Increase construction contract days

Rinconada WTP Reliability Improvement Project

PROJECT CHANGES



***27M is not adequate construction funding for remaining Phases 3-6.** ← - - - - -



PROJECT STATUS

Board approved Amendment to Consultant Contract September 2021

- Revising specifications, drawings, and construction documents
- O&M workshops and training
- Incorporating lessons learned from Phases 1 and 2
- Target advertise for construction late 2022



Purified Water Project

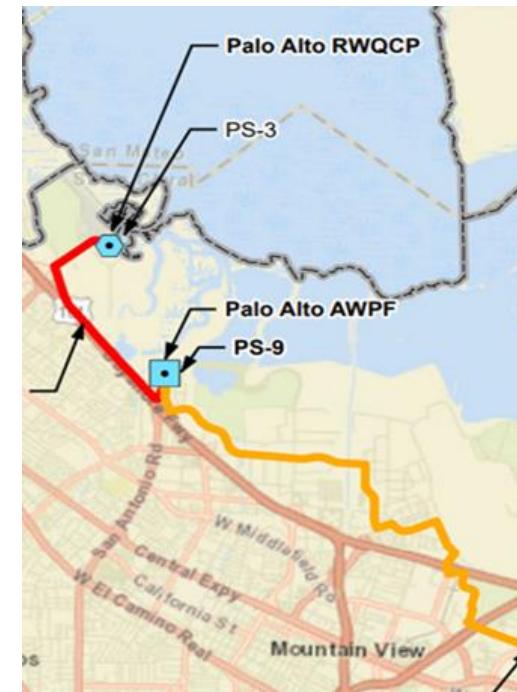
Presented by
Kirsten Struve, Assistant Operating Officer of Water Supply

Purified Water Project

**TOTAL PROJECT COST INCREASED BY \$113.184M (INFLATED)
SCHEDULE EXTENDED BY 1 YEAR (CLOSEOUT PHASE)**

Primary contributing factors:

- Change in scope: Palo Alto Advanced Water Purification Facility site
- Additional Preliminary Engineering and Environmental Work
- Additional Design and Construction



Purified Water Project

SCOPE UPDATES

22

- Additional Pump Stations and associated pipeline
- Pipeline investigations, improvements, and realignments to Los Gatos Recharge System
- Advanced Water Purification Facility at former Los Altos Treatment Plant Site
 - Site investigations
 - Contaminated soil removal
 - Environmental Mitigation
 - Sea level rise protection
- Additional CEQA work
- Consultant and partner agency support



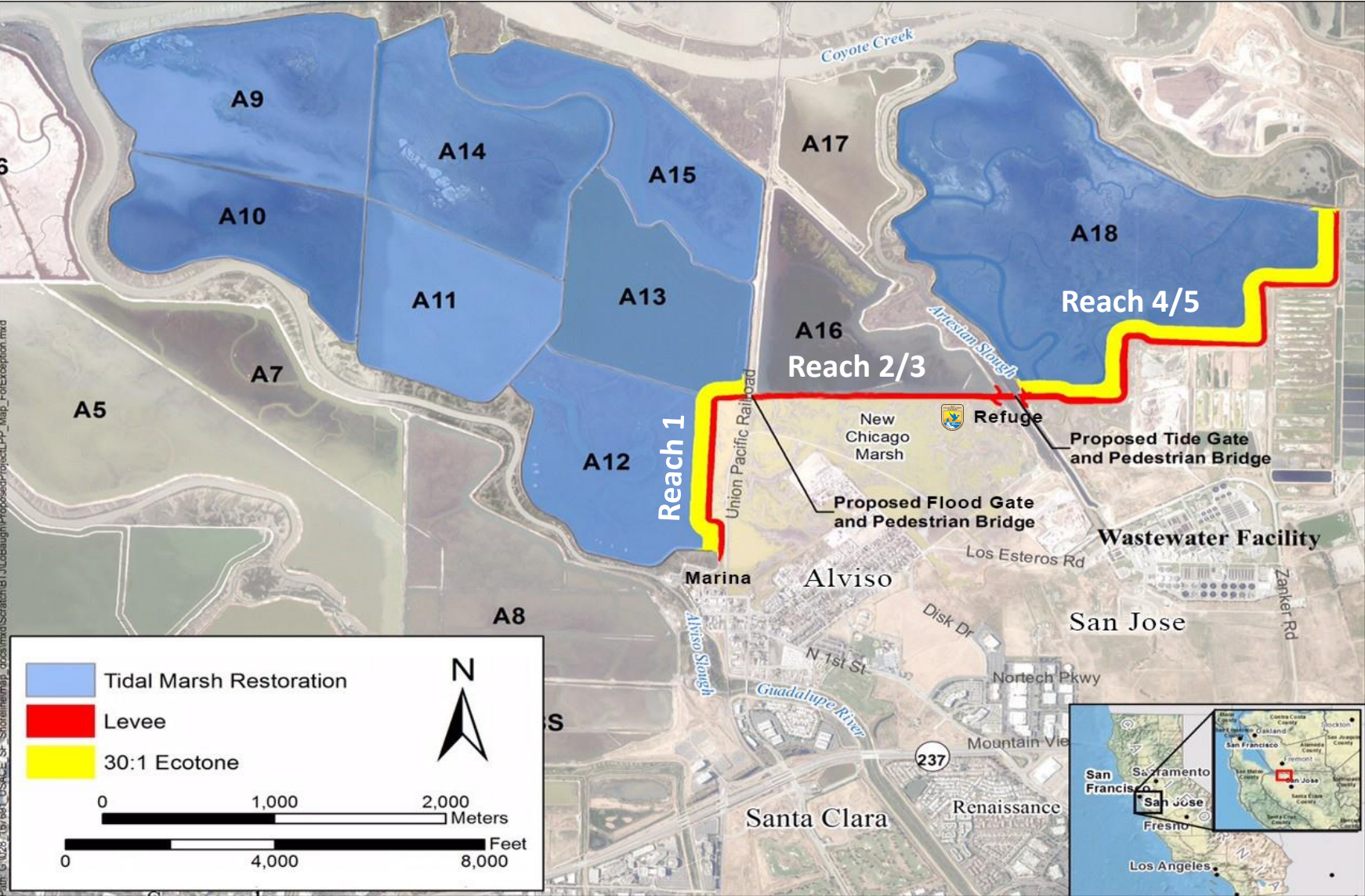
South San Francisco Bay Shoreline Project – Phase I

Presented by
Rechelle Blank, Deputy Operating Officer of Watersheds Design and Construction



South San Francisco Bay Shoreline Project – Phase 1

PROJECT ELEMENTS



PROJECT PARTNERS



US Army Corps of Engineers®



PROJECT ELEMENTS

PHASE 1: DESIGN AND CONSTRUCTION COSTS (REACHES 1-5)

2015 Authorized Cost: \$194M with crediting (\$177M without crediting, actual design and construction cost)

2021 Updated Cost: \$545M with crediting (\$518M without crediting, actual design and construction cost)

Reaches 1-3 (all elements)

Design and Construction Costs

- \$247.6M (fully funded)

Reaches 1-3 (levee)

Construction Underway

- \$129.8M Construction Contract (Valley Water's share = \$58.4M, paid in full)

Reaches 4-5 (all elements)

Design and Construction Costs

- \$270.4M (partially funded)

NEXT STEPS

- Eliminate contractor competition for fill and incorporate lessons learned from Reaches 1-3 construction.
- Explore ways to lower the cost of construction for Reaches 4-5 and identify additional funding sources.
- Remove planned expenditures associated with Reaches 4-5 real estate acquisition and utility relocation (\$38.77M decrease) until project cost and lessons learned are addressed.

OVERVIEW

- **3 Projects** had changes to **Scope, Schedule and Cost**
- **2 Projects** had changes to **Scope and Cost**
- **15 Projects** had changes to **Schedule (Completion Date) and Cost**
- **7 Projects** had changes to **Schedule (Phase Only) and Cost**
- **7 Projects** had changes to **Schedule (Phase Only) – TPC changes due to inflation**
- **4 Project** had changes to **Schedule (Completion Date) – TPC changes due to inflation**
- **2 Projects** had changes to **Cost Only**
- **3 Projects** had changes due to **Small Capital Forecast Revisions**
- **2 Placeholder Projects** had changes due to **Administrative Updates**

