



Fallbrook Public Utility District 2016 Rate Study

Board Workshop Rate Workshop

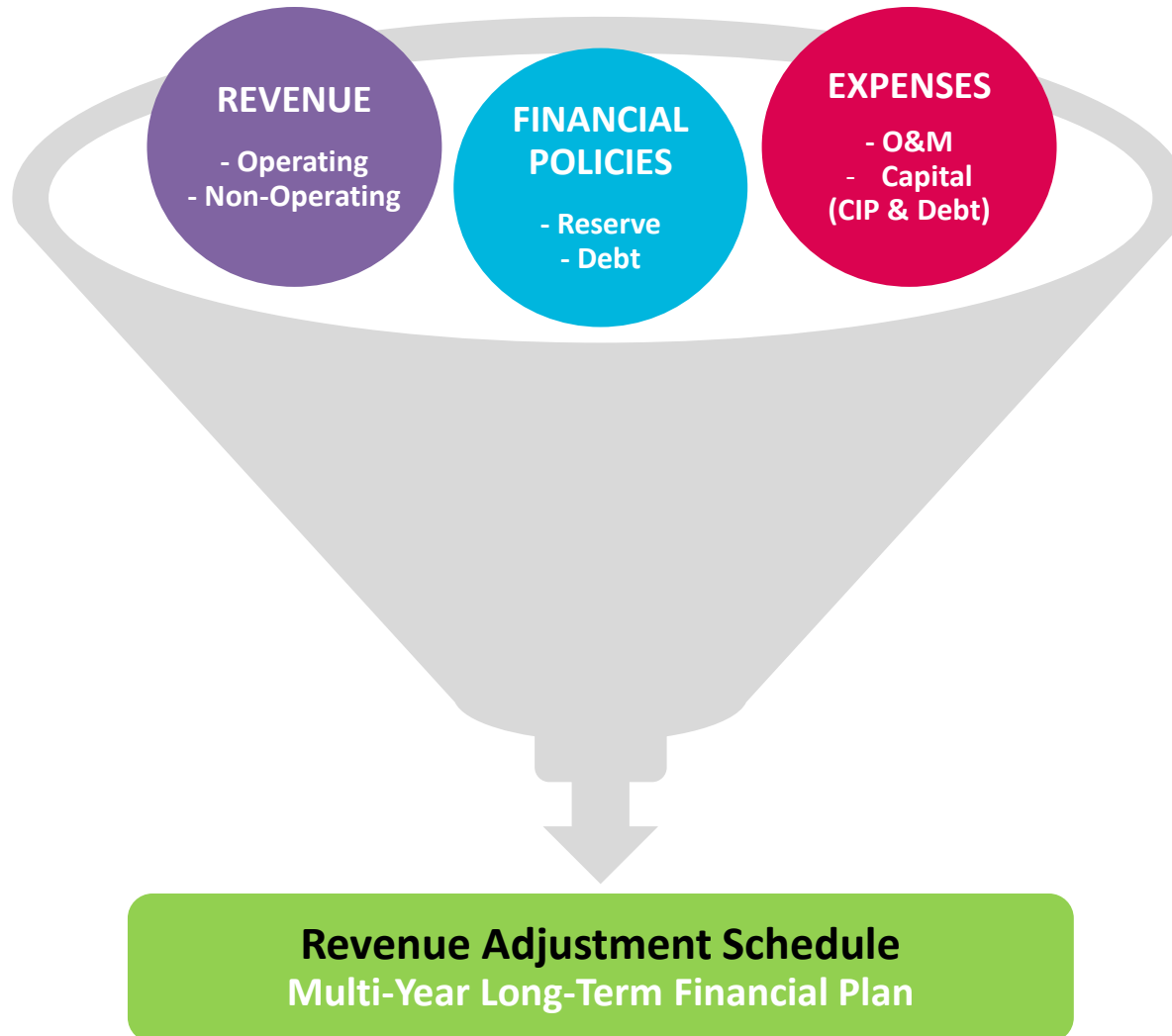
May 17, 2017

AGENDA

1. Financial Plan Development
 - a) Wastewater (WW)
 - b) Water
 - c) Recycled Water (RW)
2. Wastewater Rate Discussion
3. Water Rate Design Discussion
 - a) Rate Structure Framework
 - b) Tier Definitions
 - c) Rate Justification Framework
 - d) Preliminary Rates and Impacts
4. Recycled Water Rate Discussion
5. Proposed Drought Rates

Financial Plan Development

FINANCIAL PLAN OVERVIEW





REVISED FINANCIAL POLICY

ESTABLISHED DURING DEC 2016 FINANCE COMMITTEE WORKSHOP

Target Reserves		FY 2017
Water Working capital (MIN)	3 months of O&M including Water Costs	\$4.929M
Water Rates Stabilization**	2 years debt service of SMCUP	\$0.00
Water Capital Fund	3 years of CIP *	\$10.507M
Total Water Fund	As of Jul 2016 = \$11.888M	\$15.436M
Recycled Water Working Capital (MIN)	3 months of O&M	\$0.252M
Recycled Water Capital Fund	3 years of CIP *	\$0.388M
Total RW Fund	As of Jul 2016 = \$0.749M	\$0.640M
WW Working Capital (MIN)	3 months of O&M	\$1.282M
WW Rate Stabilization	10% Revenues	\$0.784M
WW Capital Fund	3 years of CIP *	\$2.541M
Total WW Fund	As of Jul 2016 = \$2.444M	\$4.607M
TOTAL WHOLE FPUD 292 days cash	As of Jul 2016 = \$15.082M	\$20.680M

*CIP, excluding one time projects:

Water CIP excludes : Santa Margarita Conjunctive Use

Recycled Water CIP excludes: East Line Extension & ' Construction '

** If SMCUP realization starts during the projection period (2017-2027)

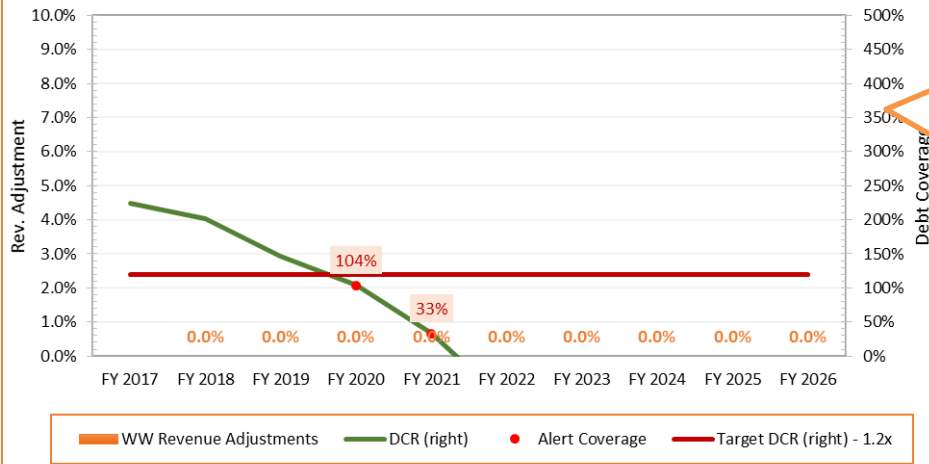
FINANCIAL PLAN KEY ASSUMPTIONS

1. Increase Water Capital Improvement Charges (CIC) annually by ENR + 3% (~6% per year)
2. Increase WW Capital Improvement Charges (CIC) annually by ENR (~3% per year)
3. Continue to Pass-through MWD RTS and CWA IAC costs via MWD RTS and CWA IAC rates
4. MWD & CWA Rates Increases: 10% per year
5. Water Sales Projections: 8,661 AF in FY 2017 to 8,779 AF in FY 2026
6. RW Sales Projections: 750AF in FY 2017 to 850 AF in FY 2018 and beyond
7. RW also fund a portion (30%) of WRP Debt Service
8. CalPERS UL increased by \$3M (\$600K per yr for FY 2022–2026)
9. **New Rates effective every January**

WW FINANCIAL PLAN

STATUS QUO – NO REV INCREASE

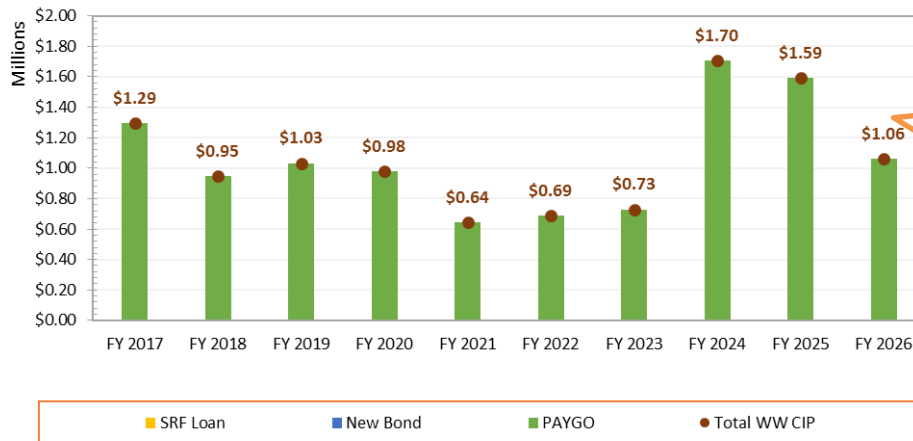
WW Rev. Adjustment and Debt Coverage



WW Revenue Adjustments and Debt Coverage

- **Orange** bars – No Revenue Adjustment (left axis)
- **Red** line – Target debt coverage 120% (right axis)
- **Green** line – Projected debt coverage for Whole FPUD (right axis)
- **Red** dot – Alert coverage when falling below target

WW CIP Funding Sources



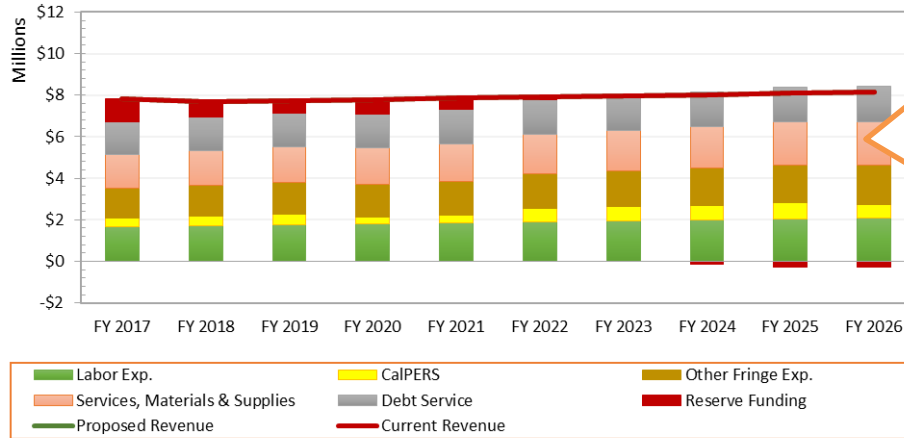
WW CIP & Funding Sources

- **Yellow** bar – SRF Loan
- **Blue** bar – New Bond
- **Green** bar – PAYGO
- **Brown** dot – Total WW CIP

WW FINANCIAL PLAN

STATUS QUO – NO REV INCREASE

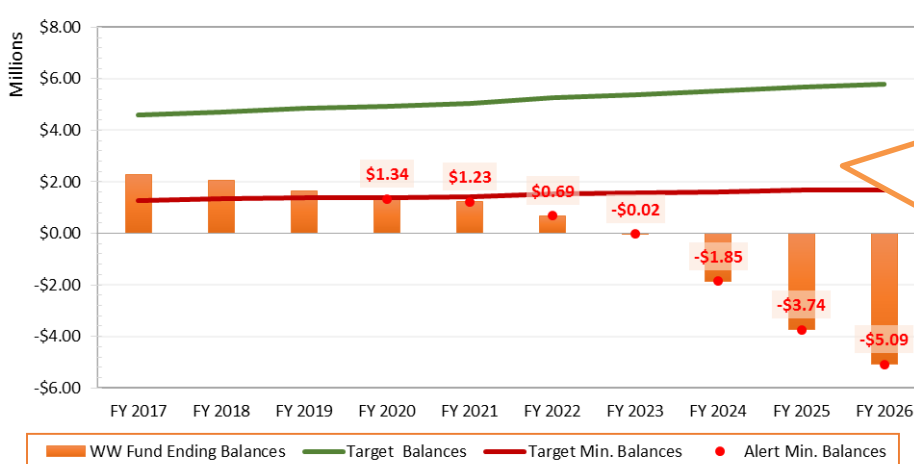
WW Fund Operating Financial Plan



Operating Financial Plan

- Lines – revenues
 - **Red** – current rates
 - **Green** – proposed rates (no revenue adjustments → same as current)
- Stacked bars - Expenses
 - **Green** – Labor Expenses
 - **Yellow** – CalPERS Expenses
 - **Dark Yellow** – Other Fringe Expenses
 - **Light Orange** – Service, Materials & Supplies
 - **Grey** – Debt Service
 - **Red** – Reserve Funding (+) or Funding from Reserve (-)

