

Preliminary FY 2020-2024 Capital Improvement Program (CIP) and Groundwater Charges

Board of Directors
Work Study Session
January 8, 2019



Preliminary FY 2020-24 CIP and Groundwater Charges - Board Actions Today

1. Review and approve FY 2020-24 Preliminary CIP list of projects.
2. Discuss and provide direction on the preliminary FY 2019-20 Groundwater Production Charge analysis prepared by staff.

Preliminary FY 2020-24 CIP and Groundwater Charges - Presentation Outline

1. Annual CIP Process
2. Preliminary FY 2020-24 CIP
 - A. Project Categories
 - B. Completed and Proposed Projects
3. Groundwater Charges and Funding Scenarios
 - A. Water Use
 - B. Financial Analysis
 - i. FY 20 Analysis Scenario Assumptions
 - ii. Scenarios
 - iii. Other Information
 - C. Schedule

Annual CIP Process Overview



Preliminary FY 2020-24 CIP Review

CIP Committee – 2018 Activities

CIP Committee 2018 Workplan

		<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
CIP Implementation												
10 Year Pipeline	N o M e e t i n g			X		N o M e e t i n g						
Long Term Purified Water		X										
Public Private Partnership (P3) Delivery for capital projects												
So Co Recycled Water Pipeline					X							
Calero & Guadalupe Dams								X				
Safe, Clean Water Projects									X			
Implementation Regulatory Permits												
Coyote Watershed Presentation on												
Design-Build												
Project Labor Agreement												
Large Construction Projects - Lessons Learned												X
Calero Dam Seismic Upgrade and Water Reliability Analysis												X
Anderson Dam Improvements Update												
Capital Project Monitoring												
Construction			X				X			X		
Design				X				X			X	
Planning / Feasibility					X				X			X
Upcoming Consultant Agreements and Amendments				X						X		X
CIP Development												
Project ranking criteria										X	X	X
Preliminary CIP											X	X
Criteria for Ranking Stewardship Projects							X					
Project w/ Environmental Justice Prioritization Criteria								X				

Project Categories

► **Projects in the CIP fall under one or more of the following categories*:**

- A. Regulatory requirements (6 projects)
- B. Repair or replacement of aging infrastructure (29 projects)
- C. District commitment [Safe Clean Water (SCW); Fish and Aquatic Habitat Collaborative Effort (FAHCE)] (21 projects)
- D. Water Supply Master Plan “No Regrets” Option (0 projects)
- E. Board Policy (9 projects)
- F. Discretionary projects as directed by the Board (7 projects)

* Projects that fall into multiple categories are only counted once

A. Regulatory Requirements

Key Projects

- ▶ Anderson, Calero and Guadalupe Dams' Seismic Retrofits
- ▶ SMP Mitigation, Stream & Watershed Land Preservation



B. Repair or Replacement of aging infrastructure

- ▶ **Key Projects**
- ▶ 10-Year Pipeline Rehabilitation
- ▶ Main & Madrone Pipeline Rehabilitation
- ▶ RWTP Reliability Improvements
- ▶ Palo Alto Flood Basin Tide Gate Structure Improvements
- ▶ Watershed Asset Rehabilitation
- ▶ Enterprise Resource Program (ERP) System Improvements



C. District Commitment (SCW, FAHCE)

Key Projects

- ▶ IRP2 Additional Line Valves
- ▶ Permanente Creek, SF Bay to Foothill Expy.
- ▶ San Francisquito Creek, SF Bay to Searsville Dam
- ▶ Coyote Creek, Montague Expy to Tully Rd.
- ▶ Llagas Creek – Upper, Buena Vista to Llagas Rd.
- ▶ Almaden Lake Improvements



D. Water Supply Master Plan “No Regrets”

- ▶ This is a placeholder category for future projects from the Water Supply Master Plan



E. Board Policy

Key Projects

- ▶ Pacheco Reservoir Expansion Project
- ▶ Expedited Purified Water Program
- ▶ Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd
- ▶ Cunningham Flood Detention Certification



F. Discretionary projects as directed by the Board

- ▶ **Key Projects**
- ▶ Westside Retailer Interties
- ▶ Watershed Habitat Design and Construction
- ▶ Employee Workspace Optimization Project



Preliminary FY 2020-24 CIP Project Completion

Projects to Close in FY 2019:

▶ Pacheco Conduit Inspection and Rehabilitation	\$9 M
▶ Penitencia Delivery/Force Main Seismic Retrofit	\$35 M
▶ Fluoridation at Water Treatment Plants	\$10 M
▶ IRP2 WTP Ops Buildings Seismic Retrofit	\$22 M
▶ PWTP Clearwell Recoating and Repair	\$7 M
▶ Wolfe Road Recycled Water Pipeline	\$15 M
▶ Boardroom Technology Upgrade	\$1M
▶ Vena Software Implementation	\$1M
TOTAL	<hr/> \$100 M

Preliminary FY 2020-24 CIP

▶ **New Water Supply Projects:**

- ▶ Pacheco Reservoir Expansion - \$1.345 B
- ▶ Water Treatment Plant Electrical Improvements - \$11M
- ▶ Santa Teresa WTP Filter Media Replacement - \$9.5M

Validated, Unfunded Water Supply Projects

Priority	Validated, Unfunded Water Supply Projects	Est. Cost (\$ Million)
72	Dam Seismic Retrofit at Chesbro & Uvas	\$90 M
71	Long-Term Purified Water Program Elements	\$104 M
62	Long-Term SCADA Improvements	\$20 M
32	So. County Recycled Water New Storage Tank	\$7 M
28	Alamitos Diversion Dam Improvements	\$3 M
28	Coyote Diversion Dam Improvements	\$2 M
25	Land Rights - South County Recycled Water Pipeline	\$6 M
	TOTAL	\$232 M

Preliminary FY 2020-24 CIP

New Flood Protection & Water Resources Stewardship Projects:

- ▶ Los Gatos Creek Restoration and Flood Protection Project (planning design Partial const) - \$8 M
- ▶ Lower Guadalupe River Freeboard Restoration (Montague Expy. to Trimble Rd.) (planning) - \$5 M
- ▶ Ogier Ponds (planning) - \$3 M