CIP Evaluation Team Recommendations

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Project Name	Total Project Cost (In \$ thousands)	Remaining Cost (FY23 to completion) (In \$ thousands)	Phase	CIP Evaluation Team Recommendations
FY23 Initially Validated Projects				
South Babb Flood Mitigation Project	\$1.3M	\$1.3M	N/A	Moved to the Watershed Asset Rehabilitation Program (WARP) as proposed work in the Preliminary FY23-27 CIP.
South Babb Flood Protection Project	\$12.0M	\$12.0M	N/A	Recommended to remain as Validated in FY23 to allow staff additional time to develop the Business Case.
San Tomas Aquino Project	\$35.0M	\$35.0M	N/A	Recommended to remain as Validated in FY23 to allow staff additional time to develop the Business Case.
Randol Creek Levee Rehab Project	\$2.0M	\$2.0M	N/A	Moved to the WARP as proposed work in the Preliminary FY23-27 CIP.
CPP Isolation Valves & Actuators Replacement Project	\$3.2M	\$3.2M	N/A	Recommended to remain as Validated in FY23 to allow staff additional time to analyze whether this project is appropriate for inclusion as part of the Anderson Dam Seismic Retrofit Project, and if not, then to develop the Business Case.
Tepid Water System for Emergency Shower/Eyewash Stations at WTPs	\$2.8M	\$2.8M	N/A	Recommended to remain as Validated in FY23 to allow staff additional time to identify additional project scope, schedule, and cost information and assign staff resources to implement the project.
Security Upgrades and Enhancements	\$14.0M	\$14.0M	N/A	Recommended for funding in the Preliminary FY23-27 CIP.
Proposed Unfunded Project List for FY23-27 CIP				
Long-Term Purified Water Program Elements	\$190.5M	\$190.5M	N/A	Recommended to REMAIN on the unfunded list - for Phase 2 Purified Water Program.
RWTP Ammonia Storage & Metering Facility Upgrade	\$5.8M	\$5.8M	N/A	Recommended to REMAIN on the unfunded list as the project is being analyzed to determine whether it would be appropriate to include in the RWTP Reliability Improvement Project. Business Case/Project Proposal was developed in 2019.
Pacheco Pumping Plant Back-Up Power	\$17.2M	\$17.2M	N/A	Recommended for ADDITION to the unfunded list. Submitted for validation during CIP Evaluation Team Meeting on 11/18 with Business Case/Project Proposal submitted on 11/29. Staff to undertake immediate interim measures to provide a short-term power supply while this Project is prepared for proposed inclusion in the FY 24-28 CIP.
Total:	\$283.8M	\$283.8M	N/A	

CIP Evaluation Team Recommendations

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NEWLY VALIDATED PROJECT RECOMMENDED FOR ADDITION TO UNFUNDED LIST

The following newly validated project is recommended for inclusion on the Unfunded List for FY 23:

Pacheco Pumping Plant Back-up Power: Valley Water relies on Pacheco Pumping Plant (PPP) for delivery of raw water from the San Luis Reservoir into Santa Clara County. There is currently no back-up power available at PPP to run the pumping equipment for raw water delivery during an outage of utility power. The objective of this project is to improve the power resiliency of PPP such that an outage from PG&E or damage to the utility power transmission line would not completely take PPP out of service and support a service sustaining minimum flow of raw water to Valley Water's three treatment plants. The inflated TPC is estimated to be \$17.02M.

Interim Measures: Pursuing funding through the Small Capital, Raw Water Transmission Project, to undertake immediate interim measures to provide a short-term power supply while the Pacheco Pumping Plant Back-up Power Project is prepared for proposed inclusion in the FY 24-28 CIP.

CIP Evaluation Team Recommendations

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VALIDATED PROJECTS RECOMMENDED FOR INCLUSION IN FY 2023-27 CIP

The following project plan updates have been processed for inclusion in the Preliminary CIP for FY 2023-27:

Security Upgrades and Enhancements: A new project was created for inclusion in the CIP. This project will significantly enhance overall security at Valley Water facilities through technological and physical upgrades and enhancements. This project includes designing and installing a modern technical security system capable of meeting today's security and investigative requirements and improves physical security for critical facilities and assets. The estimated total inflated project cost is \$16.57M and the project duration is expected to last four to six years.

Watersheds Asset Rehabilitation Program (WARP): Project expenditures have been updated to reflect the shifting of previously scheduled work to add two projects from the Initially Validated list (South Babb Flood Mitigation Project and Randol Creek Levee Rehabilitation Project) in FY 23 and FY 24. The uninflated total project cost remains unchanged; however, the inflated total project cost has increased by \$287K. Based upon this revision and combined with the project plan update presented to the CIP Committee on November 15, 2021 (see Attachment 2), the change from the Board adopted FY2022-26 CIP is a TPC decrease of \$8.56M (inflated).

Projects Planned for Closure in FY 2022

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VALIDATED PROJECTS RECOMMENDED FOR INCLUSION IN FY 2023-27 CIP

• RWTP Treated Water Valve Upgrade	\$8.6 M
• San Francisquito Creek, SF Bay thru Searsville Dam (E5)	\$6.8 M
• Berryessa Creek, Calaveras, I-680 - Reimbursable	\$17.7 M
• Cunningham Flood Detention Certification	\$11.8 M
• Lwr Silver Creek, I-680 to Cunningham, Reimbursable (R4-6)	\$1.9 M
• Telephone System Voiceover IP	<u>\$1.2 M</u>
TOTAL	\$48 M

- Water Supply – 29 projects
- Flood Protection – 16 projects
- Water Resources Stewardship – 11 projects
- Buildings and Grounds – 3 projects
- Information Technology – 5 projects

* Projects that fall into multiple categories are only counted once

Preliminary FY23-27 CIP

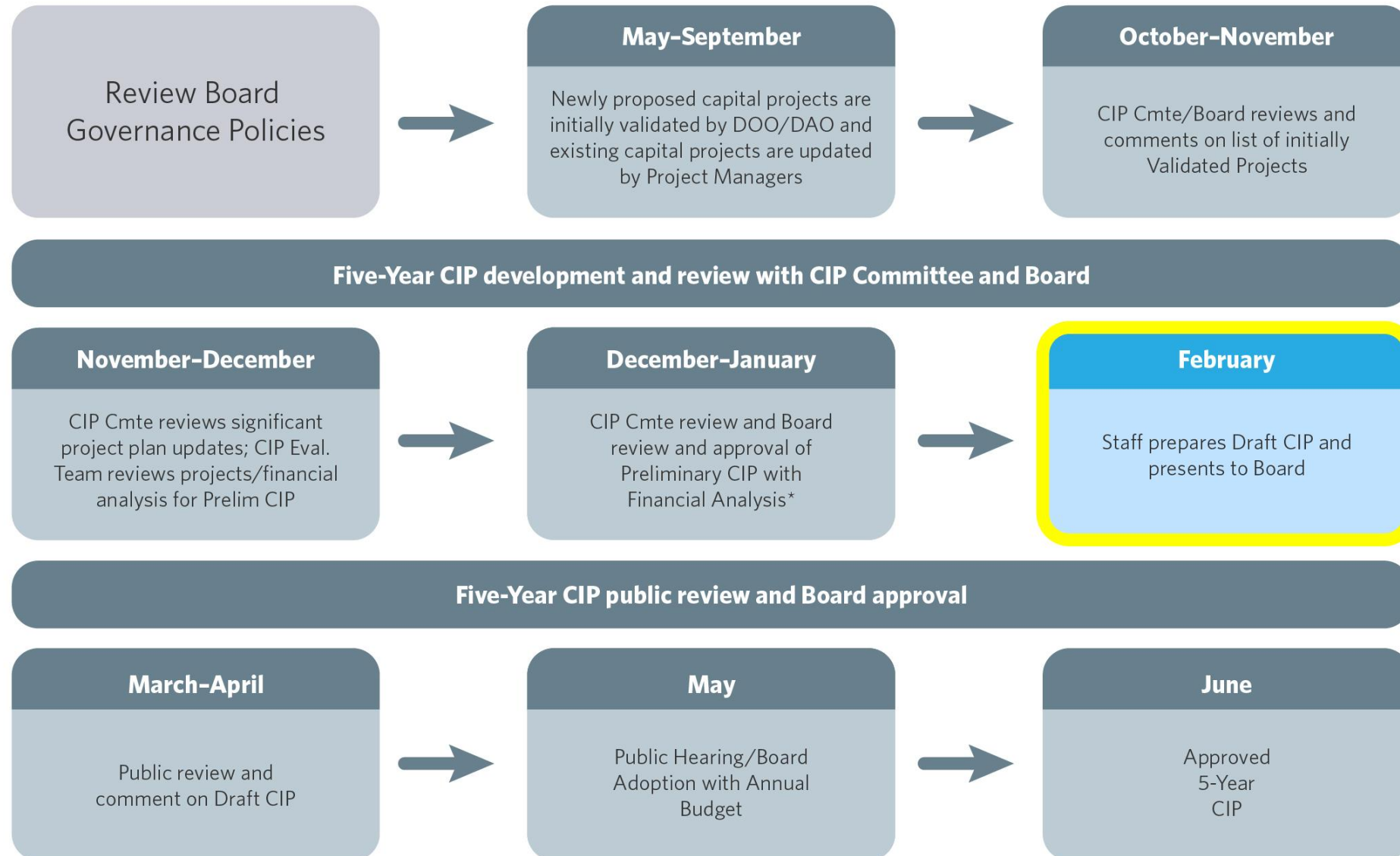
32

SUMMARY OF PROJECT COSTS BY IMPROVEMENT TYPE

	Appropriated / Actuals through FY-22	Remaining Cost to Completion	Total Project Costs
Water Supply	\$924 M	\$5,184 M	\$6,109 M
Flood Protection	\$1,059 M	\$764 M	\$1,823 M
Stewardship	\$45 M	\$156 M	\$201 M
Buildings/Grounds	\$6 M	\$66 M	\$72 M
Information Technology	\$29 M	\$19 M	\$48 M
TOTAL CIP	\$2,063 M	\$6,188 M	\$8,252 M