WW Fund Ending Balances



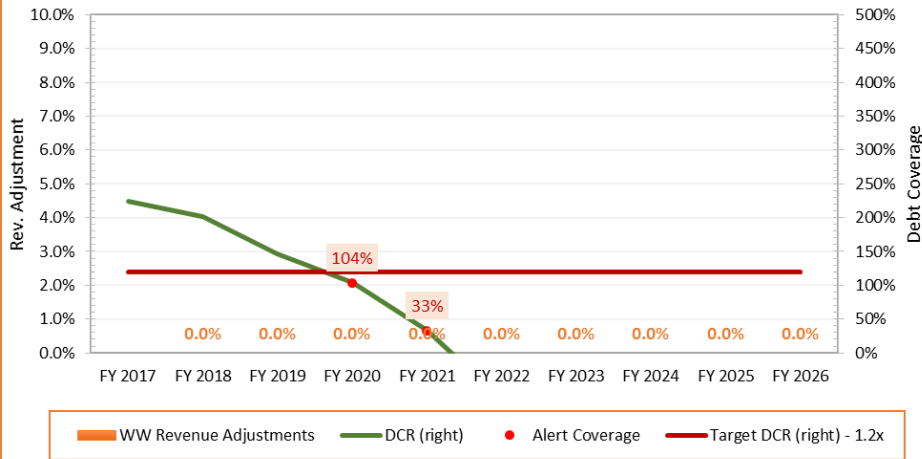
Projected Reserve Balances

- **Orange** bars – Projected ending fund balances
- **Green** line – Target balances
- **Red** line – Minimum target balances (3 months of O&M)
- **Red** dot – alert balances when ending balances fall below target levels

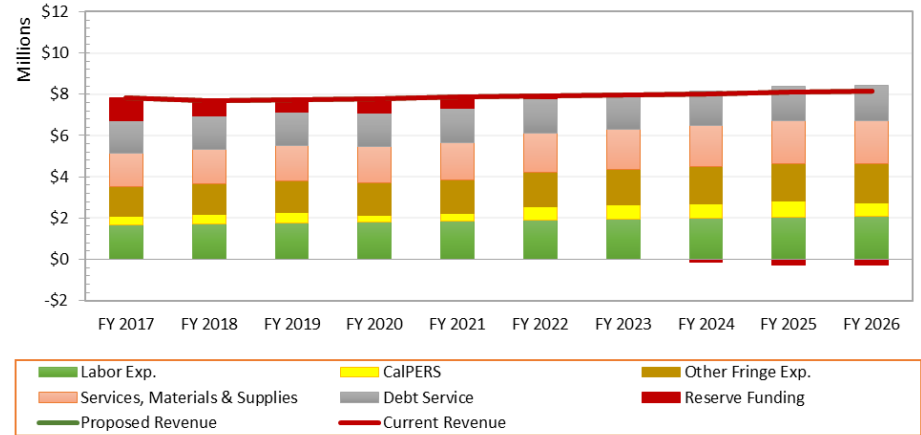
WW FINANCIAL PLAN

STATUS QUO – NO REV INCREASE

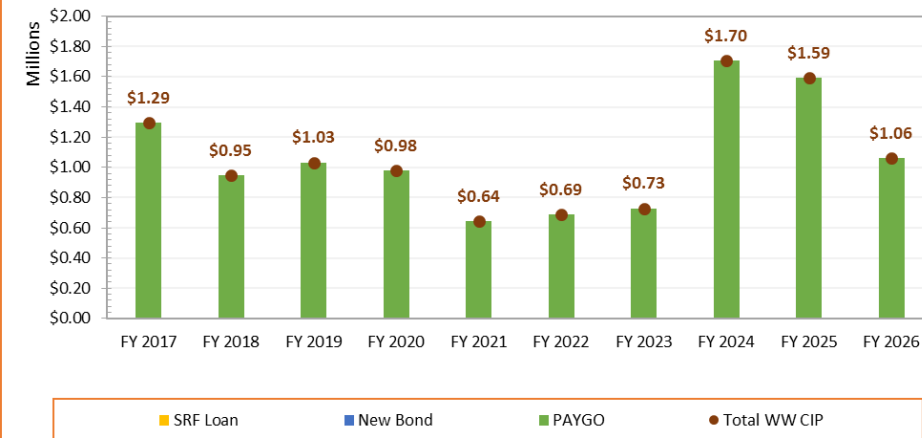
WW Rev. Adjustment and Debt Coverage



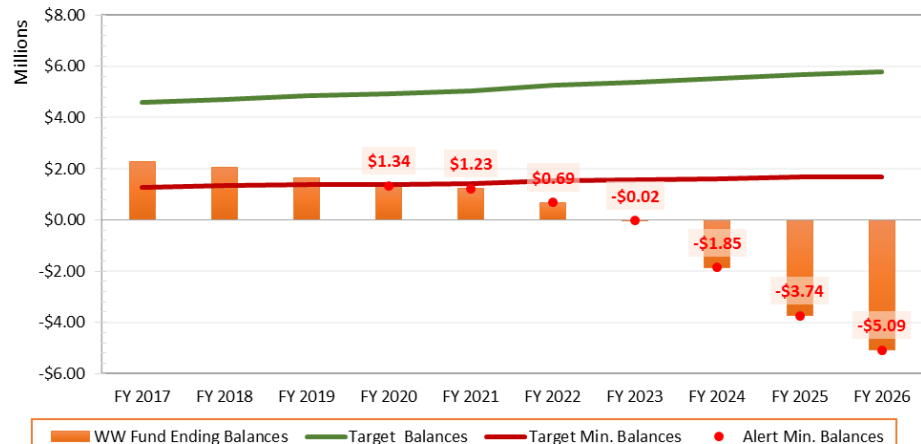
WW Fund Operating Financial Plan



WW CIP Funding Sources



WW Fund Ending Balances

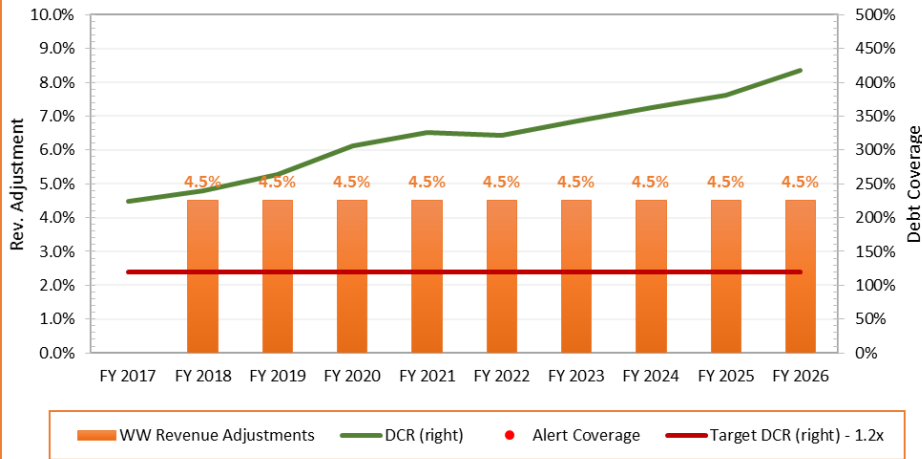




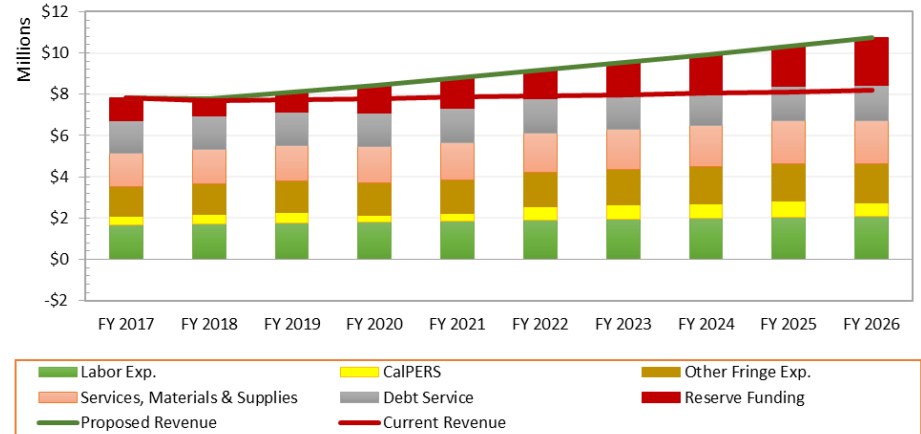
WW FINANCIAL PLAN

PROPOSED – RATE INCREASES IN JANUARY

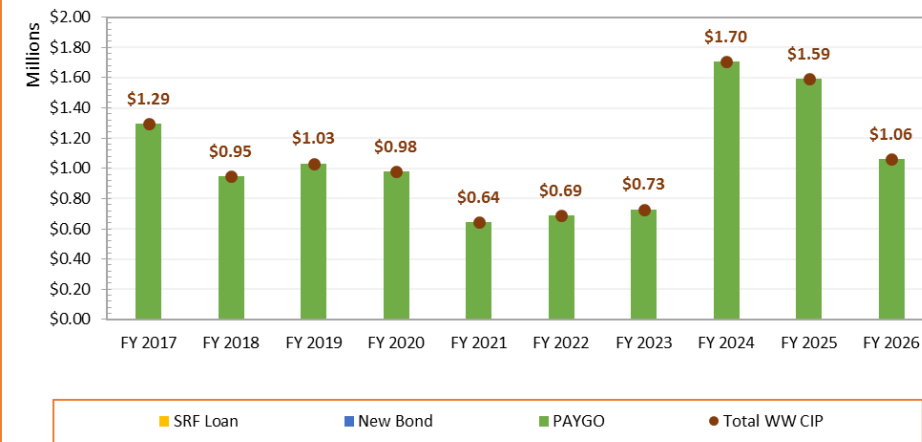
WW Rev. Adjustment and Debt Coverage



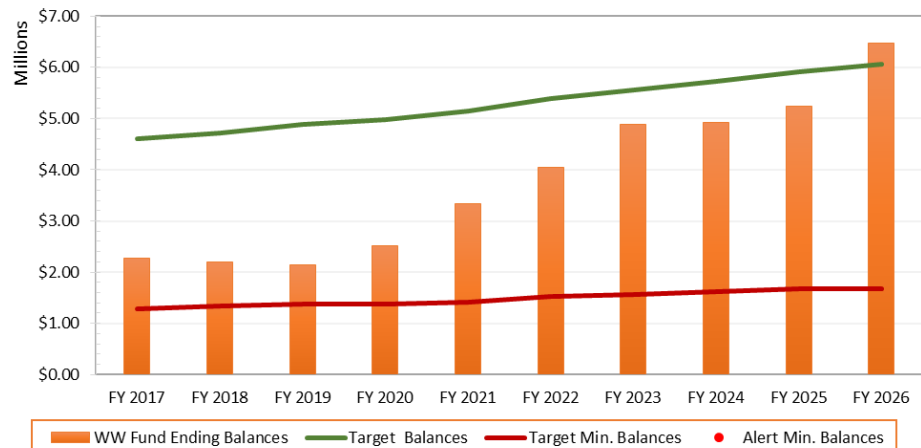
WW Fund Operating Financial Plan



WW CIP Funding Sources



WW Fund Ending Balances





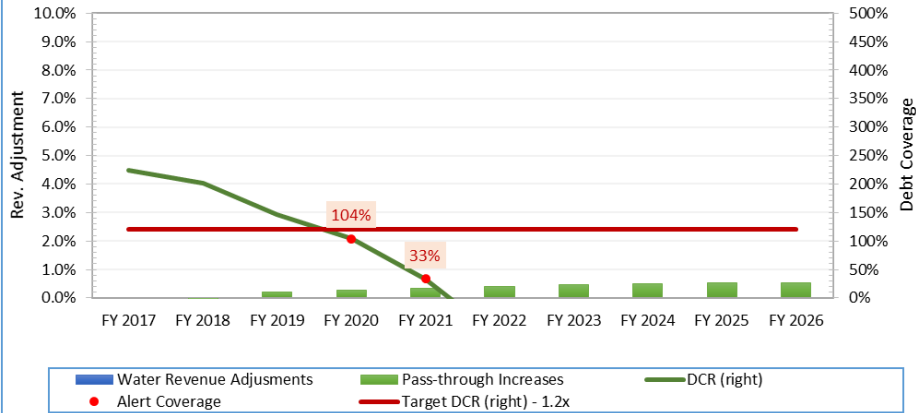
WATER FINANCIAL PLAN SCENARIOS

		Proposed Rev Adjustments	Total Water Sales	SMCUP Production	New SRF Loan
0	Status Quo	0%	~ 8,700AF	N/A	None
1	Proposed No SMCUP	8.0% / yr	~ 8,700AF	N/A	None
2	Proposed SMCUP Avg	8.0% / yr	~ 8,700AF	Average (3,200 AF)	\$45M
3	Proposed SMCUP Low	8.0% / yr	~ 8,700AF	Low (2,400 AF)	\$45M
4	Proposed SMCUP Avg w/ Pessimistic Sales	8.0% / yr	~ 5,000AF	Average (3,200 AF)	\$45M