Priority	Unfunded Flood Protection Projects	Est. Cost (\$M)
59	Lower Guadalupe River Freeboard Restoration (Montague Expy. to Trimble Rd.) Design and Construction	\$54 M
59	Los Gatos Creek Restoration and Flood Protection Project	\$22 M
	Total Project Costs	\$ 76 M

Preliminary FY 2020-24 CIP

New Buildings & Grounds and Information Technology Projects:

- ▶ Employee Workspace Optimization (planning) \$2M
- ▶ Telephone System Voiceover Internet Protocol \$1M

Validated, Unfunded Buildings & Grounds and Information Technology Projects:

- ▶ Fleet/Facility Annex Improvements \$5M
- ▶ Employee Workspace Optimization (design/const) \$16M

Preliminary FY 2020-24 CIP Capital Reimbursements

Total Capital Reimbursements \$280M

**Reimbursements anticipated to be received between
FY-20 and FY-24: \$135M**

- ▶ Grants and Cost Share including Measure AA: \$95M
- ▶ State Subvention Reimbursements: ~\$40M

State Subvention Reimbursements:

- Project must be federally authorized, then appropriated through State budget process
- Subventions reimburses 50% -100% of local share
- The Board has reserved the authority to determine which projects will be funded by subventions

State Subvention Reimbursements

State Flood Control Subventions Program

- Safe Clean Water Subventions previously designated to remain in SCW Fund
- Watershed/Stream Stewardship Fund Remaining subventions funding \$1.7M
 - Projects previously designated to receive subventions allocations:

Project	Amount
Lower Penitencia	\$7M
Lake Cunningham	\$3M ✓
Lower Silver Creek	\$11M ✓
Llagas Ck Lower – Capacity	\$3.7M
Pond A8 Design & Construction	\$2.4M ✓

✓ = Funds Spent in Prior Years

Preliminary FY 2020-24 CIP -Summary of Project Costs

	Appropriated /Actual thru FY-19	Remaining Cost to Completion	Total Project Costs
Water Supply	\$506 M	\$3,084 M	\$3,591 M
Flood Protection	\$786 M	\$580 M	\$1,367 M
Stewardship	\$33 M	\$128 M	\$161 M
Buildings/Grounds	\$2 M	\$51 M	\$54 M
Information Technology	\$15 M	\$37 M	\$52 M
TOTAL CIP	\$1,342M	\$3,882 M	\$5,224 M

Annual CIP Process Overview



Preliminary FY 20 Groundwater Production Charge Analysis

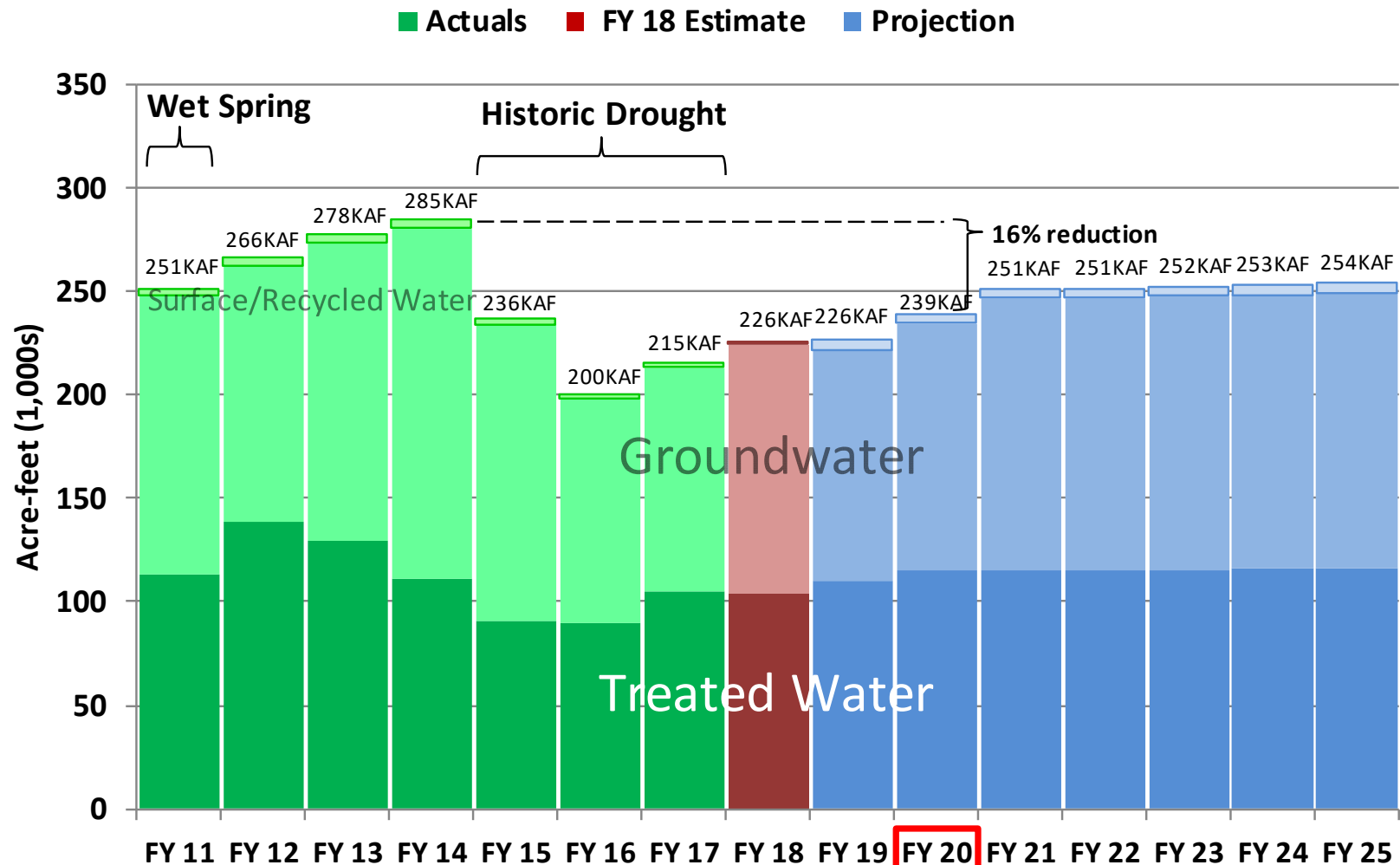
January 8, 2019



Presentation Outline

1. Water Use
2. Financial Analysis
 - ▶ FY 20 Analysis Scenario Assumptions
 - ▶ Scenarios
 - ▶ Other Information
3. Schedule