Annual Process Overview

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Preliminary Financial Forecast Overview for Fund 12 and Fund 26

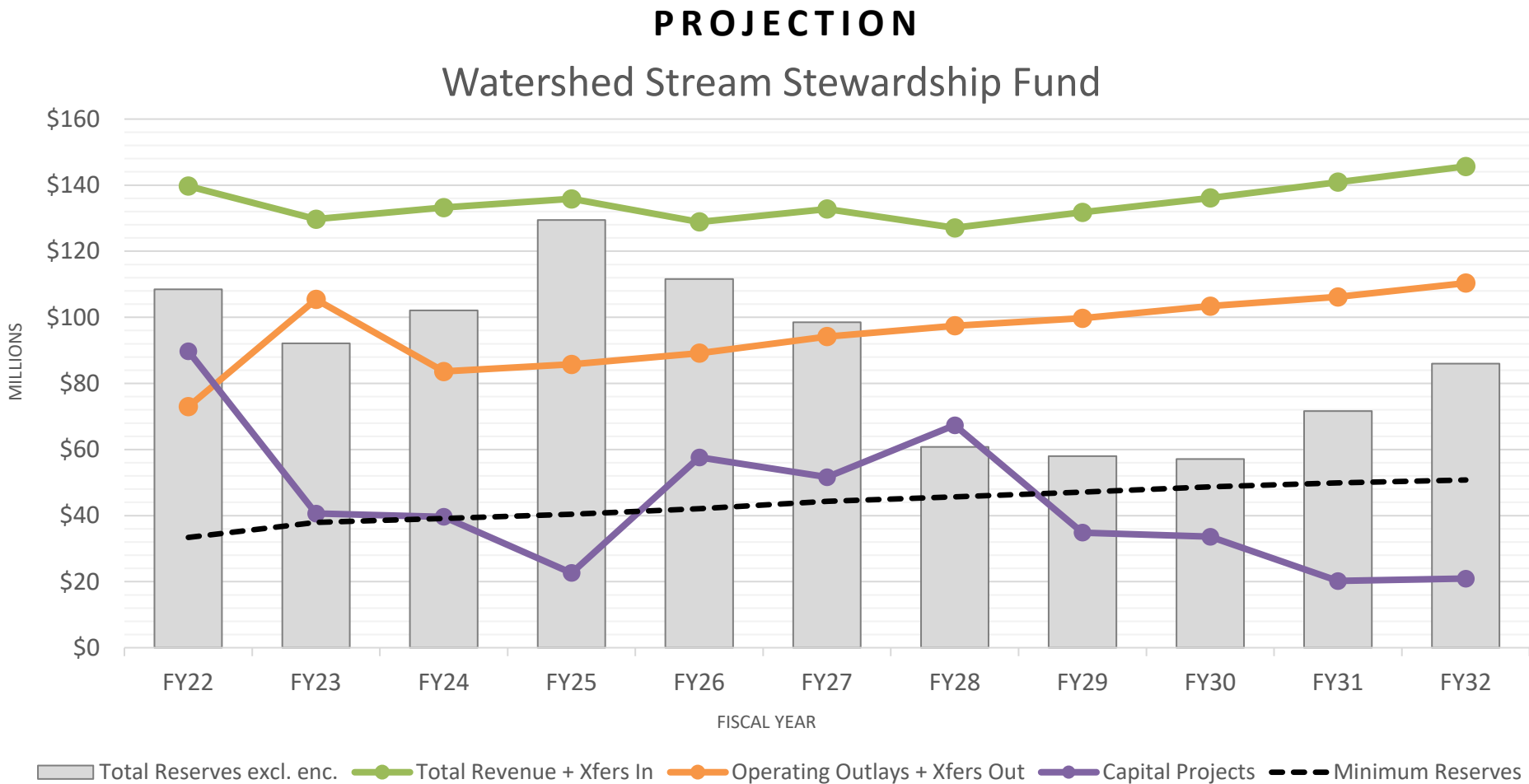
Presented by
Darin Taylor, Chief Financial Officer



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Watershed and Stream Stewardship (WSS) Fund

RESERVES ARE ABOVE MINIMUM LEVELS FOR 10-YEAR FORECAST



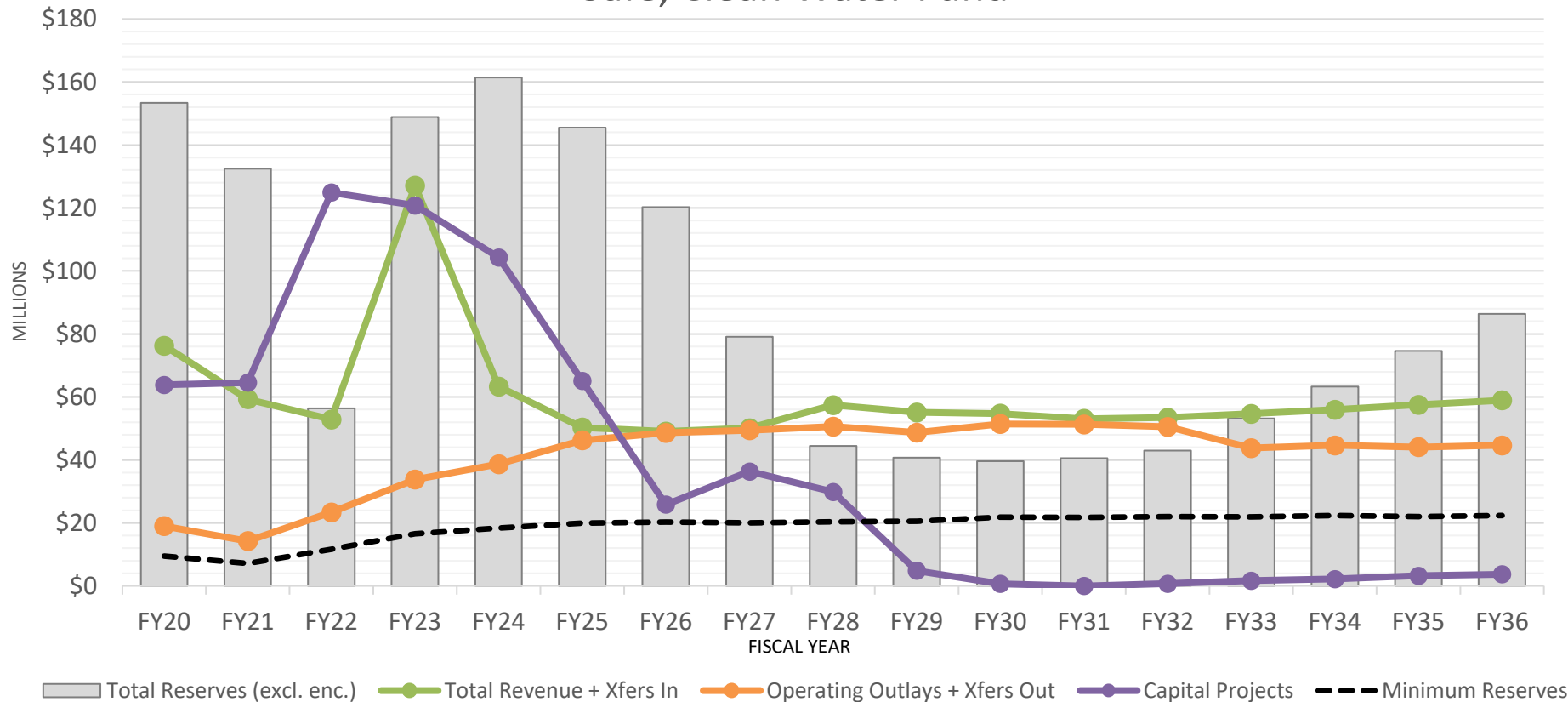
- **O&M maintenance placeholder**
 - \$2M/yr FY 23 to FY 26
 - \$5M/yr FY 27 to FY 32
- **FY23 WUE Transfer**
 - \$25M in FY 23 for drought-related expenses
- **Shoreline project: \$15.6M previously included in WSS Fund shifted back to SCW Fund**

Safe, Clean Water (SCW) Fund

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RESERVES ARE ABOVE MINIMUM LEVELS FOR FIRST 15 YEARS OF MEASURE S PLAN

PROJECTION
Safe, Clean Water Fund



- Reflects Measure S renewal
- Reflects \$80M in WIFIA funding
- Assumes \$80M NRCS Reimbursements for Upper Llagas Creek to fully construct Phase 2
- Assumes receipt of San Francisquito Creek outside funding sources, including \$23.5M from grants and partnerships through the SFCJPA; along with an \$8.9M CalTrans grant through the City of Palo Alto for the Newell Road Bridge