WATER FINANCIAL PLAN

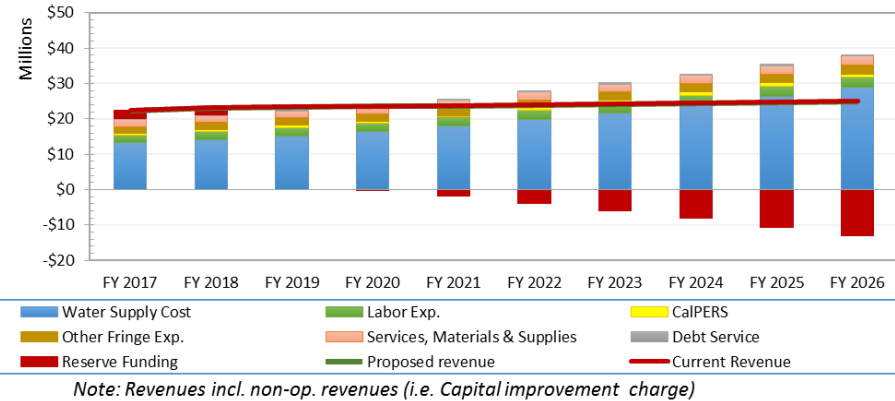
STATUS QUO – NO REV INCREASE, NO SMCUP

Water Rev. Adjustment and Debt Coverage



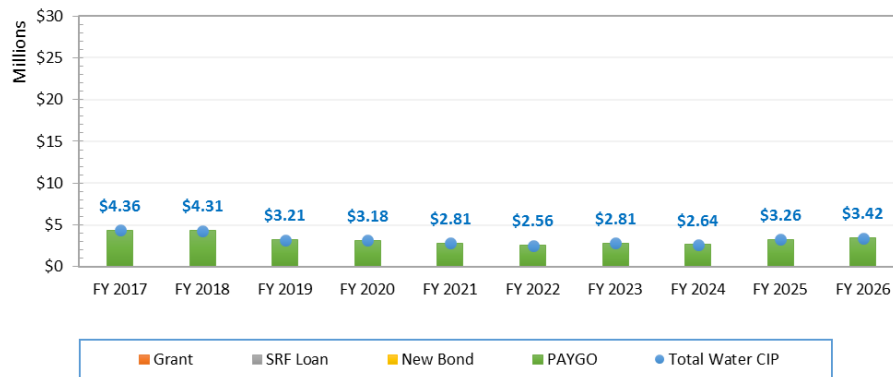
Water Fund Operating Financial Plan

No SMCUP; Current Water Sales; Increased CalPERS_UL

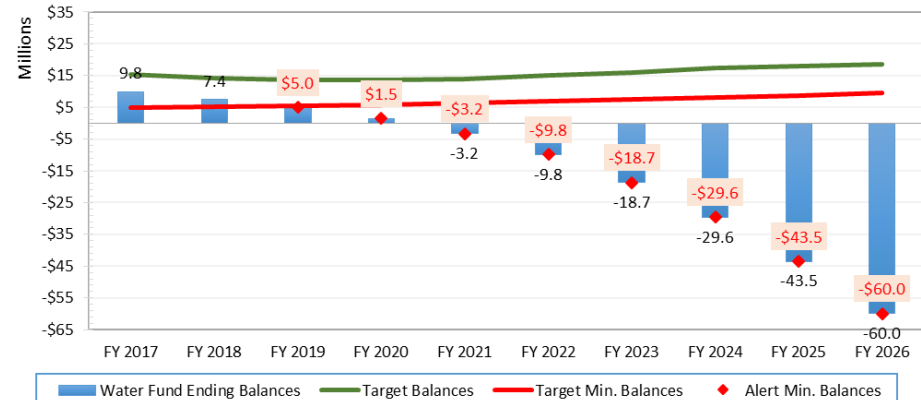


Water CIP Funding Sources

Master CIP, No SMCUP



Water Fund Ending Balances

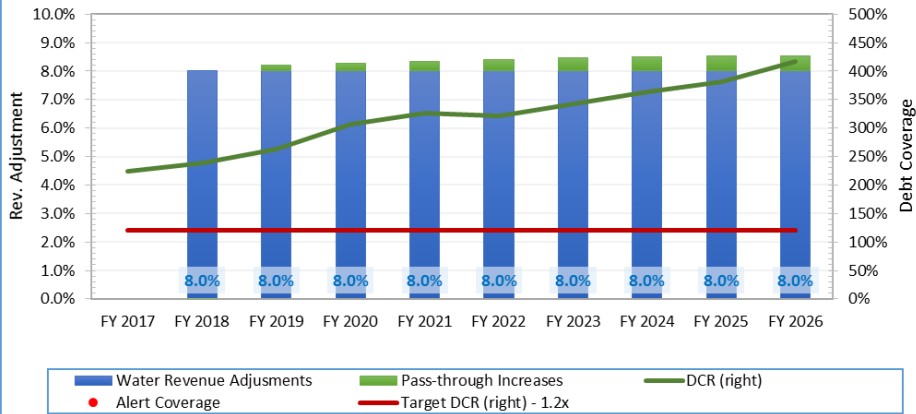




WATER FINANCIAL PLAN

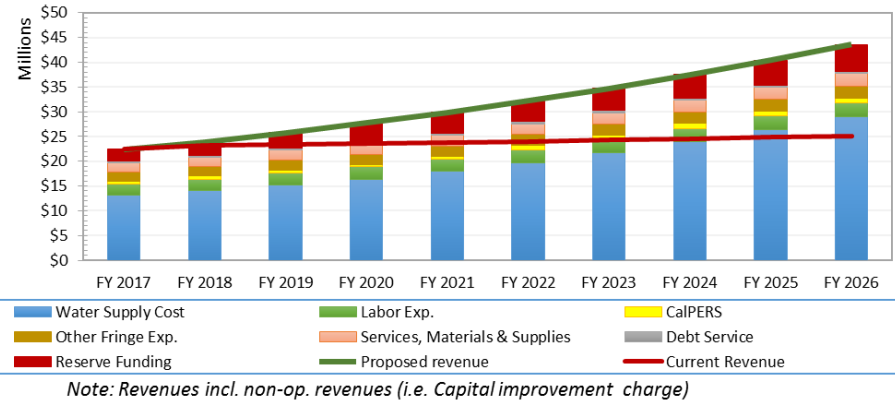
SCENARIO 1 – PROPOSED REV INCREASE AND NO SMCUP

Water Rev. Adjustment and Debt Coverage



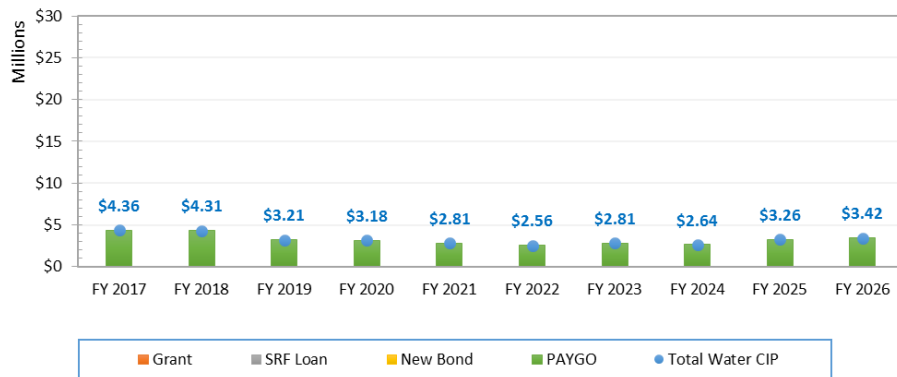
Water Fund Operating Financial Plan

No SMCUP ; Current Water Sales; Increased CalPERS_UL

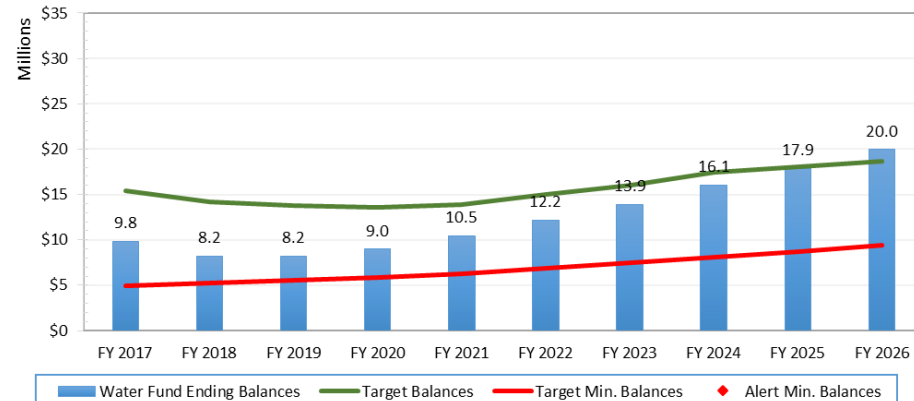


Water CIP Funding Sources

Master CIP, No SMCUP



Water Fund Ending Balances

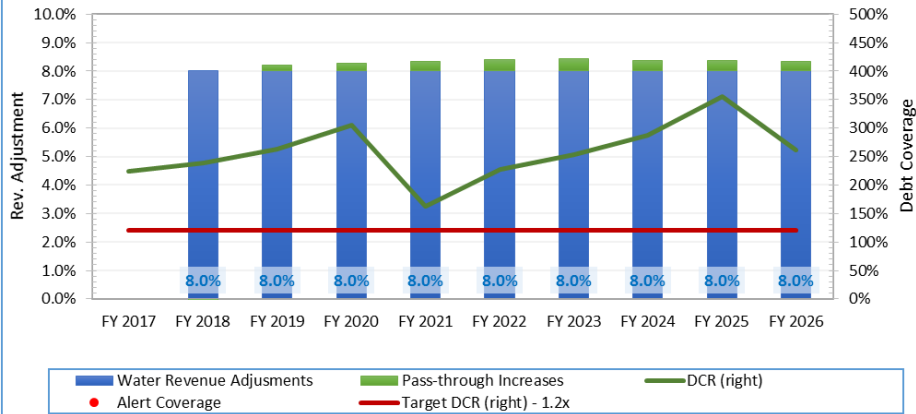




WATER FINANCIAL PLAN

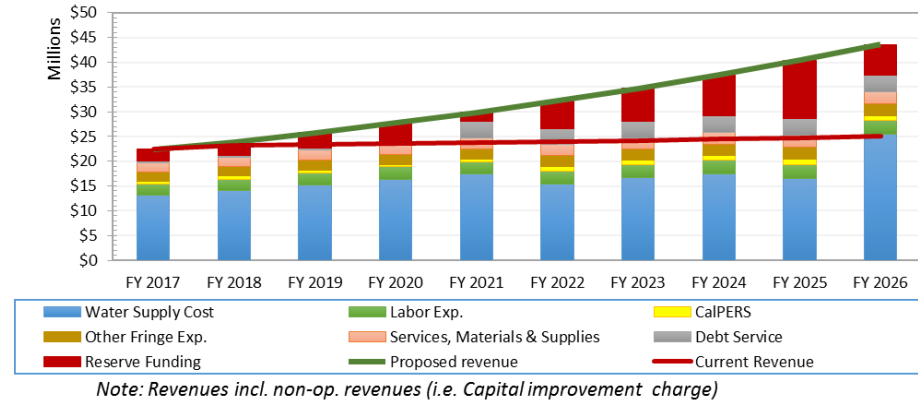
SCENARIO 2 – PROPOSED REV INCREASE AND SMCUP AVERAGE SCENARIO

Water Rev. Adjustment and Debt Coverage



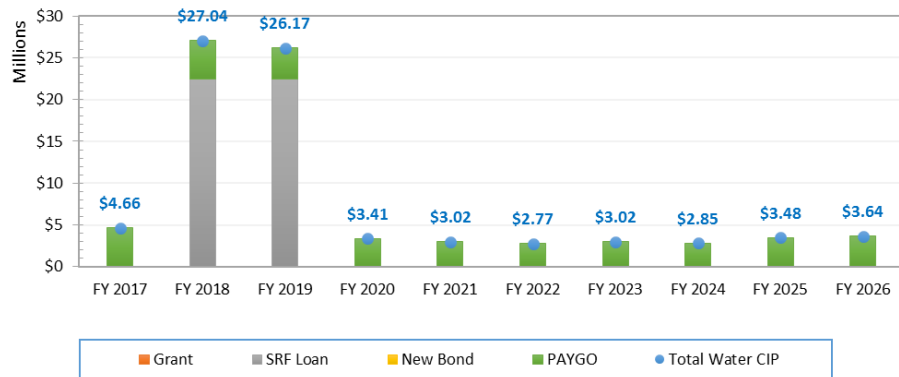
Water Fund Operating Financial Plan