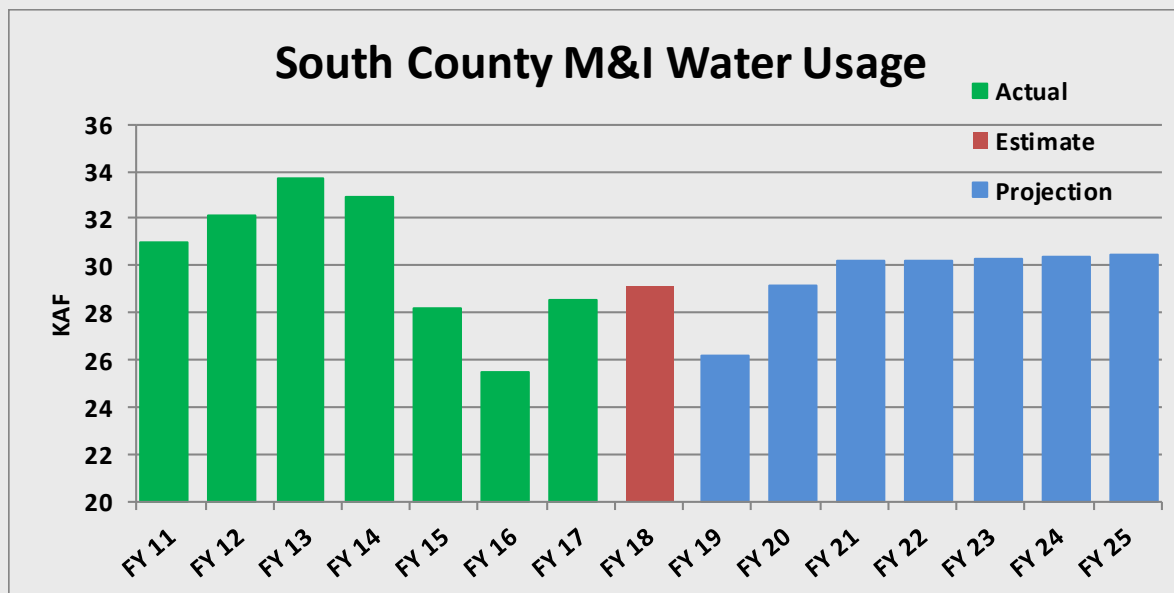
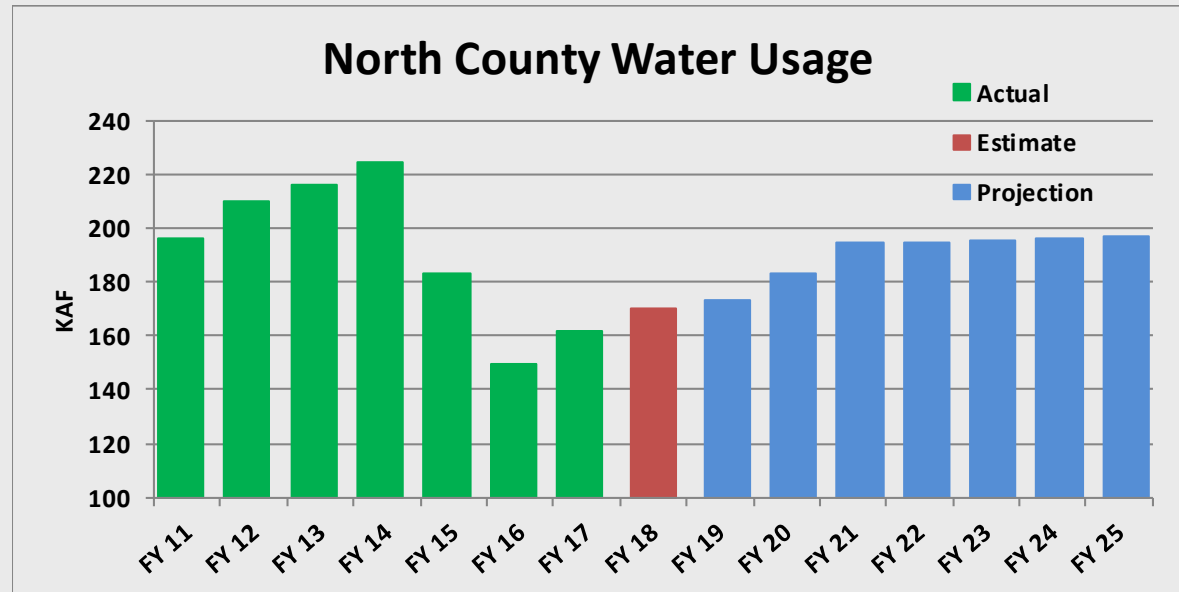
Water Usage (District Managed)



Note: FY 19 refers to fiscal year 2018-19

Water Usage Trend by Zone

North County Water Usage includes Groundwater, Treated Water, & Surface Water



South County Water Usage includes Groundwater, Surface Water & Recycled Water

Financial Analysis: Scenario Assumptions

1) WSMP 90% Level Of Service

- ▶ Baseline Projects
- ▶ CWF (State side)
 - ▶ Paid for by water charges, not SWP Tax
- ▶ CWF (CVP side)
- ▶ No Regrets Package
- ▶ Potable Reuse Phase 1 to produce 24KAF by FY 28
 - ▶ Based on 690M capital project, District contributes 30% "pay as you go"
 - ▶ P3 reserve at \$8M in FY 20 growing to \$20M by FY 28
- ▶ Pacheco Reservoir
- ▶ Transfer-Bethany Pipeline
- ▶ South County Recharge
 - ▶ Timing = beyond FY 29

Also Includes:

- ▶ \$200M warranty placeholder for dams & RWTP
- ▶ Guiding Principle #5

2) WSMP 80% Level Of Service

- ▶ Baseline Projects
- ▶ CWF (State side)
 - ▶ Paid for by water charges, not SWP Tax
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- ▶ Pacheco Reservoir paid for by special tax
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- ▶ South County Recharge
 - ▶ Timing = beyond FY 29

Also Includes:

- ▶ \$200M warranty placeholder for dams & RWTP
- ▶ Guiding Principle #5

3) WSMP 80%, Reduce Potable Reuse

- ▶ Baseline Projects
- ▶ CWF (State side)
 - ▶ Paid for by water charges, not SWP Tax
- ~~▶ CWF (CVP side)~~
- ▶ No Regrets Package
- ▶ Potable Reuse Phase 1 to produce 24KAF before FY 40
 - ▶ Based on 345M capital project, District contributes 15% "pay as you go"
 - ▶ Delay remaining \$345M to beyond FY 29
 - ▶ P3 reserve at \$4M in FY 20 growing to \$10M by FY 28
- ▶ Pacheco Reservoir paid for by special tax
- ▶ Transfer-Bethany Pipeline
- ▶ South County Recharge
 - ▶ Timing = beyond FY 29

Also Includes:

- ▶ \$200M warranty placeholder for dams & RWTP
- ▶ Guiding Principle #5

Financial Analysis: Scenario Assumptions

4) WSMP 80%, No CWF, Reduce Potable Reuse

- ▶ Baseline Projects
- ▶ ~~CWF (State side)~~
- ▶ ~~CWF (CVP side)~~
- ▶ No Regrets Package
- ▶ Potable Reuse Phase 1 to produce 24KAF before FY 40
 - ▶ Based on 345M capital project, District contributes 15% "pay as you go"
 - ▶ Delay remaining \$345M to beyond FY 29
 - ▶ P3 reserve at \$4M in FY 20 growing to \$10M by FY 28
- ▶ Pacheco Reservoir paid for by special tax
- ▶ Transfer-Bethany Pipeline
- ▶ South County Recharge
 - ▶ Timing = beyond FY 29

Also Includes:

- ▶ \$200M warranty placeholder for dams & RWTP
- ▶ Guiding Principle #5

5) WSMP 80%, Reduce Potable Reuse, + LV + Sites

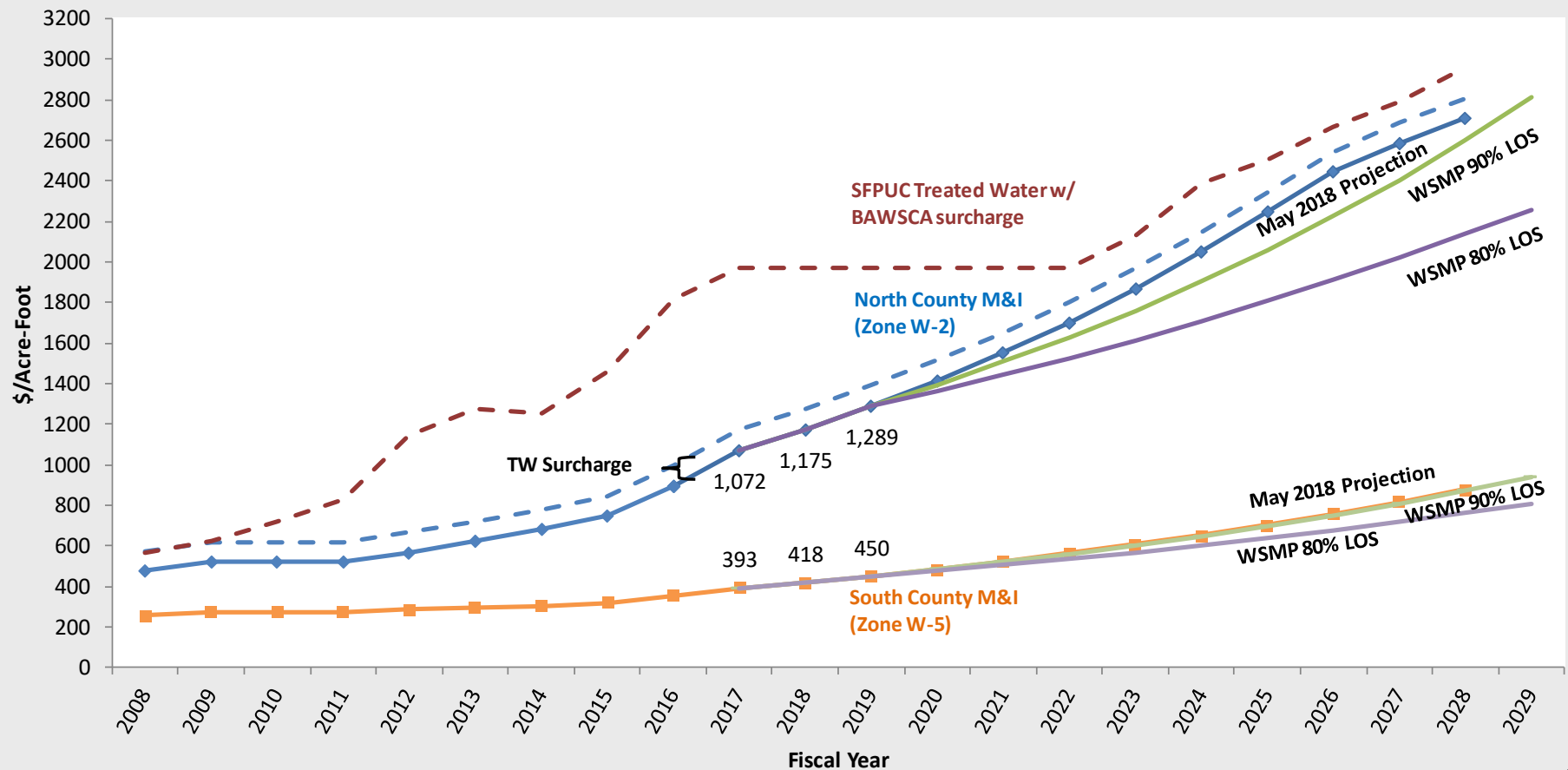
- ▶ Baseline Projects
- ▶ CWF (State side)
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- ▶ Transfer-Bethany Pipeline
- ▶ South County Recharge
 - ▶ Timing = beyond FY 29
- ▶ Sites & Los Vaqueros

Also Includes:

- ▶ \$200M warranty placeholder for dams & RWTP
- ▶ Guiding Principle #5

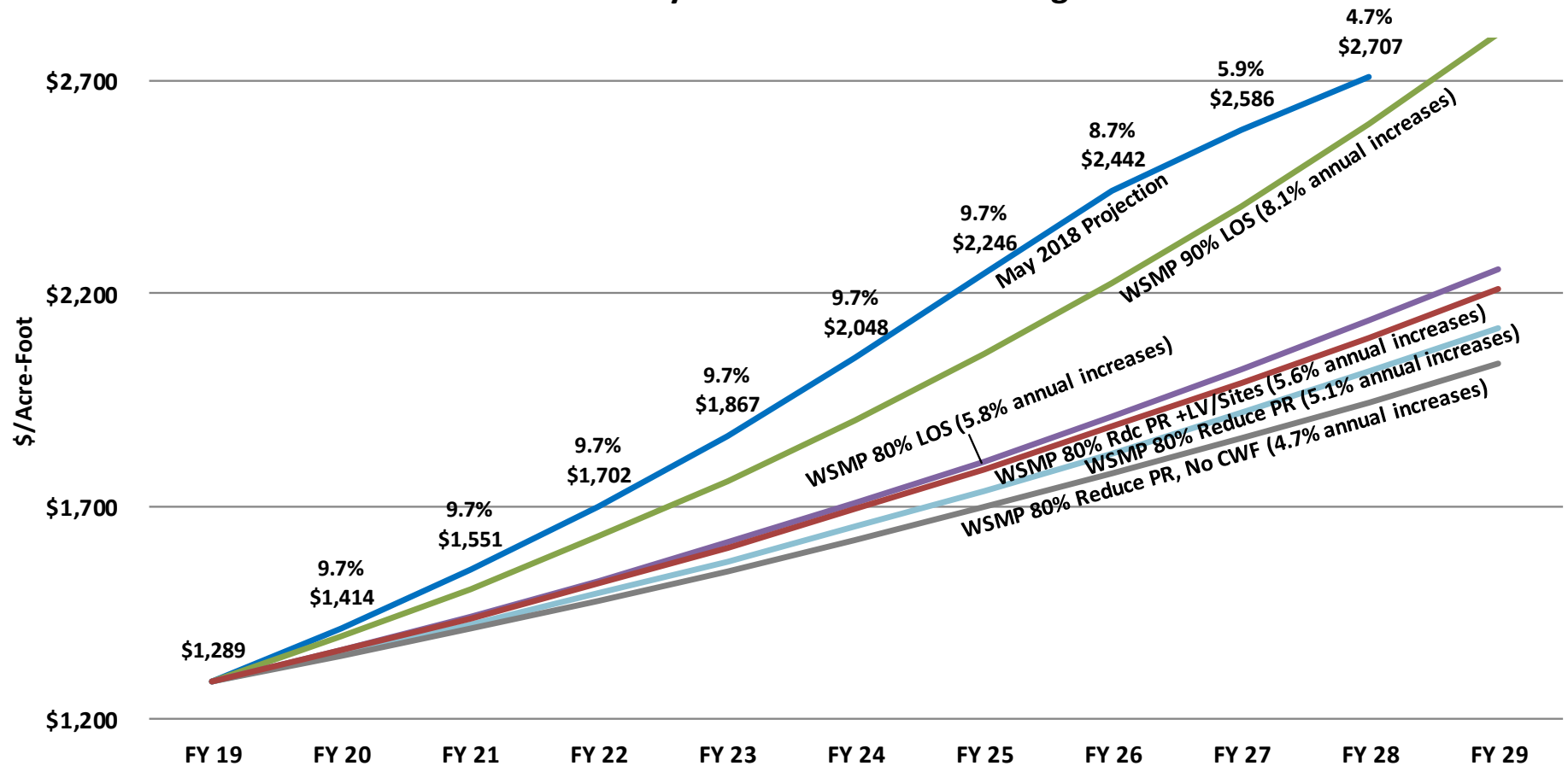
Financial Analysis: Preliminary Groundwater Production Charge Projections

North County M&I Groundwater Charge



Financial Analysis: Preliminary Groundwater Production Charge Projections

North County M&I Groundwater Charge



Financial Analysis: Preliminary Water Supply Investment Scenarios

No. County M&I Groundwater Charge Y-Y Growth %

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
May 2018	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	8.7%	5.9%	4.7%	
WSMP 90% LOS	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%
WSMP 80% LOS	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.6%	5.6%
WSMP 80% Reduce PR	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%
WSMP 80% Rdc PR, No CWF	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.6%	4.6%	4.6%
WSMP 80% Rdc PR, +LV/Sites	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.4%	5.4%	5.4%

So. County M&I Groundwater Charge Y-Y Growth %

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
May 2018	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	
WSMP 90% LOS	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%
WSMP 80% LOS	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%
WSMP 80% Reduce PR	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%
WSMP 80% Rdc PR, No CWF	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%
WSMP 80% Rdc PR, +LV/Sites	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%

Financial Analysis: Preliminary Water Supply Investment Scenarios

No. County Increase per Month per Avg Household*

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
May 2018	\$4.31	\$4.72	\$5.18	\$5.68	\$6.24	\$6.84	\$6.73	\$4.96	\$4.19	
WSMP 90% LOS	\$3.60	\$3.89	\$4.20	\$4.54	\$4.91	\$5.31	\$5.74	\$6.20	\$6.71	\$7.25
WSMP 80% LOS	\$2.57	\$2.72	\$2.88	\$3.05	\$3.23	\$3.41	\$3.61	\$3.82	\$3.90	\$4.12
WSMP 80% Reduce PR	\$2.26	\$2.38	\$2.50	\$2.63	\$2.76	\$2.90	\$3.05	\$3.21	\$3.37	\$3.54
WSMP 80% Rdc PR, No CWF	\$2.09	\$2.18	\$2.29	\$2.39	\$2.51	\$2.63	\$2.75	\$2.82	\$2.95	\$3.08
WSMP 80% Rdc PR, +LV/Sites	\$2.49	\$2.63	\$2.77	\$2.93	\$3.09	\$3.26	\$3.45	\$3.51	\$3.70	\$3.90

So. County Increase per Month per Avg Household*

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
May 2018	\$1.19	\$1.29	\$1.38	\$1.49	\$1.61	\$1.73	\$1.86	\$2.01	\$2.16	
WSMP 90% LOS	\$1.19	\$1.29	\$1.38	\$1.49	\$1.61	\$1.73	\$1.86	\$2.01	\$2.16	\$2.33
WSMP 80% LOS	\$0.95	\$1.00	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.43	\$1.52	\$1.61
WSMP 80% Reduce PR	\$0.98	\$1.04	\$1.10	\$1.17	\$1.25	\$1.33	\$1.41	\$1.50	\$1.59	\$1.69
WSMP 80% Rdc PR, No CWF	\$0.88	\$0.93	\$0.99	\$1.04	\$1.10	\$1.17	\$1.23	\$1.30	\$1.38	\$1.45
WSMP 80% Rdc PR, +LV/Sites	\$1.08	\$1.16	\$1.24	\$1.33	\$1.42	\$1.52	\$1.63	\$1.74	\$1.86	\$1.99