Preliminary FY 23 Groundwater Production Charge Analysis

- 1. Drought Impact on Preliminary Analysis**
- 2. Water Usage**
- 3. Water Utility Cost Projection**
- 4. Scenario Assumptions**
- 5. Preliminary Groundwater Charge Forecast Scenarios**
- 6. Other Information**
- 7. Schedule**
- 8. Summary**

Drought has significant impact on preliminary analysis

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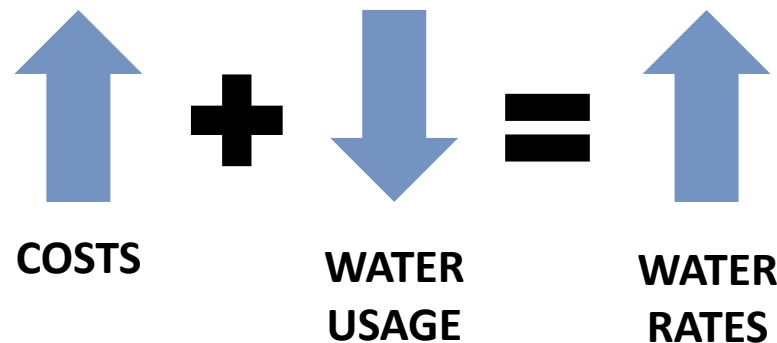
DROUGHT IMPACT PUTS PRESSURE ON WATER RATES:

Drought Emergency Cost increases

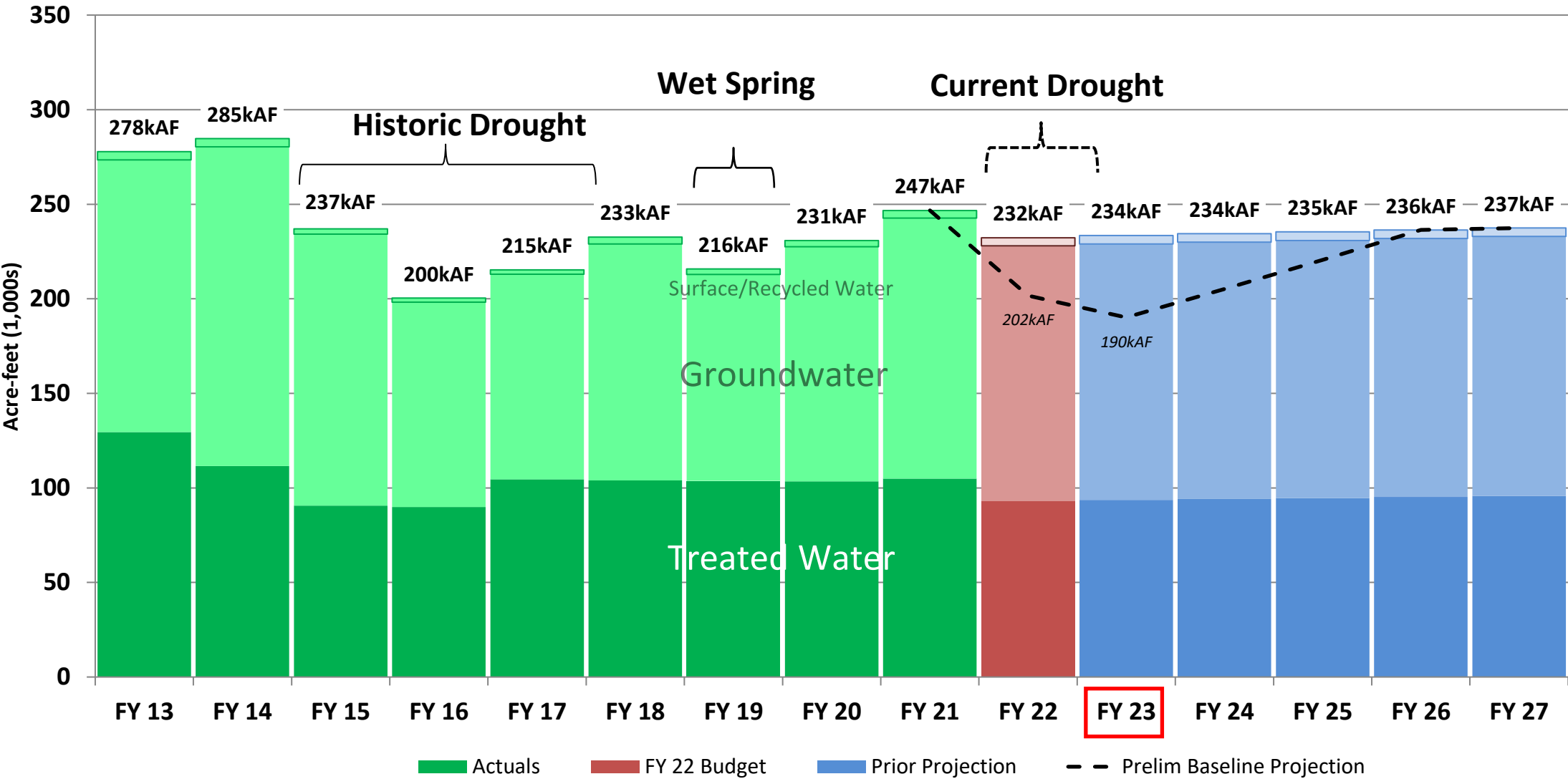
- Emergency Water Purchases projected to be \$67.7M from FY23 to FY25
- Emergency Conservation activities projected to be \$19.8M from FY23 to FY25

Water Usage down

- Mandatory 15% call for conservation compared to 2019 (achieved by FY23)
- Results in lower revenue to pay for highly fixed cost structure

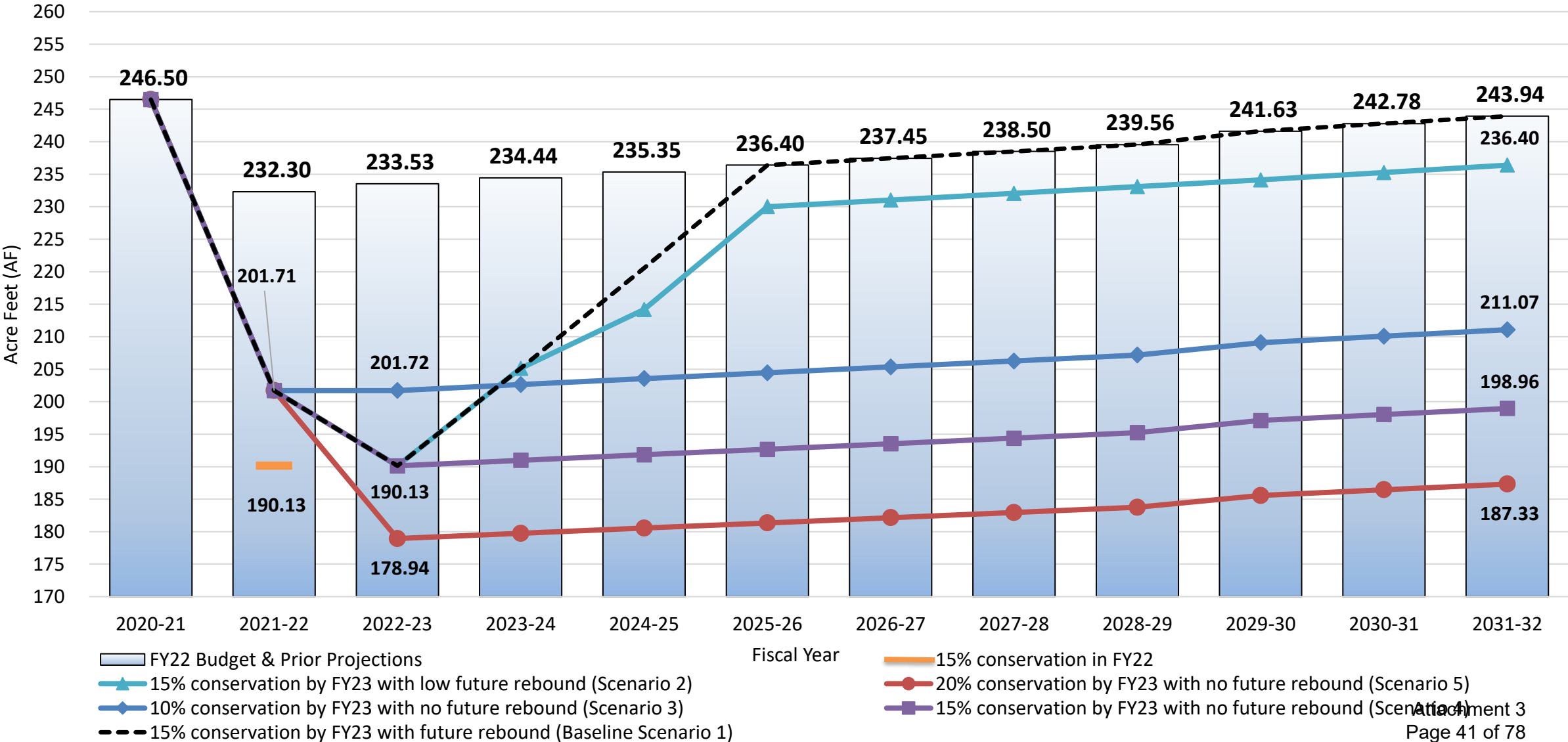


Water Usage (District Managed)