SMCUP (2021) Av.; Current Water Sales; Increased CalPERS_UL

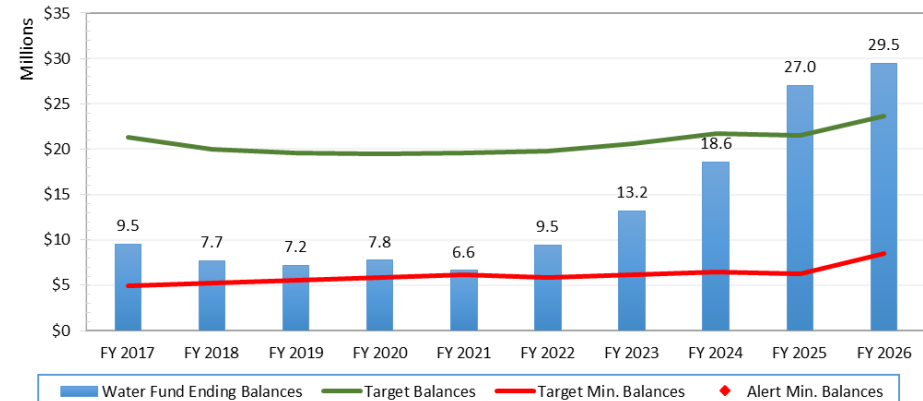


Water CIP Funding Sources

Master CIP, SMCUP (2021) Av.



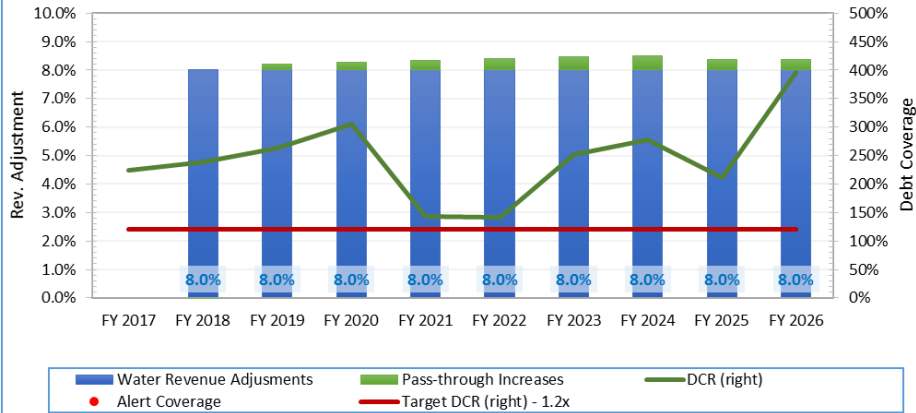
Water Fund Ending Balances



WATER FINANCIAL PLAN

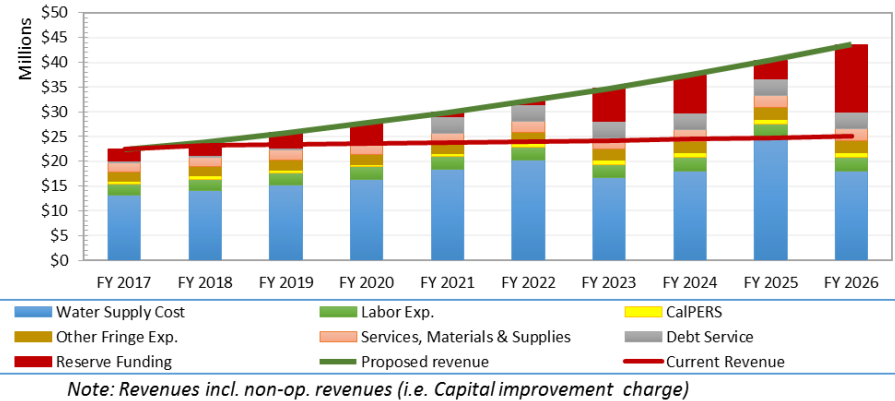
SCENARIO 3 – PROPOSED REV INCREASE AND SMCUP LOW SCENARIO

Water Rev. Adjustment and Debt Coverage



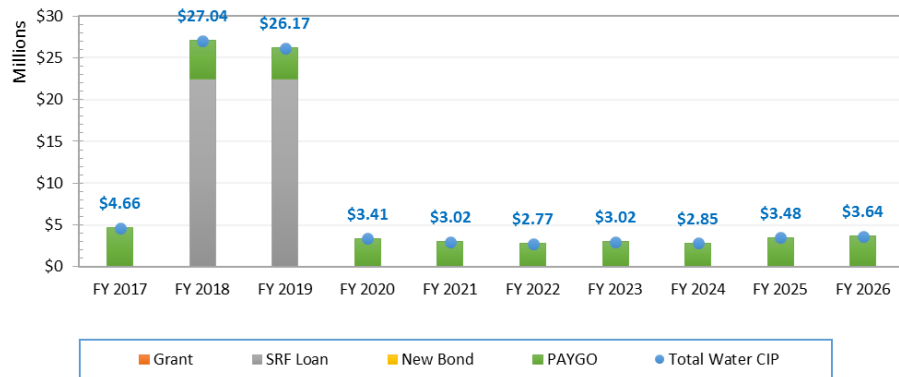
Water Fund Operating Financial Plan

SMCUP (2021) Low; Current Water Sales; Increased CalPERS_UL

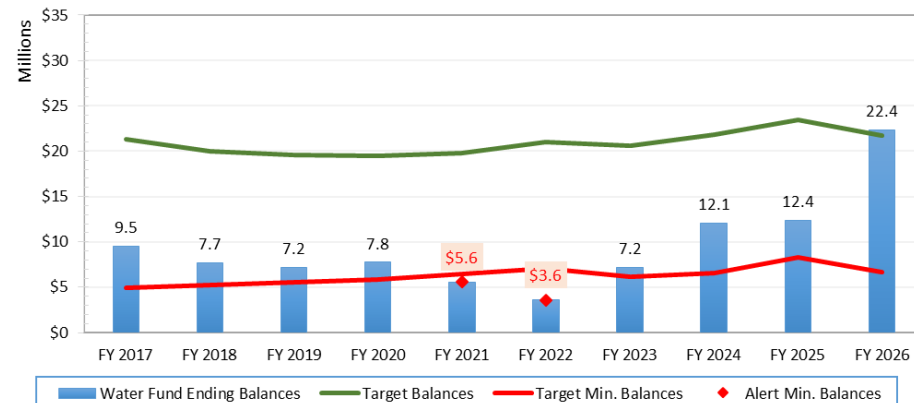


Water CIP Funding Sources

Master CIP, SMCUP (2021) Low



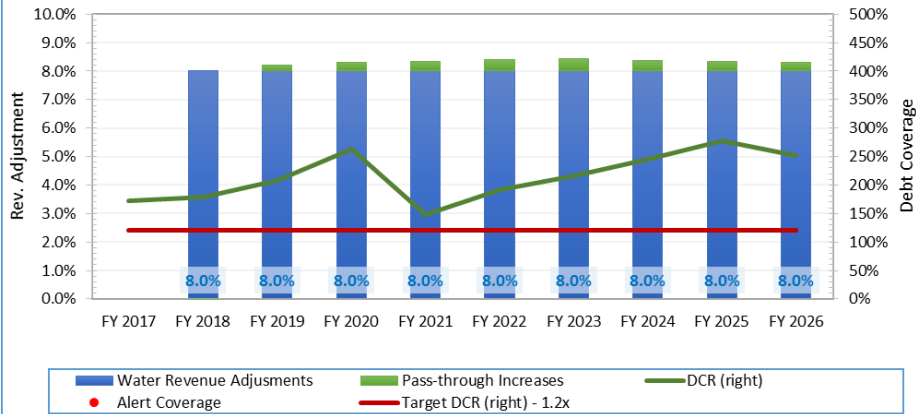
Water Fund Ending Balances



WATER FINANCIAL PLAN

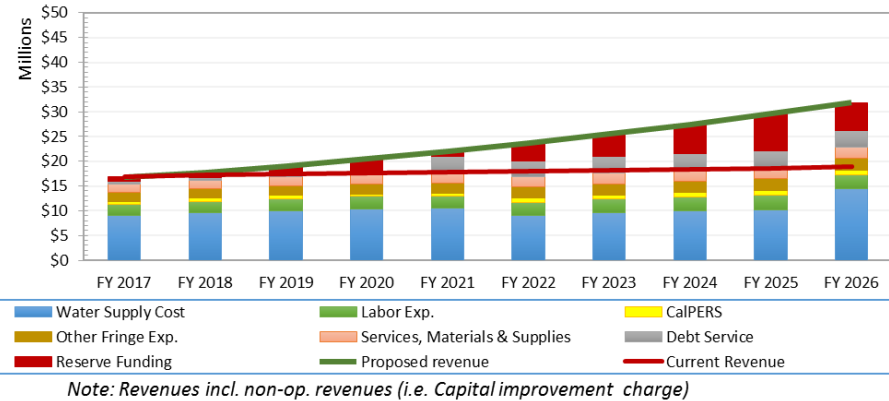
SCENARIO 4 – PROPOSED REV INCREASE, SMCUP AVERAGE AND PESSIMISTIC DEMAND (~5,000AF)

Water Rev. Adjustment and Debt Coverage



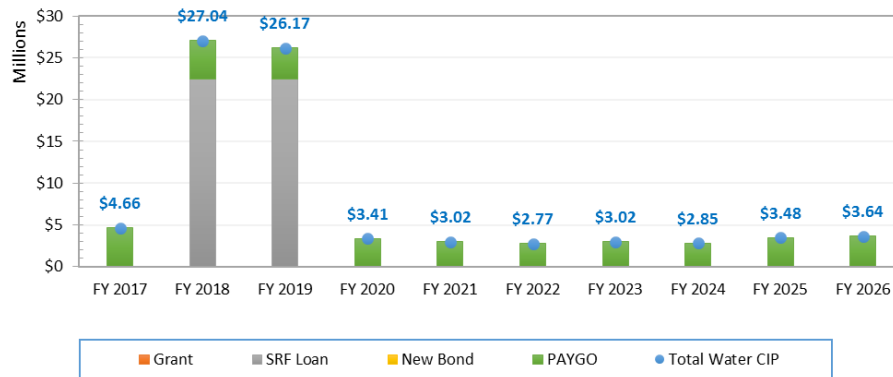
Water Fund Operating Financial Plan

SMCUP (2021) Av.; Pessimistic Water Sales; Increased

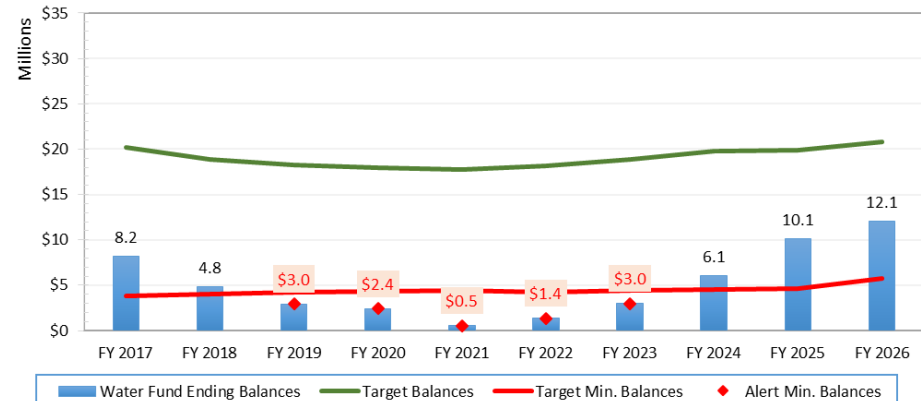


Water CIP Funding Sources

Master CIP, SMCUP (2021) Av.