* Calculated based on groundwater production charge

Financial Analysis: Other Information

	FY 2019	FY 2020
<u>Other Charges</u>	<u>Budget</u>	<u>Projection</u>
Contract TW Surcharge (\$/AF)	\$100.00	\$100.00
Non-contract TW Surcharge (\$/AF)	\$100.00	\$100.00
Surface Water Master Charge (\$/AF)	\$35.93	\$37.50
 <u>SWP Tax</u>		
Revenue	\$18M	\$18M
Cost per average household	\$27/Yr	\$27/Yr
 1% Ad Valorem Taxes	\$6.96M	\$7.48M
WU O&M Costs	\$177.6M	\$186.4M (5% increase)
Drought Reserve	\$7.0M	\$7.0M

FY 2019-2020 Schedule

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
Mar 26	Board Meeting: Budget development update
Apr 1	Ag Water Advisory Committee
Apr 2	Landscape Committee Meeting
Apr 9	Open Public Hearing
Apr 10	Water Commission Meeting
Apr TBD	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

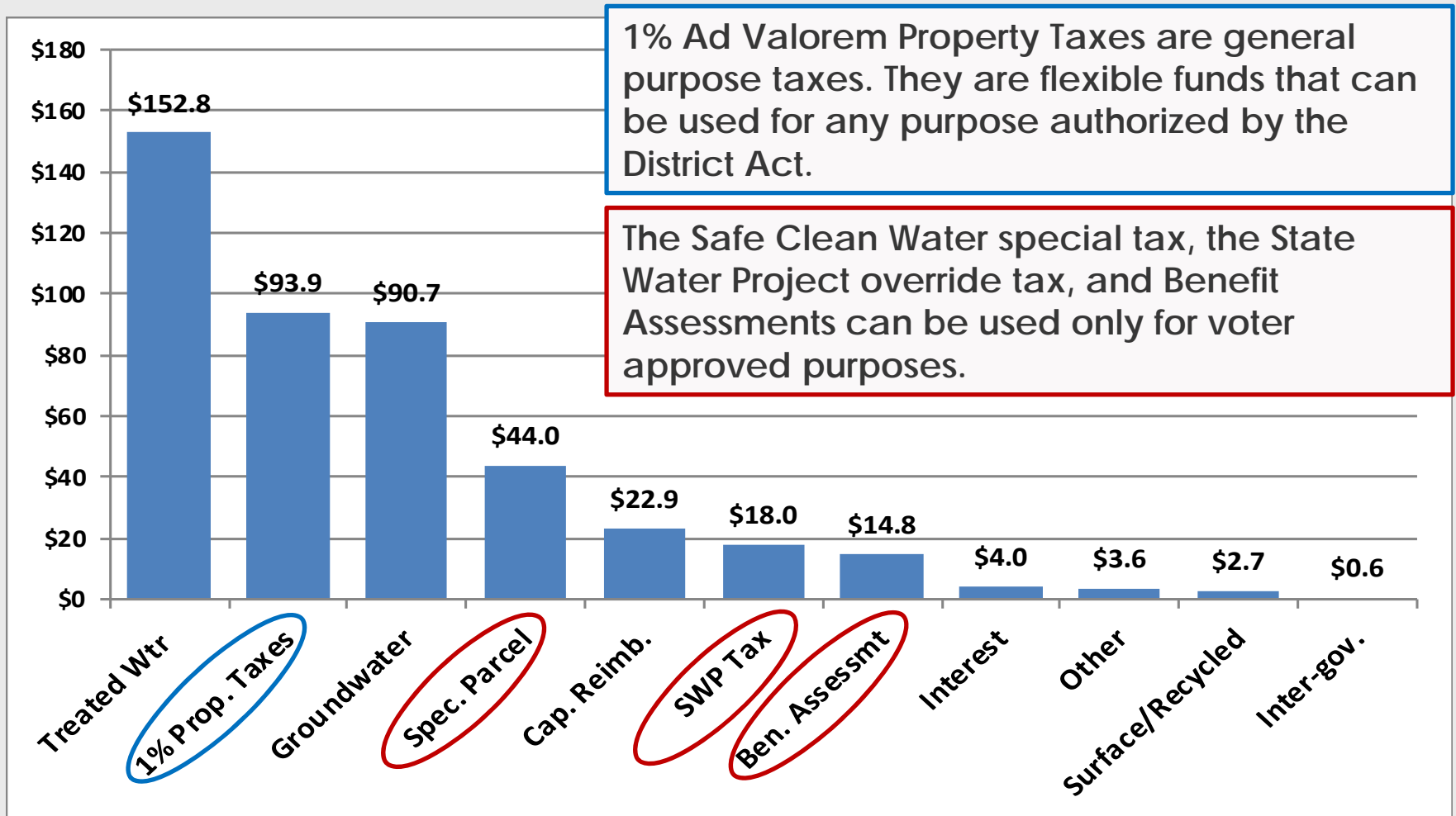
Summary of Preliminary Analysis

- Scenarios range from 4.7% to 8.1% annual increases in North County M&I groundwater charge, & 5.7% to 7.7% in South County
- Potential FY 20 increase ranges from \$2.09 to \$3.60 per month for the average household in North County, and \$0.88 to \$1.19 per month in South County
- Board direction to be incorporated into Report on Protection and Augmentation of Water Supplies (PAWS) scheduled for release on February 22, 2019