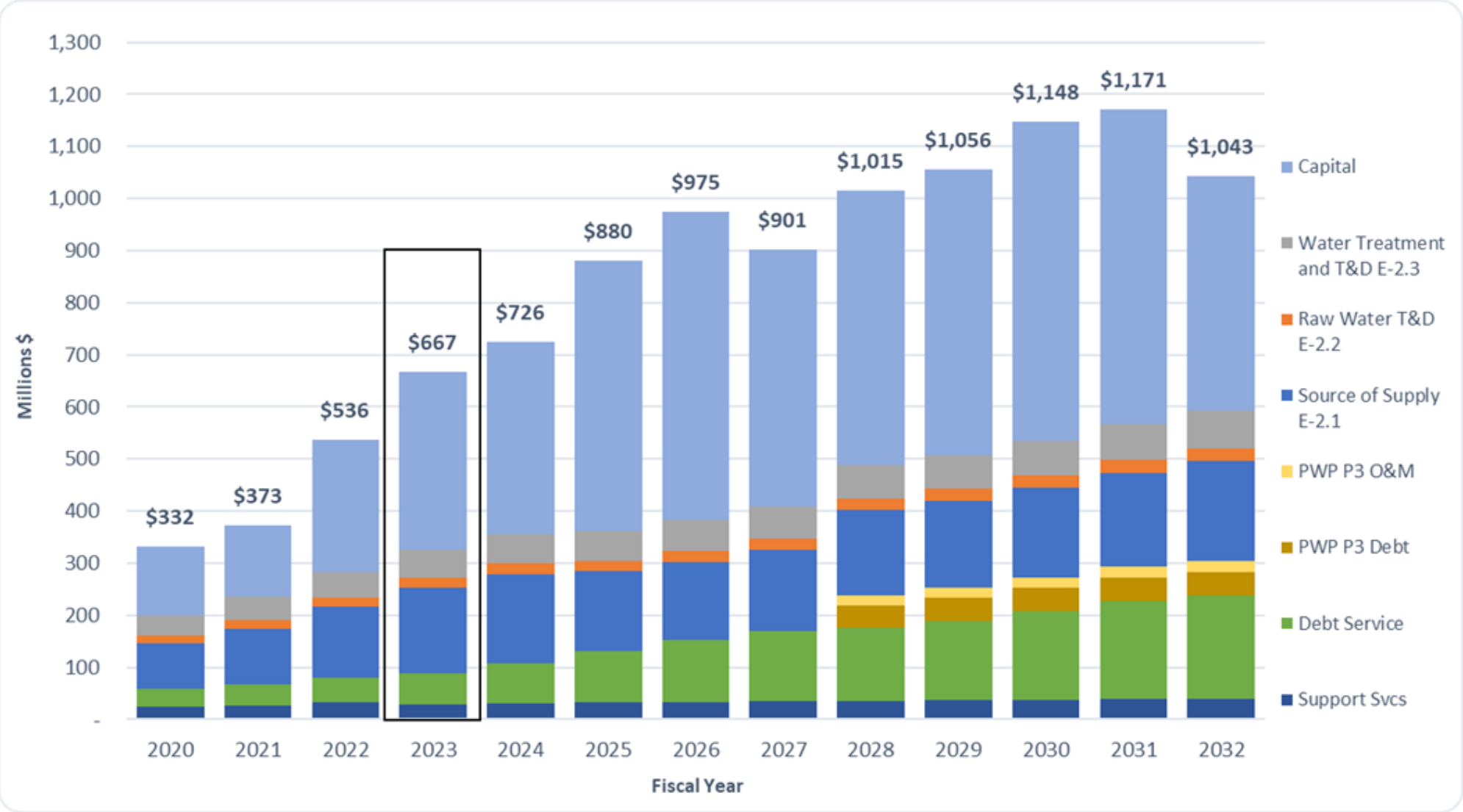


FY23 Water User Scenarios & Water Usage (District Managed)

FY2022-23 Water Use Scenarios (AF) with Various Conservation Levels & Rebounds



Preliminary Cost Projection



Infrastructure Repair and Water Supply Investments Drive Water Rates

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Smart infrastructure investments needed today:

- Critical to providing safe, clean water to Santa Clara County
- Investing now is most cost-efficient way to get critical multi-year projects done

Priority infrastructure investments needed include:

- **Fixing Anderson Dam**
 - Address public health and safety concerns and relieve operational restrictions
- **Upgrading Rinconada Water Treatment Plant**
 - Extend service life of plant for next 50 years and expand plant capacity
- **Building local storage with Pacheco Reservoir Expansion Project**
 - Add water storage to help face extended droughts
- **Expanding Purified Water Project**
 - Provide incremental drought proof water supply

WATER RATE IMPACT MINIMIZATION STRATEGIES:

1. Transfer \$39M unspent funds from PREP to Rate Stabilization Reserve in FY 22; future PREP cost projection adjusted such that Total Project Cost (TPC) is unchanged
2. Leverage available reserves: draw down \$64M total in FY 23 & FY 24 (including \$39M from PREP unspent funds)
3. One-time transfer of \$25M from WSS Fund to Water Utility in FY 23

FY 23 BASELINE CASE ASSUMPTIONS:

- Baseline Projects*
- SWP Tax pays for 100% of SWP costs (excludes SWP portion of Delta Conveyance)
- Delta Conveyance SWP portion at 3.23%
- Los Vaqueros (Transfer Bethany Pipeline)
- Anderson Dam Seismic Retrofit with WIFIA loans (up to 49% of TPC)
- Purified Water Expansion via P3 with operations beginning in FY28
 - Assumes 100% debt financing through P3 entity
- Pacheco Reservoir Expansion Project (PREP) with \$496M Proposition 1 grants, WIFIA loans (up to 49% of TPC) and Partnership Participation at 35% of TPC
- Master Plan Projects Placeholder**: Assumes \$369M from FY23-FY32, mainly after 5 Year CIP

* Includes but not limited to dam seismic retrofits, Rinconada WTP reliability improvement, 10-year pipeline rehabilitation program

** Master Plan Project Placeholder includes anticipated costs for new pipelines, pipeline rehabilitations, treatment plant upgrades & SCADA implementation projects

TPC: Total Project Cost

Preliminary Groundwater Charge Increase Projection

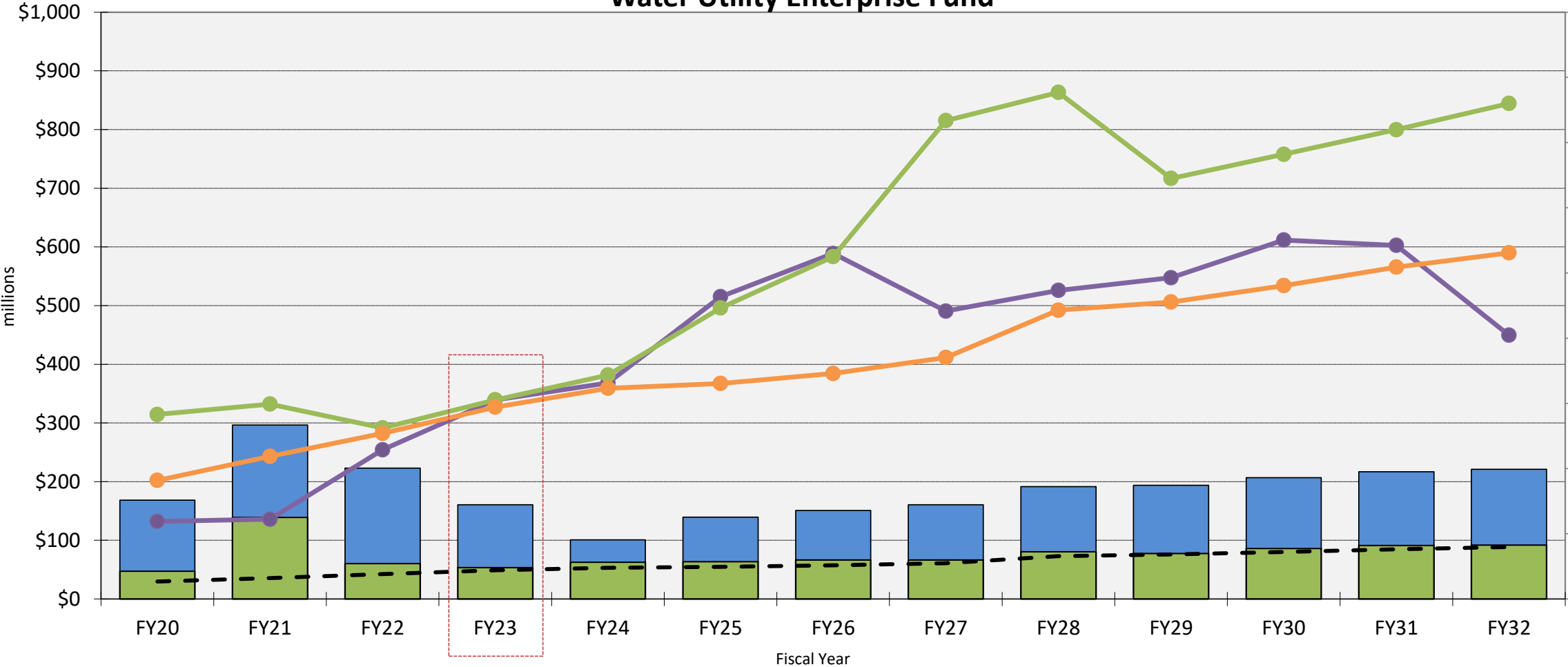
Baseline Scenario

M&I Groundwater Charge Year to Year Growth %

Baseline Scenario 1	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
North County Zone W-2	15%	15%	15%	9.1%	9.1%	9.1%	9.1%	5%	5%	5%
South County Zone W-5	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
South County Zone W-7	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%
South County Zone W-8	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%