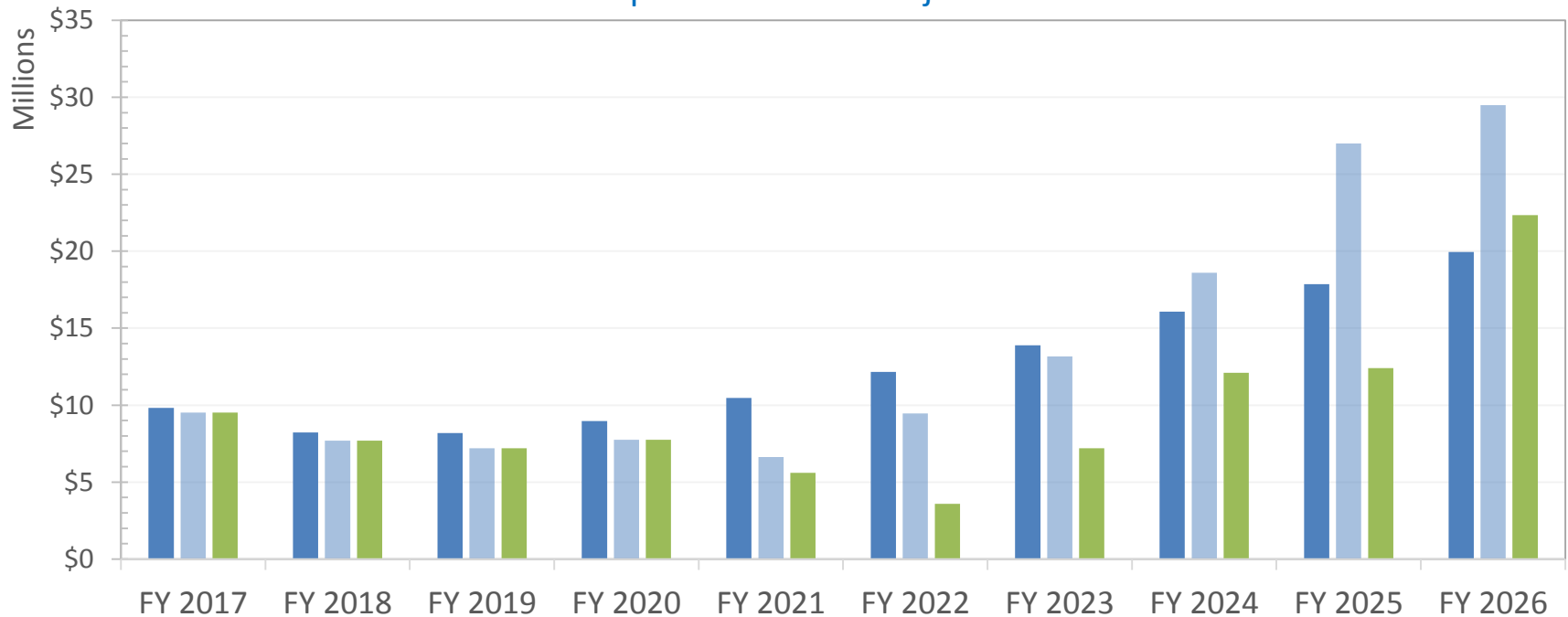
Water Fund Ending Balances



SMCUP PROJECT IMPACTS

Water Fund Ending Balances Comparison

With Proposed Revenue Adjustments



■ No SMCUP

■ SMCUP Average

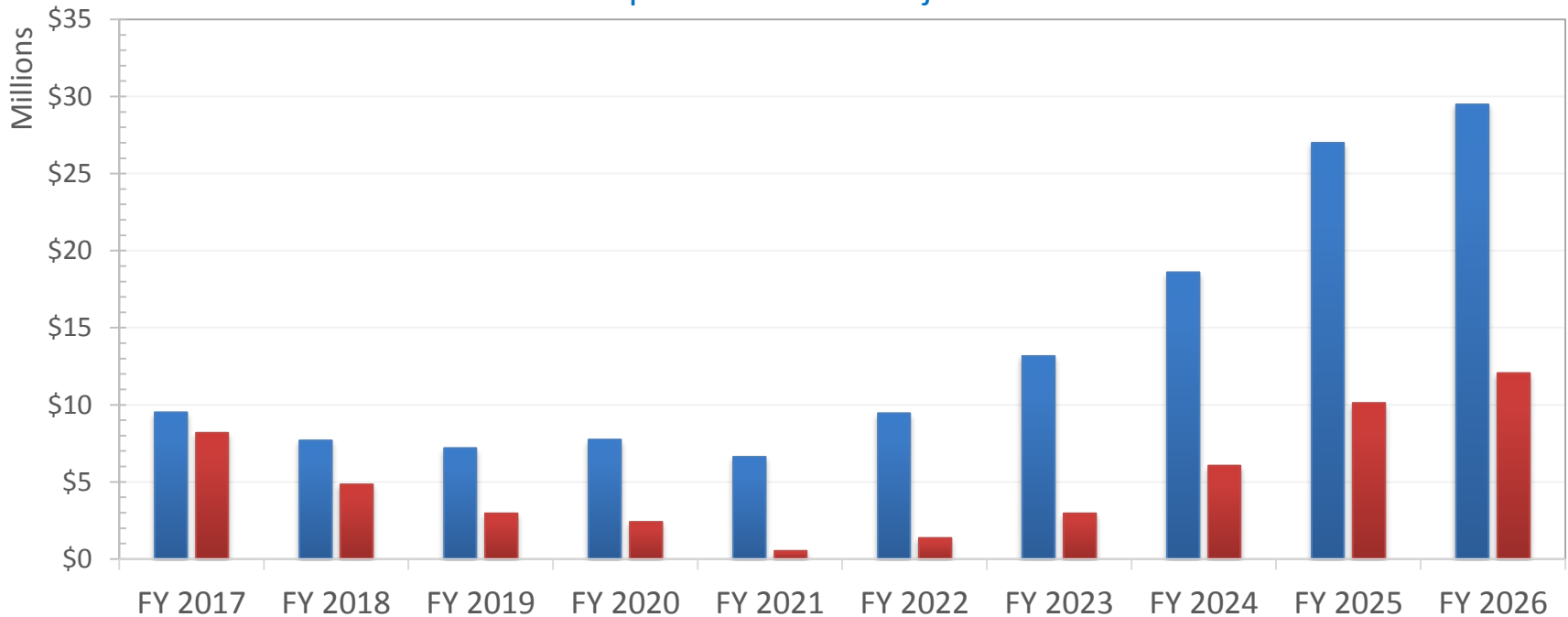
■ SMCUP Low

WATER SALES IMPACTS

ALL SCENARIOS WITH SMCUP 2021 AVG PRODUCTION

Water Fund Ending Balances Comparison

With Proposed Revenue Adjustments



■ SMCUP Avg, Total Sales 8,700AF

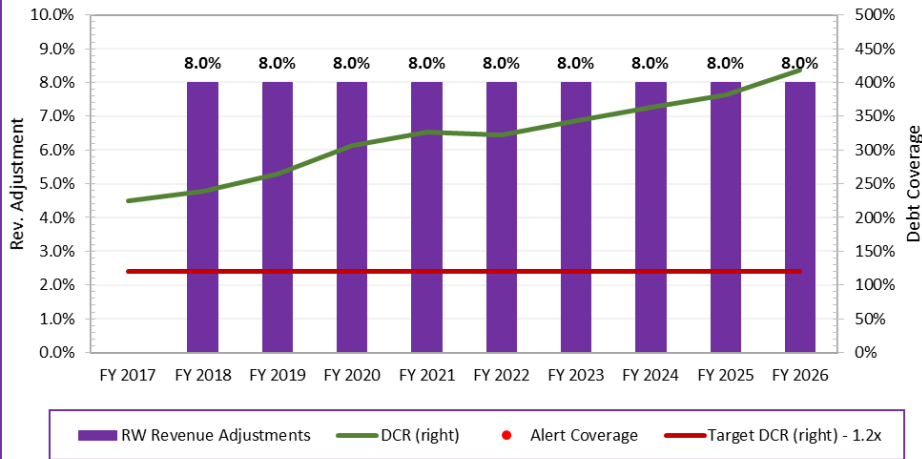
■ SMCUP Avg, Total Sales 5,000AF



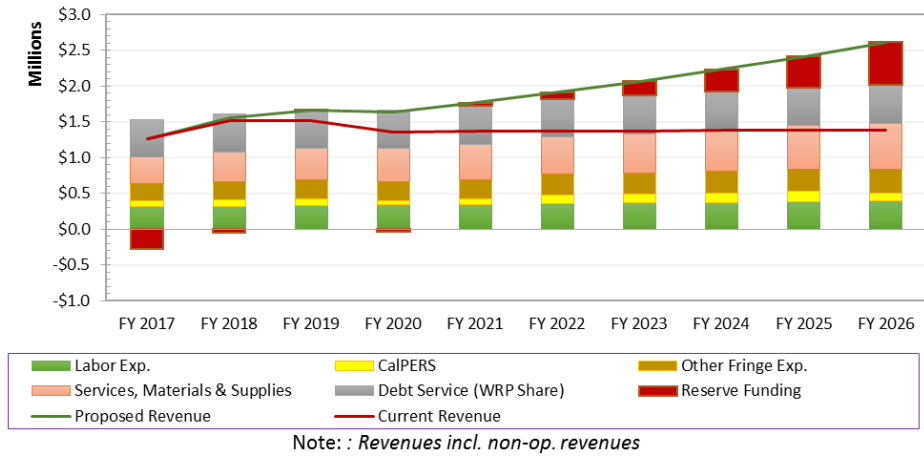
RW FINANCIAL PLAN

PROPOSED – RATE INCREASES IN JANUARY

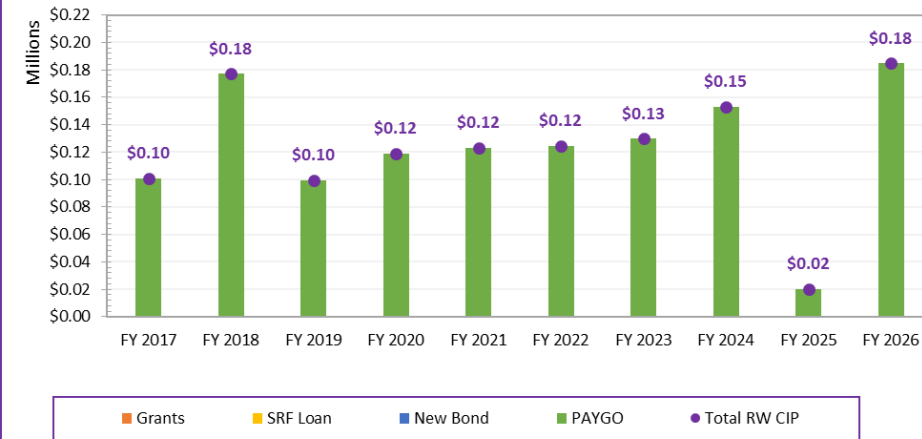
RW Rev. Adjustment and Debt Coverage



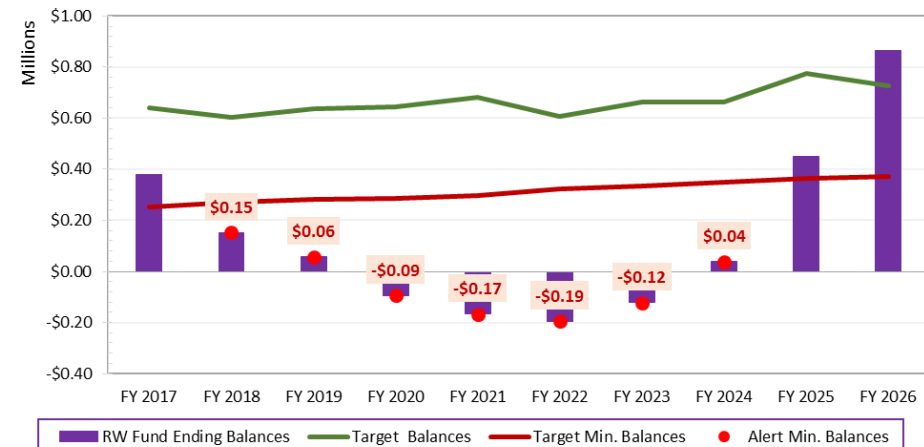
RW Fund Operating Financial Plan



RW CIP Funding Sources



RW Fund Ending Balances

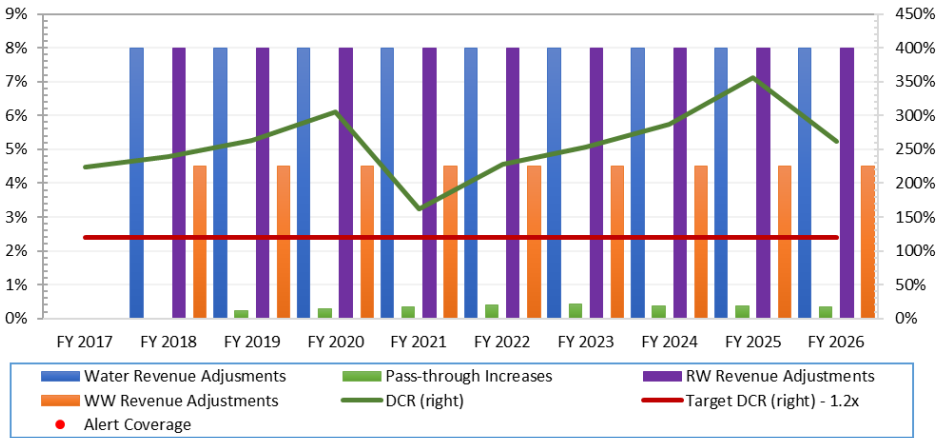




WHOLE DISTRICT FINANCIAL PLAN

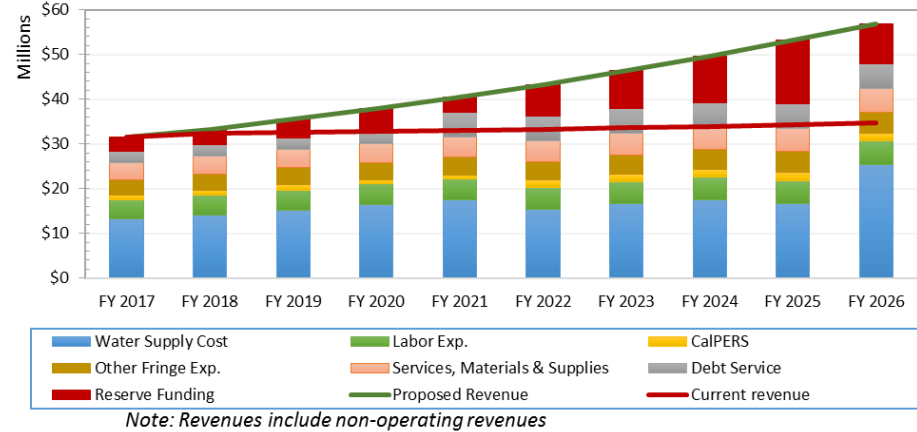
PROPOSED REV INCREASE, SMCUP AVERAGE SCENARIO

FPUD Rev. Adjustment and Debt Coverage



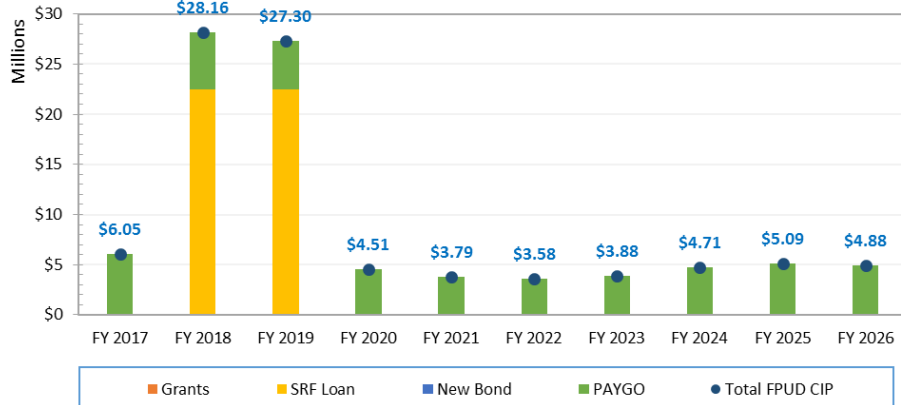
FPUD Fund Operating Financial Plan

SMCUP (2021) Av.; Current Water Sales; Increased CalPERS_UL

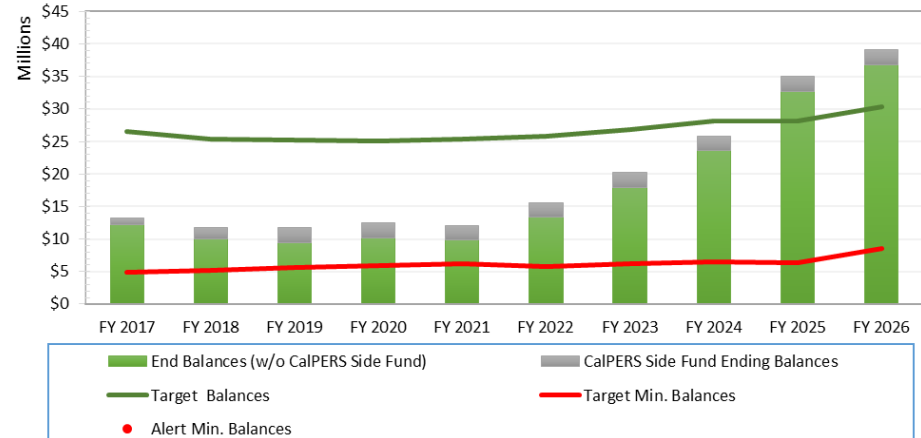


FPUD CIP Funding Sources

Master CIP, SMCUP (2021) Av.



FPUD Fund Ending Balances





PROPOSED 10-YEAR REVENUE ADJUSTMENTS

Fiscal Year	Effective Date	Water + Pass-through MWD RTS & CWA IAC Costs	RW	WW
FY 2018	Jan 2018	8.0%	8.0%	4.5%
FY 2019	Jan 2019	8.0%	8.0%	4.5%
FY 2020	Jan 2020	8.0%	8.0%	4.5%
FY 2021	Jan 2021	8.0%	8.0%	4.5%
FY 2022	Jan 2022	8.0%	8.0%	4.5%
FY 2023	Jan 2023	8.0%	8.0%	4.5%
FY 2024	Jan 2024	8.0%	8.0%	4.5%
FY 2025	Jan 2025	8.0%	8.0%	4.5%
FY 2026	Jan 2026	8.0%	8.0%	4.5%

WW Rate Discussion

WW COST OF SERVICE ANALYSIS

Step 1

- **Determine flow and strength of each customer class**
- Examine inflow at the treatment plant and number of customers

Step 2

- **Determine how much O&M and capital is flow or strength-related**
- Allocate O&M costs and assets list by function

Step 3

- **Determine revenues required for flow and strength**
- Allocate revenue requirements based on above allocations

Step 4

- **Determine customer class characteristics and unit cost**

Step 5

- **Distribution of costs to customer classes**



PLANT BALANCE RESULTS & RECOMMENDATIONS

FY 2016 Data (Jul 2015 – Jun 2016)	Current Return To Sewer (RTS)	Billed WW Flows (RTS x Min Winter Use)	Revised RTS	Revised Billed WW Flows (Rev. RTS x Av Winter Use*)
Ag Domestic (AT)	90%	572	75%	798
Commercial Ag (CB)	90%	238	75%	336
Multi Family (M)	90%	146,459	75%	143,691
Single Family (D)	90%	224,357	75%	278,868
Single Family (LD)	90%	8,176	75%	11,376