Property Tax Revenue Overview

Adopted FY19 Budget Revenue by Category

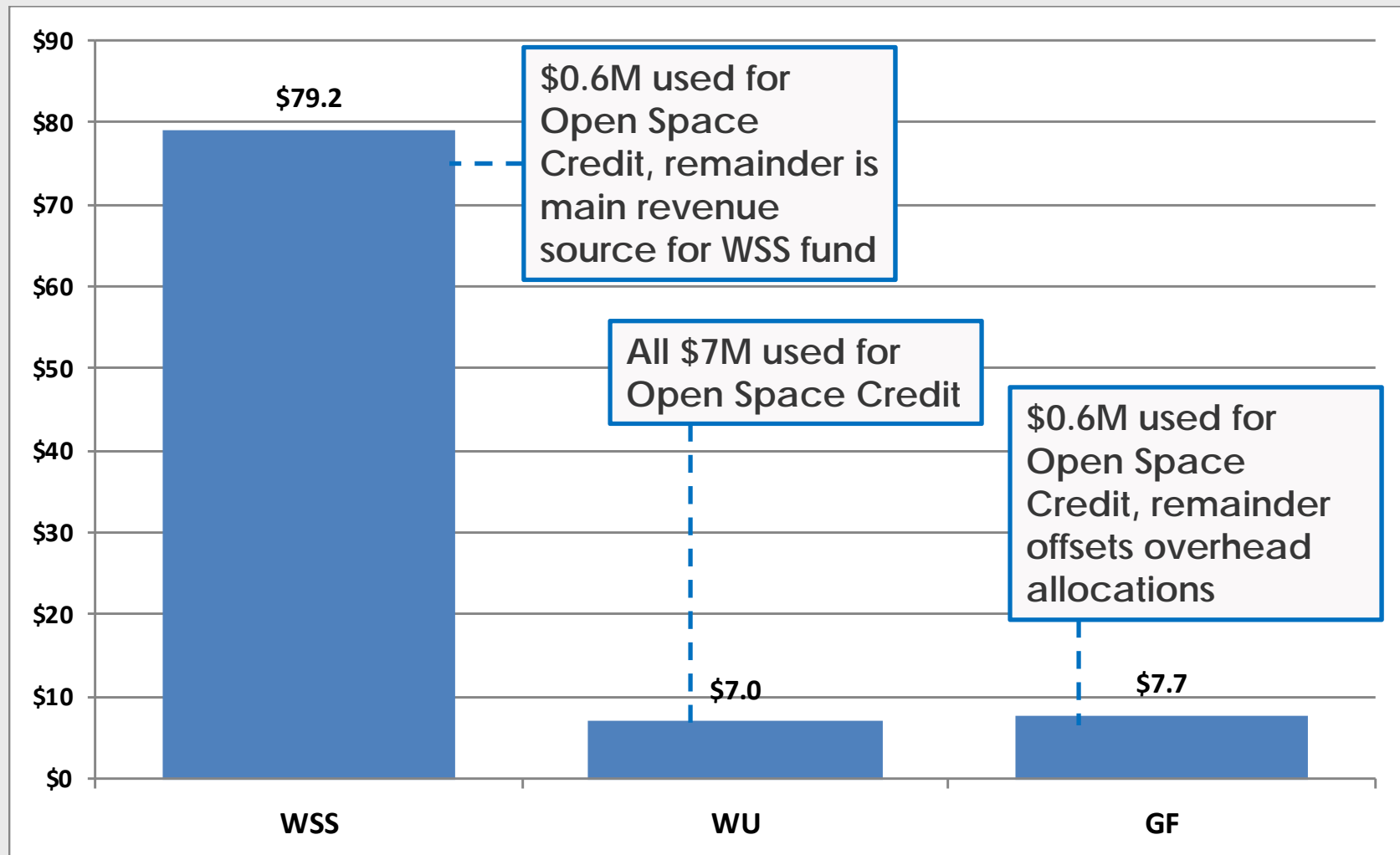
TOTAL: \$447.9 Million



Data in \$ millions

1% Ad Valorem Property Tax Usage – FY 19 Budget

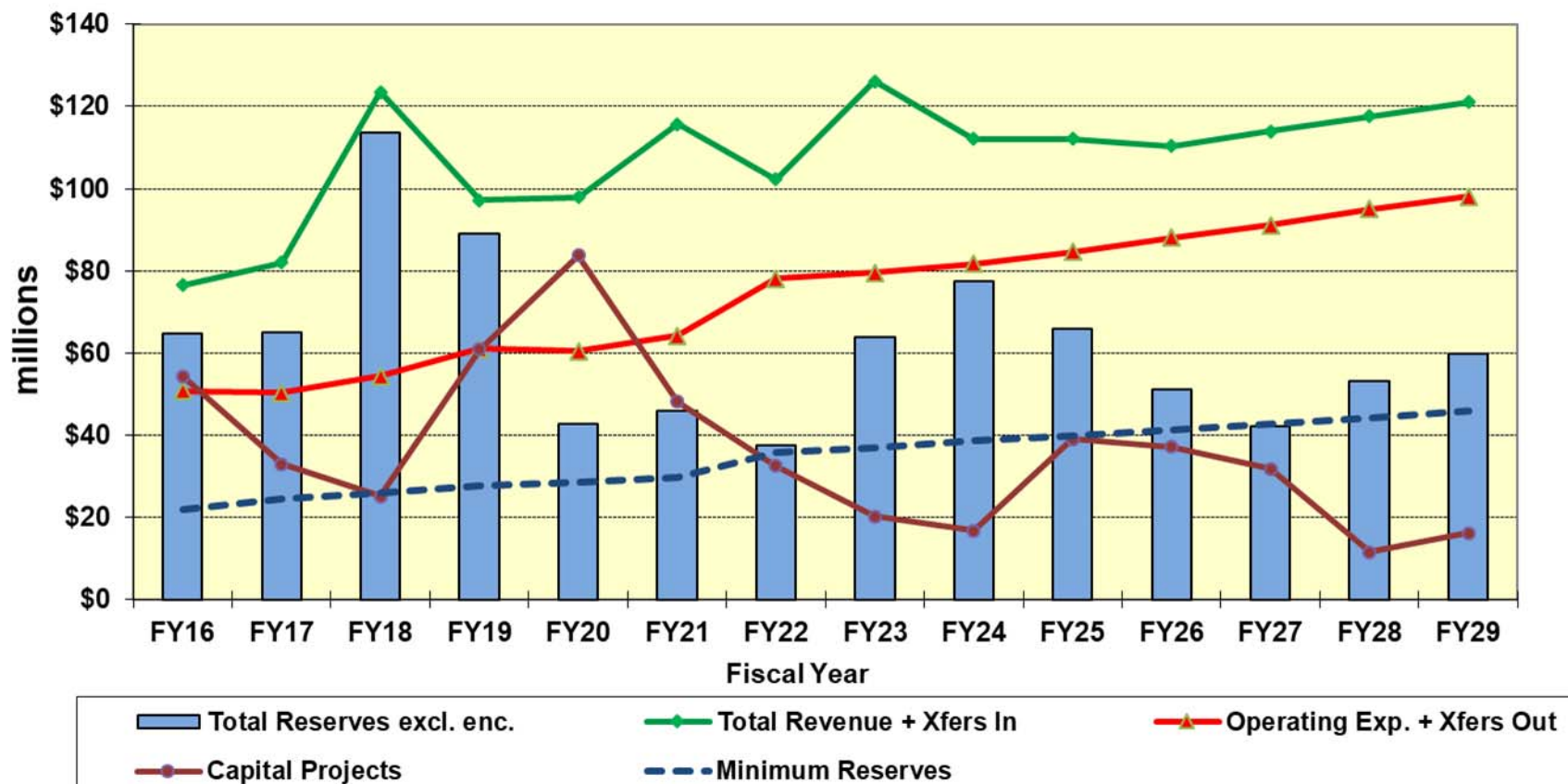
TOTAL: \$93.9 Million



Data in \$ millions

WSS Fund reserves are near minimum in FY 22 and FY 27

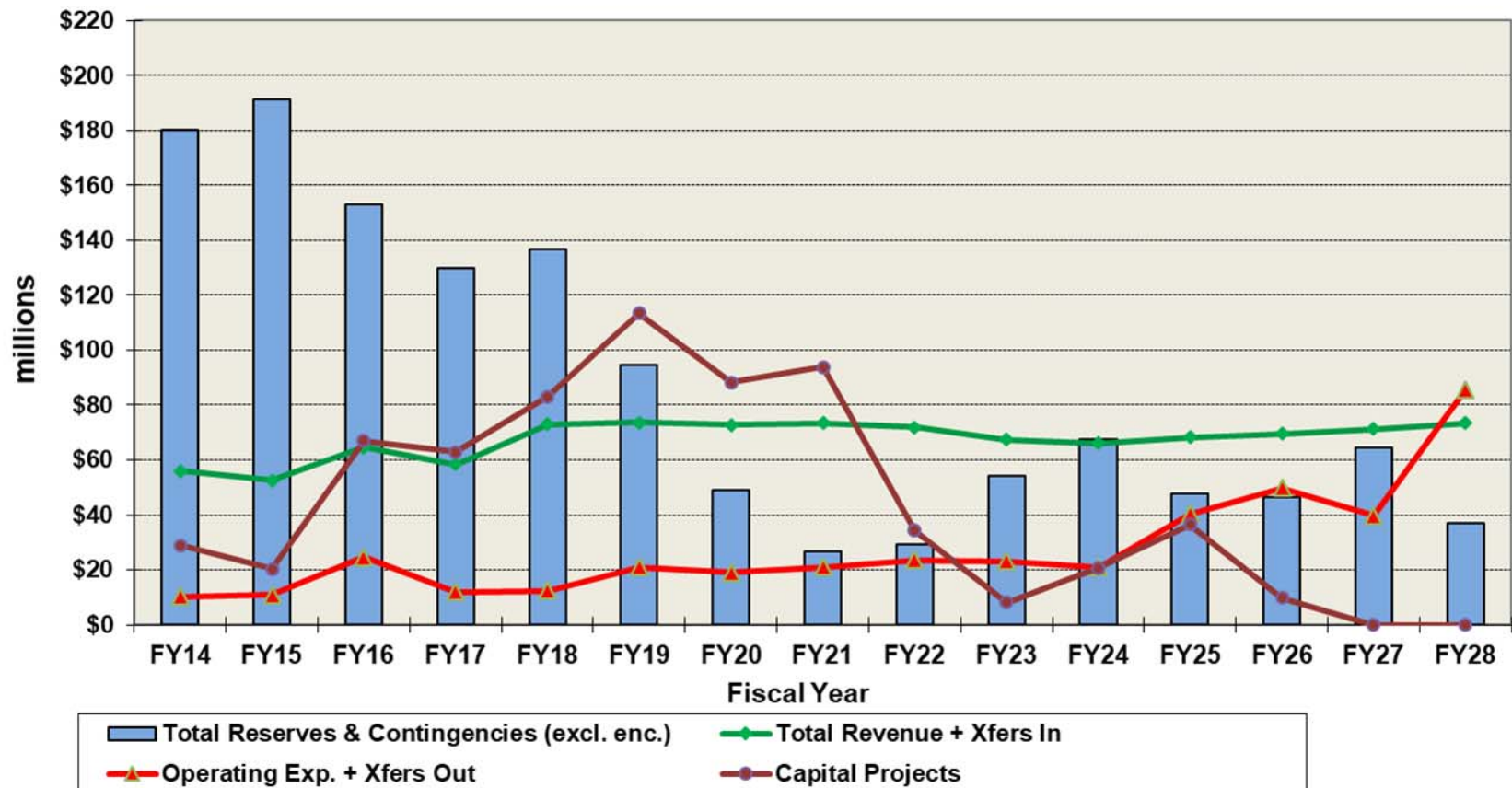
Watershed Stream Stewardship Fund Projection



Assumes O&M placeholder cost of \$10M per year to address deferred maintenance beginning in FY 22

Projecting small surplus at end of Safe Clean Water Program

Safe, Clean Water Fund Projection



January 8, 2019 Board Actions



1. Review and approve FY 2020-24 Preliminary CIP list of projects.
2. Discuss and provide direction on the preliminary FY 2019-20 Groundwater Production Charge analysis prepared by staff.



Back up

Financial Analysis: MORE Preliminary Water Supply Investment Scenarios

Assumes PWP operational by FY 26
instead of FY 28

No. County M&I Groundwater Charge Y-Y Growth %

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
May 2018	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	8.7%	5.9%	4.7%	
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WSMP 80% LOS, PWP in FY 26	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	3.0%	3.0%	3.0%
WSMP 80% LOS, +Pchco w/ WIIN	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%

So. County M&I Groundwater Charge Y-Y Growth %

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WSMP 80% LOS, PWP in FY 26	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%
WSMP 80% LOS, +Pchco w/ WIIN	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%

Assumes \$250M WIIN funding, partners
pay 20%, WIFIA loan, water charges pay
for remaining balance (no special tax)

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