Financial Analysis: Preliminary Financial Forecast Overview

Water Utility Enterprise Fund



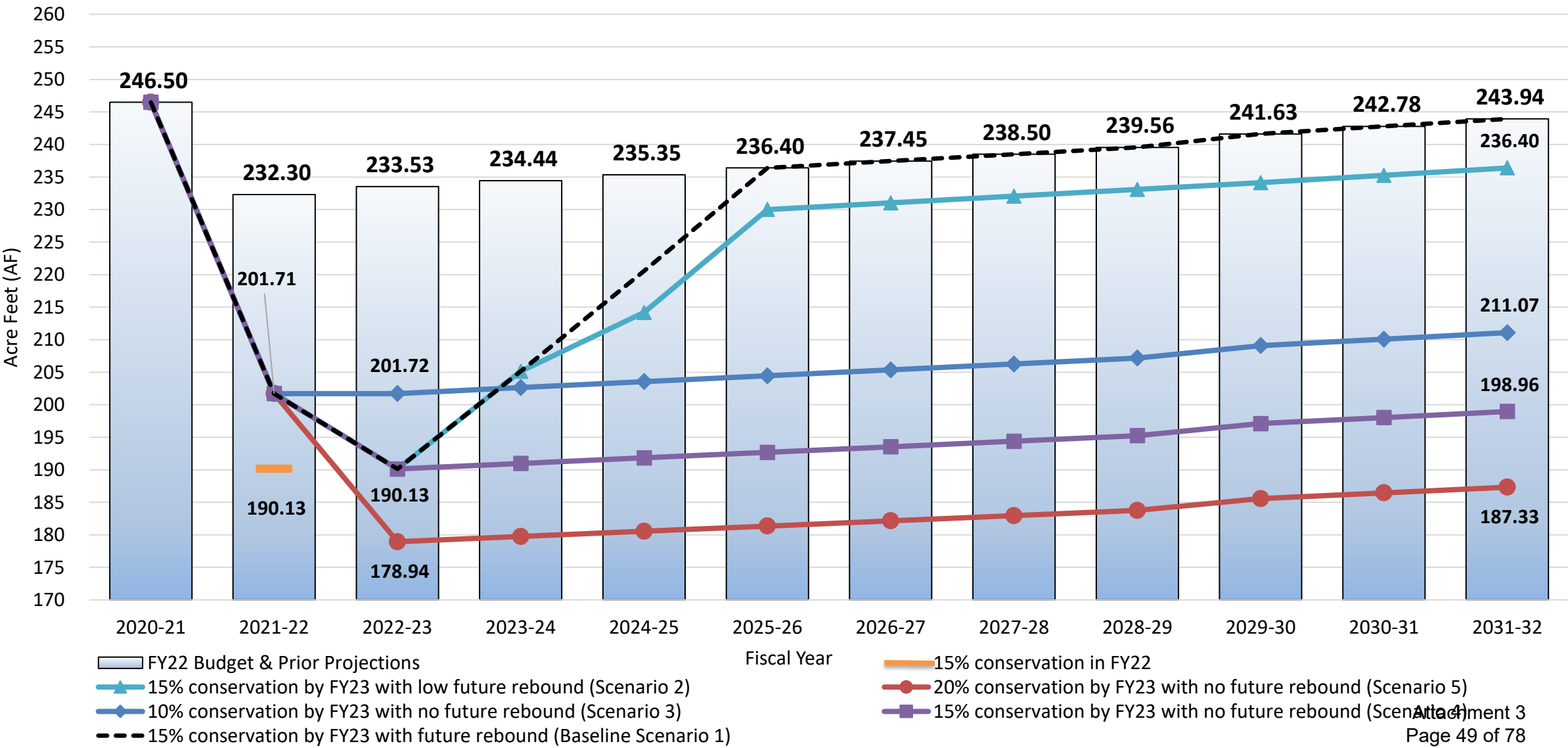
ADDITIONAL FY 23 SCENARIOS:

- | | |
|-------------------|---|
| Scenario 2 | 15% conservation achieved (around 190kAF in FY 2022-23) with Lower Future Rebound
Water use projection grows to 236kAF by FY 2031-32 |
| Scenario 3 | 10% conservation achieved (around 201kAF in FY 2022-23) and No Future Rebound
Water use projection grows to 211kAF by FY 2031-32 |
| Scenario 4 | 15% conservation achieved (around 190kAF in FY 2022-23) and No Future Rebound
Water use projection grows to 199kAF by FY 2031-32 |
| Scenario 5 | 20% conservation achieved (around 179kAF in FY 2022-23) and No Future Rebound
Water use projection grows to 187kAF by FY 2031-32 |

*All scenarios assume annual water use growth of ~ 0.5% based on Urban Water Management Plan.
Financial modeling for Scenarios 2 – 5 includes the same projects and assumptions as Baseline Scenario 1.*

FY23 Water User Scenarios & Water Usage (District Managed)

FY2022-23 Water Use Scenarios (AF) with Various Conservation Levels & Rebounds



Preliminary Groundwater Charge Increase Scenarios

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M&I Groundwater Charge Year to Year Growth %

North County Zone W-2	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Baseline Scenario #1 15% in FY23 returning to prior projection by FY26	15%	15%	15%	9.1%	9.1%	9.1%	9.1%	5%	5%	5%
Scenario #2 15% in FY23 with lower future rebound	15%	15%	15%	9.8%	9.8%	9.8%	9.8%	5.6%	5.6%	5.6%
Scenario #3 10% in FY23 and no future rebound	17%	16.3%	15.3%	13%	13%	13%	13%	5.5%	5.5%	5.5%
Scenario #4 15% in FY23 and no future rebound	21%	21%	16%	12%	12%	12%	12%	6%	6%	6%
Scenario #5 20% in FY23 and no future rebound	22.5%	22.5%	18.5%	12%	12%	12%	12%	6.2%	6.2%	6.2%

Preliminary Monthly Impact to Average Household Scenarios

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M&I Groundwater Charge – Monthly impact to Average Household

North County Zone W-2	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Baseline Scenario #1 15% in FY23 returning to prior projection by FY26	\$7.75	\$8.91	\$10.24	\$7.15	\$7.80	\$8.51	\$9.28	\$5.56	\$5.84	\$6.13
Scenario #2 15% in FY23 with lower future rebound	\$7.75	\$8.91	\$10.24	\$7.70	\$8.45	\$9.28	\$10.19	\$6.39	\$6.75	\$7.13
Scenario #3 10% in FY23 and no future rebound	\$8.78	\$9.85	\$10.75	\$10.53	\$11.90	\$13.45	\$15.19	\$7.26	\$7.66	\$8.09
Scenario #4 15% in FY23 and no future rebound	\$10.85	\$13.12	\$12.09	\$10.52	\$11.79	\$13.20	\$14.78	\$8.28	\$8.78	\$9.30
Scenario #5 20% in FY23 and no future rebound	\$11.61	\$14.23	\$14.33	\$11.01	\$12.34	\$13.82	\$15.47	\$8.95	\$9.51	\$10.10

Note: Does not include any increase that a retailer would layer on top

M&I Groundwater Charge Year to Year Growth %

South County Zone W-5	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Baseline Scenario #1 15% in FY23 returning to prior projection by FY26	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
Scenario #2 15% in FY23 with lower future rebound	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%
Scenario #3 10% in FY23 and no future rebound	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Scenario #4 15% in FY23 and no future rebound	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Scenario #5 20% in FY23 and no future rebound	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%

Preliminary Monthly Impact to Average Household Scenarios

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M&I Groundwater Charge – Monthly impact to Average Household