Total Billed Residential Flows (1)		379,801 kgal (51.1 GPCD)		435,069 kgal (58.5 GPCD)
Residential Flows from Plant Balance (2)		438,744 kgal (59.0 GPCD)		438,744 kgal (59.0 GPCD)
(2) / (1)		116% Billed << Estimated		101%

*Av Winter Use = Average 3-month Dec – Feb



WW REV REQUIREMENT ALLOCATION TO RATE COMPONENTS

Cost Categories	FY 2018	Fixed Charges		Flow Rates	
		CIC	WW Services	Flow	Strength
Flows	\$2,572,925			\$2,572,925	
BOD	\$302,987				\$302,987
TSS	\$1,104,987				\$1,104,987
WW Services	\$1,869,020		\$934,510	\$934,510	
CIC	\$1,123,364	\$1,123,364			
Total Rev Req	\$6,973,282	\$1,123,364	\$934,510	\$3,507,435	\$1,407,973



WW RATE FRAMEWORK

	Residential	Non-Residential Low Strength	Non-Residential Medium Strength	Non-Residential High Strength
Fixed Service Charges (FSC)	\$ Per EDU	\$ Per EDU	\$ Per EDU	\$ Per EDU
Capital Improvement Charges (CIC)*	\$ Per EDU	\$ Per EDU	\$ Per EDU	\$ Per EDU
Volumetric Rates (\$ / kgal billed WW flows**)	x	x	xx	xxx

* CIC = Current CIC (\$1.84/EDU* (1 + ENR CCI%))
(Increase ~3% per year)

** Residential billed WW flows = 75% x Average Winter Use (Dec – Feb), with 22kgal cap
Non-Residential billed WW flows = RTS x Water Usage



PROPOSED WW RATES FY 2018

	CIC (\$/EDU)	Fixed WW Service Charges (\$/EDU)	Volumetric Rates (\$/kgal)
Ag Domestic	\$11.16	\$9.28	\$9.44
Commercial Ag Domestic	\$11.16	\$9.28	\$9.44
Single Family	\$11.16	\$9.28	\$9.44
Single Family (Large)	\$11.16	\$9.28	\$9.44
Multi Family	\$11.16	\$9.28	\$9.44
Government	\$11.16	\$9.28	\$9.38
School	\$11.16	\$9.28	\$9.38
Church	\$11.16	\$9.28	\$9.38
Commercial - Low Strength	\$11.16	\$9.28	\$9.38
Commercial - Medium Strength	\$11.16	\$9.28	\$11.57
Commercial - High Strength	\$11.16	\$9.28	\$14.44
Standby Services	\$11.16	\$9.28	

WW RESIDENTIAL CUSTOMER IMPACT

(3/4-INCH DOMESTIC)

Sample Single Family WW Bill Impacts

3/4 inch meter



*The "Revised WW Flow" is based on the average flow for the customers with "Min Winter Usage" shown above but using their averaged consumption over the period Dec-Feb and revised RTS.

Water Rates Design Discussion



WATER RATE STRUCTURE

ESTABLISHED DURING DEC 2016 FINANCE COMMITTEE WORKSHOP

Customer Class	Current Rate Structure	Proposed to Evaluate	Why?
Residential (D, LD, M)	Inclining 3 Tiers	Revised Inclining 3 Tiers	Simplify & justify tier definitions
Agriculture SAWR	Uniform	Uniform	All Ag use supplied by SAWR water
Ag Domestic (AT, CB)	3 Tiers	2-Tiers	Tier 1 – Indoor Domestic Use Tier 2 – Agriculture Use
Commercial (C, CA)/ Government (G)	Uniform	Uniform	Heterogeneous use
Irrigation (I)	Uniform	Uniform	Use varied significantly with irrigable areas and weather



PROPOSED RESIDENTIAL TIER DEFINITIONS

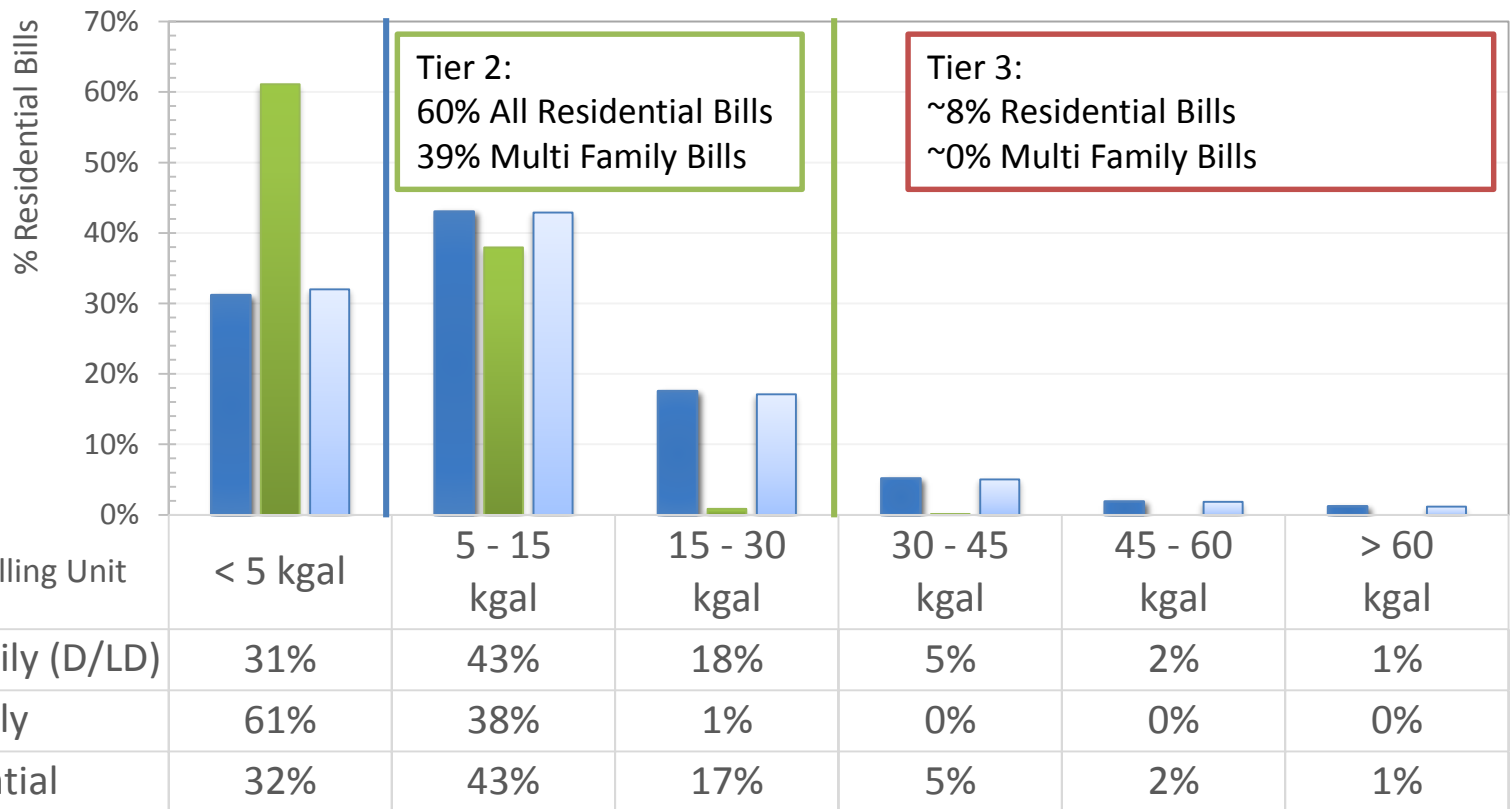
APPLIED TO ALL RESIDENTIAL CLASSES BY DWELLING UNIT

	Current Rate Structure	Proposed to Evaluate	Basis
Tier 1	0 – 5 kgal	0 – 5 kgal	Efficient Indoor Use Benchmark: 55GPCD x 3 PPH x 30 days
Tier 2	D / LD: 6 – 30 kgal M: 6 – 18 kgal	6 – 30 kgal	Average Efficient Monthly Outdoor Use Benchmark for 0.25 acre = 25 kgal / month
Tier 3	Above Tier 2	Above Tier 2	Above Average Efficient Use

RESIDENTIAL BILL FREQUENCY

Residential Bill Frequency

FY 2016 Residential Usage (July 2015 – June 2016)





PROPOSED AG DOMESTIC TIER DEFINITIONS

	Current Rate Structure	Proposed to Evaluate	Basis
Tier 1	0 – 5 kgal	0 – 5 kgal	Efficient Indoor Use Benchmark: 55GPCD x 3 PPH x 30 days
Tier 2	6 – 20 kgal	Above 5 kgal → Ag Use	Assumed all use for outdoor Ag irrigation
Tier 3	Above Tier 2 → Ag Use		

FIXED CHARGES FRAMEWORK

	Capital Improvement Charge (CIC)	RTS	IAC	Billing & CS	Meters & Services	Capacity	Fire Protection	Backflow Inspection	Monthly discount
	Current	AWWA Max Flow	AWWA Max Flow	Uniform	Meter Costs	AWWA Max Flow	Fire Capacity	Backflow Costs	Uniform
Water customers	X	X	X	X	X	X			X
Standby customers	X	X		X	X				X
Fire Connections				X			X		
Backflow device owner								X	

- Notes**

- CIC are as adopted, current CIC escalated by ENR + 3% to cover pipeline replacement costs
- RTS & IAC are pass-through costs
- Backflow device charges are to recover the Backflow Inspection costs

WATER USAGE RATES FRAMEWORK

Customer Class		Water Reliability	Delivery	Peaking (based on Peaking Factors)	Conservation	Water Supply
Ag (SAWR) (AS)			x	xx		SAWR
Ag Domestic (SAWR) (AT)	Tier 1	x	x	x		Imported
	Tier 2		x	xx		SAWR
Commercial Ag (CA)			x	xx		Imported
Commercial Domestic Ag (CB)	Tier 1	x	x	x		Imported
	Tier 2		x	xx		Imported
Commercial (C)		x	x	x	x	Imported
Irrigation Only (I)		x	x	x	x	Imported
Government (G)		x	x	xx	x	Imported
Domestic (D/LD/M)	Tier 1	x	x	x		Imported
	Tier 2	x	x	xx		Imported
	Tier 3	x	x	xxx	xxx	Imported

- **Water Reliability** to Recover the Emergency Storage and Water Supply Reliability Charges from MWD
 - Ag uses (except AT Tier 1 & CB Tier 1) are interruptible → no Water Reliability Rate and no Conservation Rate
- **All Indoor Use (Tier 1) at Tier 1 Rate:**
 - AT & CB Tier 1 Rate = Residential Tier 1 Rate for indoor use

WATER REVENUE REQUIREMENTS

Cost Categories	FY 2018
Power	\$274,271
MWD RTS & CWA IAC	\$837,412
Other Water Supply	\$10,614,717
Base Fixed	\$3,435,941
Peaking	\$2,560,498
Water Reliability	\$1,486,481
Billing & CS	\$1,037,214
Meters & Services	\$1,744,626
Conservation	\$160,886
Fire Protection	\$3,830
CIC (water)	\$1,272,836
CIC Pumping	\$39,952
Monthly Discount	-\$437,136
Total Revenue Requirements	\$23,031,527



PROPOSED RATES

FY 2018

Meter Size (inch)	Other Fixed Charges			Monthly Fixed Service Charges (FSC)				Current FSC
	CIC	MWD RTS	CWA IAC	Billing & CS	Meters & Services	Capacity	Total FSC	
Water Services								
¾	\$10.01	\$2.70	\$2.93	\$9.40	\$10.59	\$24.75	\$44.74	\$41.59
1	\$13.77	\$4.49	\$4.88	\$9.40	\$17.64	\$41.25	\$68.29	\$54.12
1 ½	\$20.03	\$8.98	\$9.76	\$9.40	\$35.27	\$82.49	\$127.16	\$77.23
2	\$31.30	\$14.36	\$15.62	\$9.40	\$56.43	\$131.98	\$197.81	\$113.03
3	\$52.58	\$28.72	\$31.24	\$9.40	\$112.86	\$263.95	\$386.21	\$184.39
4	\$82.62	\$44.87	\$48.80	\$9.40	\$176.34	\$412.43	\$598.17	\$293.17
6	\$150.22	\$89.73	\$97.60	\$9.40	\$352.68	\$824.85	\$1,186.93	\$523.95
Standby Services								
¾	\$6.01	\$2.70		\$9.40	\$10.59		\$19.99	\$24.78
1	\$8.26	\$4.49		\$9.40	\$17.64		\$27.04	\$24.78
1 ½	\$12.02	\$8.98		\$9.40	\$35.27		\$44.67	\$24.78
2	\$18.78	\$14.36		\$9.40	\$56.43		\$65.83	\$24.78
3	\$31.55	\$28.72		\$9.40	\$112.86		\$122.26	\$24.78
4	\$49.57	\$44.87		\$9.40	\$176.34		\$185.74	\$24.78
6	\$90.13	\$89.73		\$9.40	\$352.68		\$362.08	\$24.78



PROPOSED RATES FY 2018

Meter Size (inch)	Monthly Fixed Service Charges (FSC)				
	Billing & CS	Fire Capacity	Backflow Inspection	Total FSC	Current FSC
Private Fireline					
2	\$9.40	\$0.30		\$9.70	\$68.26
3	\$9.40	\$0.86		\$10.26	\$78.74
4	\$9.40	\$1.84		\$11.24	\$89.22
6	\$9.40	\$5.32		\$14.72	\$122.49
8	\$9.40	\$11.34		\$20.74	\$155.76
Backflow Devices					
¾			\$4.93	\$4.93	\$6.88
1			\$5.81	\$5.81	\$6.88
1 ½			\$10.73	\$10.73	\$9.94
2			\$12.88	\$12.88	\$9.94
3			\$25.75	\$25.75	\$11.27
4			\$40.23	\$40.23	\$15.92
6			\$80.45	\$80.45	\$19.06

\$ / kgal	Proposed	Current
Elevation Charges	\$0.69 /kgal	\$0.33
CIC Pumping	\$0.10 / kgal	\$0.10



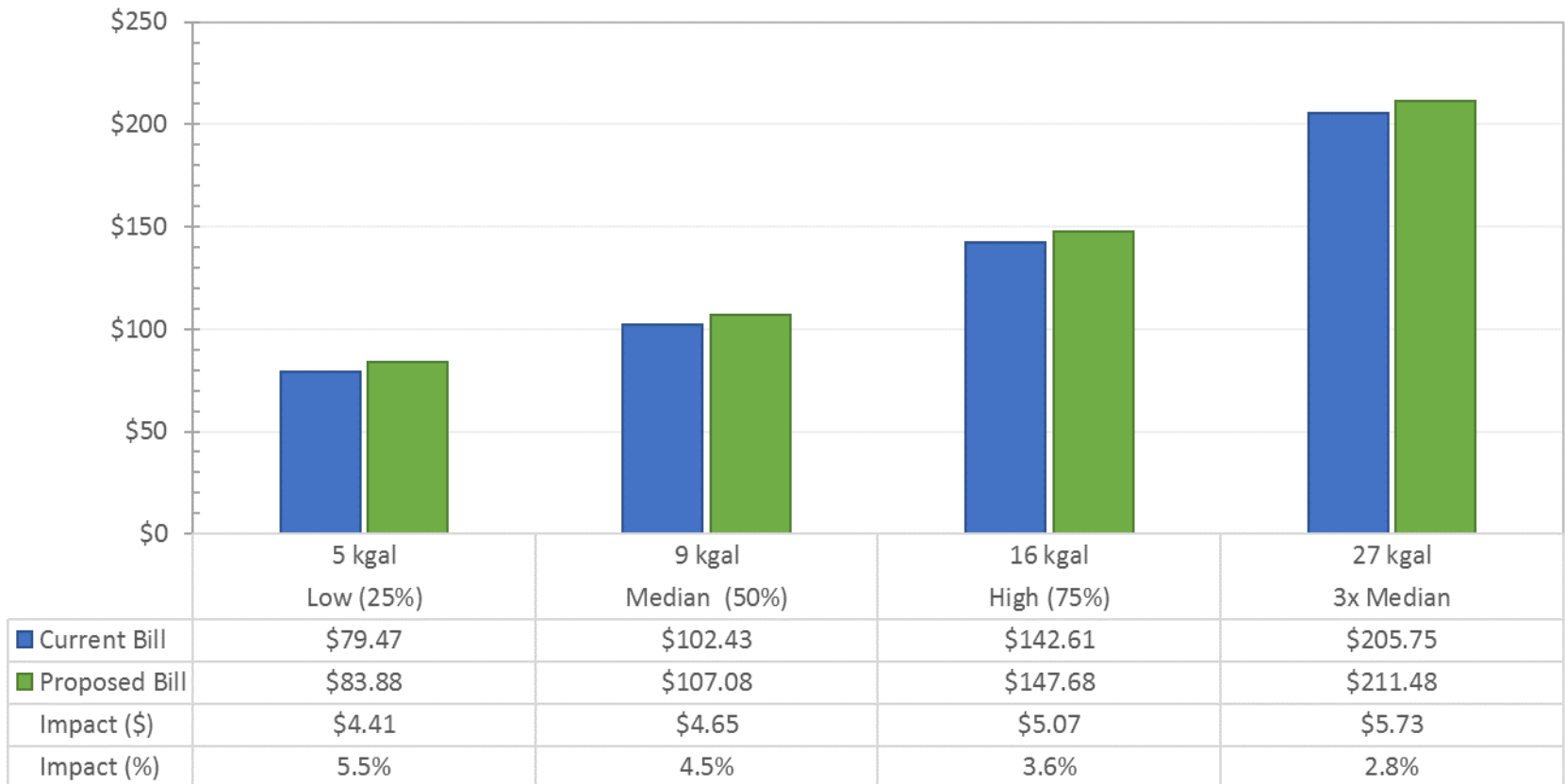
PROPOSED RATES FY 2018

Customer Class		Water Reliability	Delivery	Peaking	Conservation	Water Supply	Proposed	Current
Agriculture								
Ag (SAWR) (AS)			\$0.49	\$0.42		\$3.31	\$4.22	\$3.65
Ag Domestic (SAWR) (AT)	Tier 1	\$0.94	\$0.49	\$0.29		\$3.98	\$5.70	\$5.21 - \$5.74
	Tier 2		\$0.49	\$0.42		\$3.31	\$4.22	\$3.65
Commercial Ag (CA)			\$0.49	\$0.42		\$3.98	\$4.89	\$4.97
Commercial Domestic Ag (CB)	Tier 1	\$0.94	\$0.49	\$0.29		\$3.98	\$5.70	\$5.21 - \$5.74
	Tier 2		\$0.49	\$0.42		\$3.98	\$4.89	\$4.97
Non-Agriculture								
Commercial (C)		\$0.94	\$0.49	\$0.36	\$0.11	\$3.98	\$5.88	\$5.21 - \$5.74
Irrigation Only (I)		\$0.94	\$0.49	\$0.27	\$0.11	\$3.98	\$5.79	\$5.74
Government (G)		\$0.94	\$0.49	\$0.37	\$0.11	\$3.98	\$5.89	\$5.74
Domestic (D/LD/M)	Tier 1	\$0.94	\$0.49	\$0.29		\$3.98	\$5.70	\$5.21
	Tier 2	\$0.94	\$0.49	\$0.39		\$3.98	\$5.80	\$5.74
	Tier 3	\$0.94	\$0.49	\$0.52	\$1.12	\$3.98	\$7.05	\$6.32