South County Zone W-5	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Baseline Scenario #1 15% in FY23 returning to prior projection by FY26	\$0.86	\$0.92	\$0.97	\$1.02	\$1.07	\$1.13	\$1.18	\$1.25	\$1.31	\$1.38
Scenario #2 15% in FY23 with lower future rebound	\$0.90	\$0.96	\$1.01	\$1.06	\$1.12	\$1.18	\$1.24	\$1.31	\$1.38	\$1.46
Scenario #3 10% in FY23 and no future rebound	\$1.00	\$1.07	\$1.13	\$1.20	\$1.27	\$1.35	\$1.43	\$1.52	\$1.61	\$1.70
Scenario #4 15% in FY23 and no future rebound	\$1.08	\$1.16	\$1.24	\$1.32	\$1.40	\$1.50	\$1.59	\$1.70	\$1.81	\$1.92
Scenario #5 20% in FY23 and no future rebound	\$1.26	\$1.35	\$1.46	\$1.57	\$1.68	\$1.81	\$1.94	\$2.09	\$2.25	\$2.42

Preliminary Groundwater Charge Increase Scenarios

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M&I Groundwater Charge Year to Year Growth %

South County Zone W-7	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Baseline Scenario #1 15% in FY23 returning to prior projection by FY26	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%
Scenario #2 15% in FY23 with lower future rebound	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%
Scenario #3 10% in FY23 and no future rebound	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
Scenario #4 15% in FY23 and no future rebound	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%
Scenario #5 20% in FY23 and no future rebound	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%

Preliminary Monthly Impact to Average Household Scenarios

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M&I Groundwater Charge – Monthly Impact To Average Household

South County Zone W-7	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Baseline Scenario #1 15% in FY23 returning to prior projection by FY26	\$1.86	\$2.07	\$2.28	\$2.51	\$2.77	\$3.06	\$3.37	\$3.72	\$4.10	\$4.53
Scenario #2 15% in FY23 with lower future rebound	\$1.93	\$2.13	\$2.36	\$2.61	\$2.89	\$3.19	\$3.53	\$3.91	\$4.32	\$4.78
Scenario #3 10% in FY23 and no future rebound	\$2.12	\$2.38	\$2.66	\$2.97	\$3.31	\$3.70	\$4.13	\$4.62	\$5.16	\$5.76
Scenario #4 15% in FY23 and no future rebound	\$2.29	\$2.58	\$2.91	\$3.27	\$3.69	\$4.15	\$4.67	\$5.26	\$5.93	\$6.67
Scenario #5 20% in FY23 and no future rebound	\$2.63	\$3.02	\$3.46	\$3.96	\$4.54	\$5.19	\$5.95	\$6.81	\$7.80	\$8.93

Preliminary Groundwater Charge Increase Scenarios

M&I Groundwater Charge Year To Year Growth %

South County Zone W-8	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Baseline Scenario #1 15% in FY23 returning to prior projection by FY26	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Scenario #2 15% in FY23 with lower future rebound	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Scenario #3 10% in FY23 and no future rebound	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%
Scenario #4 15% in FY23 and no future rebound	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%
Scenario #5 20% in FY23 and no future rebound	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%

Preliminary Monthly Impact to Average Household Scenarios

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M&I Groundwater Charge – Monthly Impact To Average Household

South County Zone W-8	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Baseline Scenario #1 15% in FY23 returning to prior projection by FY26	\$0.93	\$1.02	\$1.10	\$1.18	\$1.28	\$1.38	\$1.49	\$1.61	\$1.74	\$1.88
Scenario #2 15% in FY23 with lower future rebound	\$0.93	\$1.02	\$1.10	\$1.18	\$1.28	\$1.38	\$1.49	\$1.61	\$1.74	\$1.88
Scenario #3 10% in FY23 and no future rebound	\$1.05	\$1.15	\$1.26	\$1.37	\$1.49	\$1.63	\$1.77	\$1.93	\$2.11	\$2.30
Scenario #4 15% in FY23 and no future rebound	\$1.07	\$1.17	\$1.27	\$1.39	\$1.52	\$1.65	\$1.80	\$1.97	\$2.15	\$2.34
Scenario #5 20% in FY23 and no future rebound	\$1.14	\$1.26	\$1.39	\$1.52	\$1.67	\$1.84	\$2.02	\$2.21	\$2.43	\$2.67

11/23/21 Board Analysis Request re: PREP

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Background:

- Timing of planned expenditures for PREP has changed
- Estimated Year-End FY 22 budget unspent = \$39M

Staff Proposal:

- No change to multi-year PREP total project cost
- Transfer \$39M near-term unspent to Rate Stabilization Reserve in FY 22
- Adjust future PREP cost projection in CIP such that total project cost is unchanged
- Draw down Rate Stabilization Reserve in FY 23 and FY 24 to soften rate impact
- Counts as revenue for purposes of Debt Service Coverage Calculation
 - Would be reflected in PAWS report

PREP = Pacheco Reservoir Expansion Project, PAWS = Protection and Augmentation of Water Supplies

11/23/21 Board Analysis Request re: PREP, continued

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NORTH COUNTY W-2 GROUNDWATER CHARGE IMPACT

With \$39M Transfer

	FY 23	FY 24	FY 25
Annual % Rate Increases	15%	15%	15%
Debt Service Coverage Ratio	1.75	1.77	2.17

Without \$39M Transfer

	FY 23	FY 24	FY 25
Annual % Rate Increases	15%	15%	15%
Debt Service Coverage Ratio	1.01	1.77	2.17

Without \$39M Transfer + adjust rates

	FY 23	FY 24	FY 25
Annual % Rate Increases	21%	17.5%	7.7%
Debt Service Coverage Ratio	1.75	1.77	2.24

*Staff-proposed
\$39M transfer helps soften
rate increases in FY 23 and
FY 24*

PREP = Pacheco Reservoir Expansion Project

11/23/21 Board Analysis Request re: PREP, continued

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TOP 5 WATER UTILITY CAPITAL PROJECTS WITH ESTIMATED FY22 UNSPENT:

Water Utility Capital Project	Estimated FY 22 Unspent	Estimated FY 23 Planned Expenditure/(Budget)
Pacheco Reservoir Expansion	\$39.4M	\$30.8M/(\$0.0M)*
South County Recycled Water Pipeline (Short Term 1B)	\$8.7M	\$15.9M/(\$7.2M)
RWTP Reliability Improvement	\$8.3M	\$14.3M/(\$6.0M)
RWTP Residuals Management	\$5.3M	\$0.5M/(\$0.0M)
Capital Warranty Services	\$5.3M	\$1.0M/(\$0.0M)

* If Board approves \$39M transfer to rate stabilization reserve, then FY 23 budget for Pacheco Reservoir Expansion would be \$31.2M instead of \$0.0M

PREP = Pacheco Reservoir Expansion Project

Other Charges, Taxes, Reserves Information

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	FY 2022	FY 2023	FY 2024
<u>Other Charges</u>	<u>Budget</u>	<u>Projection</u>	<u>Projection</u>
Contract TW Surcharge (\$/AF)	\$115.00	\$115.00	\$115.00
Non-contract TW Surcharge (\$/AF)	\$200.00	\$200.00	\$200.00
Surface Water Master Charge (\$/AF)	\$40.90	\$46.70	\$53.30
Agricultural Groundwater Charge (\$/AF)	\$34.15	\$36.85	\$39.80
<u>SWP Tax</u>			
Revenue	\$26M	\$27M	\$28M
Cost per average household	\$40/Yr	\$41/Yr	\$42/Yr
<u>Reserves</u>			
Supplemental Water Reserve	\$7.9M	\$5.3M	\$2.7M
Drought Reserve	\$10.0M	\$0M	\$0M
Rate Stabilization Reserve	\$55.5M	\$42.5M	\$7.5M
Operating and Capital Reserve	\$60.6M	\$53.7M	\$62.7M

2022 Schedule

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Jan 3	Ag Water Advisory Committee
Jan 11	Board Meeting: Preliminary Groundwater Charge Analysis
Jan 19	Water Retailers Meeting: Preliminary Groundwater Charge Analysis
Jan 26	Water Commission Meeting: Prelim Groundwater Charge Analysis
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Feb 8	Board Meeting: Set time & place of Public Hearing
Feb 25	Mail notice of public hearing and file PAWS report
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Mar 8	Board Meeting: Budget development update
Mar 16	Water Retailers Meeting: FY 23 Groundwater Charge Recommendation
Mar TBD	Landscape Committee Meeting
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Apr 4	Ag Water Advisory Committee
Apr TBD	Water Commission Meeting
Apr 12	Open Public Hearing
Apr 14	Continue Public Hearing in South County
Apr 26	Conclude Public Hearing
Apr 27-28	Board Meeting: Budget work study session
<hr/>	
May 10	Adopt budget & groundwater production and other water charges

Key Drivers for Water Rate Increases:

- Emergency water purchases to ensure water supply for Silicon Valley and preparing for ongoing drought over next 2 years
- Smart infrastructure investments needed today:
 - Investing now is most cost-efficient way to get critical multi-year projects done

Valley Water is leveraging all available tools to minimize rate impacts now

- Continue to reassess drought status & recovery for future year rate impacts

Seeking Board direction on following issues to be incorporated into Report on Protection and Augmentation of Water Supplies (PAWS) scheduled for February 25, 2022

- Rate Impact Minimization Strategies
- Water Use projection scenarios



BOARD ACTIONS TODAY

1. Review and approve Fiscal Year 2023-2027 (FY 23-27) Preliminary CIP list of projects.
2. Discuss and provide direction on the preliminary FY 2022-23 (FY 23) Groundwater Production Charge analysis prepared by staff.



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INFORMATION ONLY
(Presented if Requested)
Summary of All Project Plan Updates

OVERVIEW

- **3 Projects** had changes to **Scope, Schedule and Cost**
- **2 Projects** had changes to **Scope and Cost**
- **15 Projects** had changes to **Schedule (Completion Date) and Cost**
- **7 Projects** had changes to **Schedule (Phase Only) and Cost**
- **7 Projects** had changes to **Schedule (Phase Only) – TPC changes due to inflation**
- **4 Project** had changes to **Schedule (Completion Date) – TPC changes due to inflation**
- **2 Projects** had changes to **Cost Only**
- **3 Projects** had changes due to **Small Capital Forecast Revisions**
- **2 Placeholder Projects** had changes due to **Administrative Updates**

Changes to Scope, Schedule and Cost

68

Water Supply (Recycled Water Facilities):

1. 91094009 South County Recycled Water Pipeline (Short Term 1B): TPC increased by \$2.717M/ Schedule extended by 2 years/Scope change

Flood Protection (Lower Peninsula Watershed):

2. 10394001 Palo Alto Flood Basin Tide Gate Structure Replacement: Scope change/Project Schedule extended by 3 months/ TPC increased by \$1.041M

Water Resources Stewardship (Coyote Watershed):

3. 26044003 Ogier Ponds Separation from Coyote Creek Planning & Design Project: TPC increased by \$2.115M/Schedule extended by 1 year/Scope change

.

Changes to Scope and Cost

69

Water Supply (Storage Facilities):

1. 91864005 Anderson Dam Seismic Retrofit: Scope change resulted in TPC increase by \$588.75M

Information Technology:

2. 73274008 Software Upgrades and Enhancements Project: Scope change/TPC decreased by \$1.384M

Changes to Schedule (Completion Date) and Cost

70

Water Supply (Transmission Facilities):

1. 95044001 Distribution Systems Implementation: TPC increased by \$1.048M/Schedule extended by 2 years
2. 92144001 Pacheco/Santa Clara Conduit ROW Acquisition: TPC increased by \$849K

Water Supply (Treatment Facilities):

3. 93294051 RWTP Residuals Management: TPC increased by \$1.916M/Schedule extended by 3 years
4. 93294057 RWTP Reliability Improvement: Schedule extended by 1 year/TPC increased by \$101.8M
5. 93044001 WTP Implementation: TPC increased by \$1.319M/Schedule extended by 2 years

Water Supply (Recycled Water Facilities):

6. 91304001 Purified Water: TPC increased by \$113.185M/Schedule extended by 1 years
7. 91094010 South County Recycled Water Pipeline (Short Term 2): TPC increased by \$791K/Schedule extended by 2 years

Changes to Schedule (Completion Date) and Cost

71

Flood Protection (Lower Peninsula Watershed):

8. 26244001 Permanente Creek, SF Creek to Foothill Expwy: Schedule extended by 3 years/TPC decreased by \$3.702M
9. 10244001 Permanente Creek, SF Bay to Foothill Expwy: Schedule extended by 2 years/TPC increased by \$787K
10. 26284002 San Francisquito Creek (Construction SF Bay to Middlefield Rd.): Schedule extended by 4 years/TPC increased by \$12.605M

Flood Protection (Coyote Watershed):

11. 26174041 Berryessa Creek, Calaveras to I-680 Corps: Schedule extended by 3 years/TPC increased by \$768K
12. 40174004 Lower Berryessa Creek Phase 1: Schedule extended by 1 year/TPC increased by \$83K
13. 40334005 Lower Penitencia Creek (Berryessa to Coyote Creeks): Schedule extended by 1 year/TPC increased by \$6.892M

Flood Protection (Uvas Llagas Watershed):

14. 26044004 Bolsa Road Fish Passage Improvements: Schedule extended by 3 years/TPC decreased by \$70K

Flood Protection (Multiple Watersheds):

15. 20444001 Salt Ponds Restoration Project: Schedule extended by 3 years/TPC increased by \$4.88M

Changes to Schedule (Phase Only) and Cost

72

Water Supply (Storage Facilities):

1. 91234002 Coyote Pumping Plant ASD Replacement: TPC increased by \$11.773M
2. 91234011 Coyote Warehouse: TPC increased by \$61K

Water Supply (Transmission Facilities):

3. 92304001 Almaden Valley Pipeline Replacement: TPC increased by \$20.569M
4. 26764001 IRP2 (Infrastructure Reliability Plan) Additional Line Valves: TPC increased by \$4.540M
5. 92264001 Vasona Pump Station Upgrades: TPC decreased by \$1.476M

Water Supply (Treatment Facilities):

6. 93294058 RWTP Residuals Remediation: TPC increased by \$9.163M

Flood Protection (Multiple Watersheds):

7. 00044026 South San Francisco Bay Shoreline Project EIA 11: Decreased by \$38.77M

Changes to Schedule (Phase Only) – TPC changes due to Inflation

73

Water Supply (Storage Facilities):

1. 91854001 Almaden Dam Improvements: TPC decreased by \$1.295M
2. 91084020 Calero and Guadalupe Dams Seismic Retrofits (Planning only): TPC increased by \$99K
3. 91894002 Guadalupe Dam Seismic Retrofit – Design & Construction: TPC decreased by \$1.939M
4. 91954002 Pacheco Reservoir Expansion: TPC decreased by \$58.177M

Water Supply (Transmission Facilities):

5. 95084002 10-Year Pipeline Rehabilitation: TPC decreased by \$1.051M
6. 95044002 SCADA Implementation: TPC decreased by \$10K
7. 94084007 Treated Water Isolation Valves: TPC decreased by \$181K

Changes to Schedule (Completion Date) – TPC changes due to inflation 74

Flood Protection (Guadalupe Watershed):

1. 30154019 Guadalupe River Tasman Drive to I-880: Schedule extended by 2 years/TPC increased by \$3.262M

Water Resources Stewardship (Lower Peninsula Watershed):

2. 26164001 Hale Creek Enhancement Pilot Study: TPC increased by \$115K

Information Technology:

3. 73274009 Data Consolidation Project: Schedule extended by 2 years/TPC increased by \$39K
4. 73274001 IT Disaster Recovery Project: Schedule extended by 2 years/ TPC increased by \$3K

Changes to Cost Only

75

Flood Protection (Coyote Watershed):

1. 40174005 Berryessa Ck, Lower Pen Ck to Calaveras Blvd. Phase 2: TPC increased by \$1.502M

Flood Protection (Uvas Llagas Watershed):

2. 26174051 Upper Llagas Creek (LERRDs Reimbursable): TPC increased by \$3.045M

Small Capital Forecast Revisions

76

Water Supply (Storage Facilities):

1. 91214010 Small Capital Improvements, San Felipe Reach 1: TPC decreased by \$3.973M

Water Supply (Treatment Facilities):

2. 93764004 Small Capital Improvements, Water Treatment: TPC decreased by \$2.550M

Flood Protection (Multiple Watersheds):

3. 62084001 Watersheds Asset Rehabilitation Project (WARP): TPC decreased by \$8.849M

The forecasts are revised each year. Asset rehabilitation projects are added, removed, and rescheduled based on asset condition and project need. In addition, project costs are updated each year based on market conditions. These revisions to both schedule and costs cause several minor changes in expected expenditures over the forecasted period. It's not a single asset rehabilitation project that leads to the change, but rather the cumulative total of multiple changes.

Administrative Updates to Placeholder Projects

77

Water Supply (Transmission Facilities):

1. 92C40357 FAHCE Implementation: Schedule Only

Since the two creeks FAHCE EIR is still being finalized and agency permitting will also be required, the FAHCE implementation project planned expenditures were moved to begin in FY25. Additionally, after consulting with the project team, the \$90M for Phases 2 and 3 of FAHCE Implementation were spread out evenly over out years to better align with the FAHCE settlement agreement.

Water Resources Stewardship (Coyote Watershed):

2. 00C40400s Watershed Habitat Enhancement Design & Construction: Schedule and planned expenditure

This project is included in the CIP as a placeholder project to provide for future design and construction of possible habitat enhancements that may occur at Metcalf Ponds (95C40400 Project 1 Design & Construction (e.g. Metcalf Ponds): \$29.66M); and to provide funding for possible future construction at Ogier Ponds (95C40401/62C40402 Ogier Ponds – Construction: \$36.59M (\$18.295 from Fund 61 and \$18.295 from Fund12)). Since the Ogier Ponds Project is potentially being planned for future construction as a conservation measure for the Anderson Dam Seismic Retrofit Project and additional funding will likely be required; \$10M was shifted from the Watershed Habitat Enhancement Design & Construction placeholder project to the Ogier Ponds placeholder project (Fund 61 - 95C40401). The remaining planned funding for the Watershed Habitat Enhancement Design & Construction placeholder project totals \$19.66M and the new planned funding for Ogier Ponds totals \$46.59M.



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