CUSTOMER IMPACT ANALYSIS

Sample Water Bills For Domestic & Large Domestic

3/4" meter, 1 DU, eligible for monthly discount

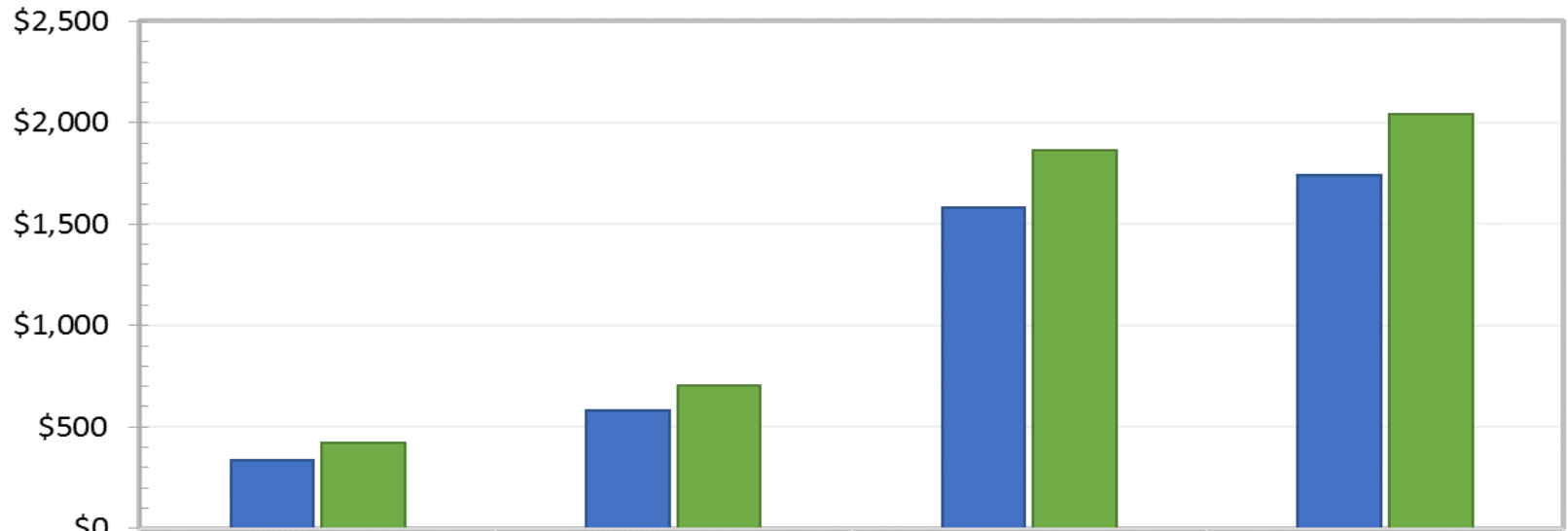


CUSTOMER IMPACT ANALYSIS

AG SAWR (AS) CUSTOMER – 2-INCH METER

Sample Water Bills For Ag (SAWR) Customers

2" meter, 1 DU, excl. pumping charge , eligible for monthly discount



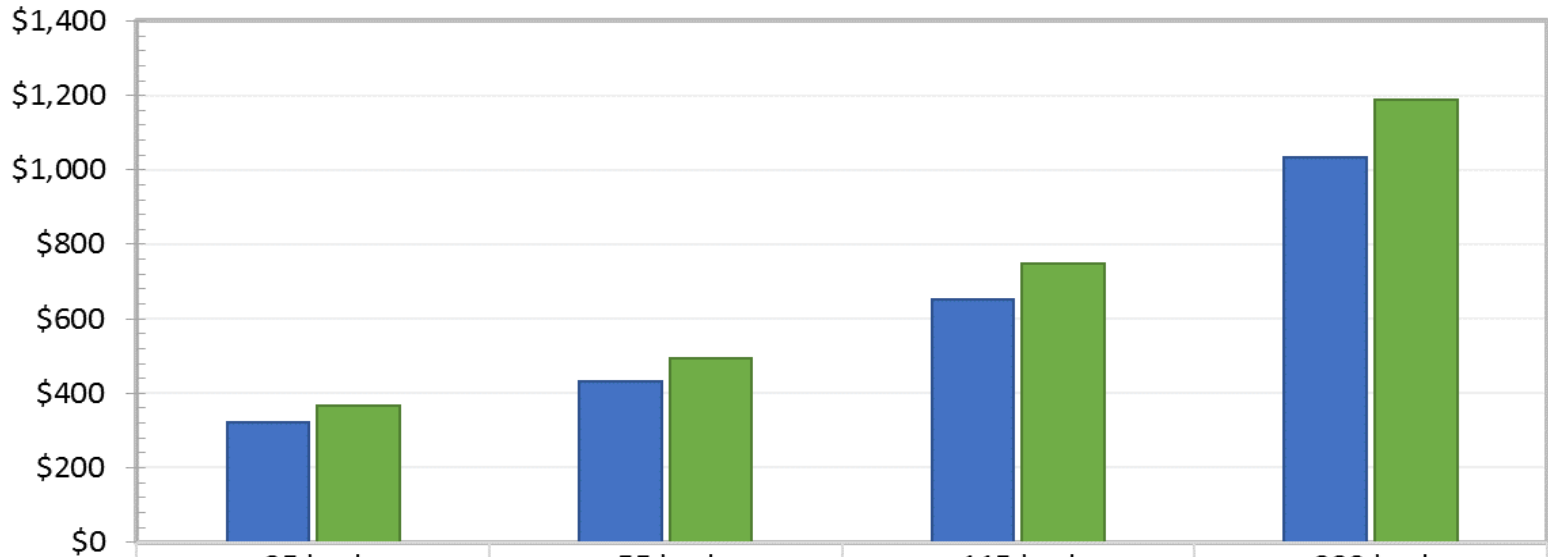
	40 kgal Low (25%)	106 kgal Median (50%)	381 kgal High (75%)	424 kgal 4x Median
■ Current Bill	\$337.71	\$578.61	\$1,582.36	\$1,739.31
■ Proposed Bill	\$422.89	\$701.41	\$1,861.91	\$2,043.37
Impact (\$)	\$85.18	\$122.80	\$279.55	\$304.06
Impact (%)	25.2%	21.2%	17.7%	17.5%

CUSTOMER IMPACT ANALYSIS

AG DOMESTIC SAWR (AT) CUSTOMER – 2-INCH METER

Sample Water Bills For Ag Domestic (SAWR)

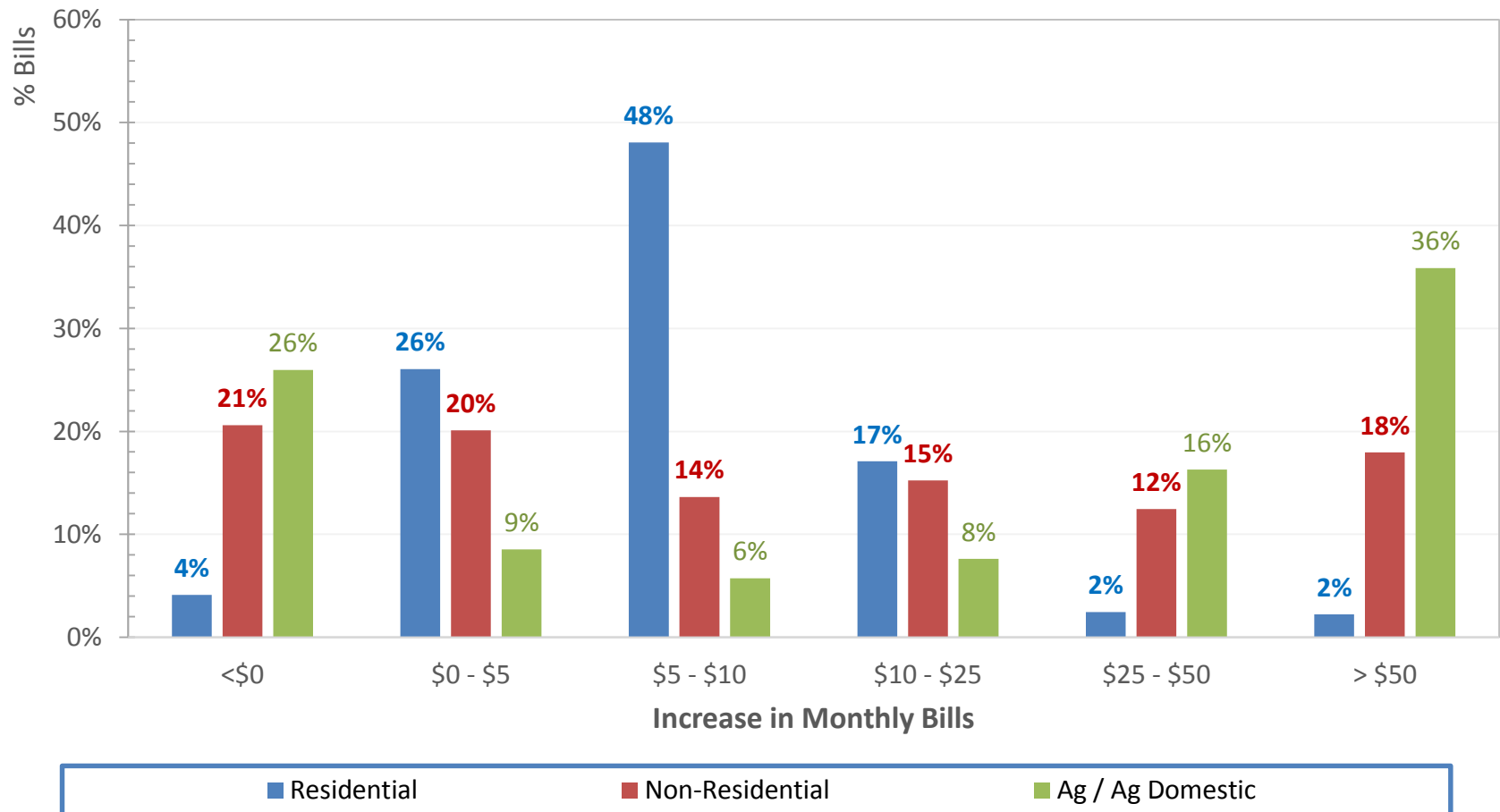
2" meter, 1 DU, excl. pumping charge , eligible for monthly discount



	25 kgal Low (25%)	55 kgal Median (50%)	115 kgal High (75%)	220 kgal 4x Median
■ Current Bill	\$322.11	\$431.61	\$650.61	\$1,033.86
■ Proposed Bill	\$366.99	\$493.59	\$746.79	\$1,189.89
Impact (\$)	\$44.88	\$61.98	\$96.18	\$156.03
Impact (%)	13.9%	14.4%	14.8%	15.1%

CUSTOMER IMPACT ANALYSIS

Customer Impact Analysis



RW Rate Discussion

RW RATE FRAMEWORK

- RW services pay the same monthly fixed service charges (FSC) as Water services
- RW usage rates recover the residual RW costs after accounting for FSC revenues
 - Property tax allocated to RW fund (\$34,033 in FY 2018) are dedicated to provide discount for non-revenue RW usage and Sport Park & Youth Baseball (SP&YB) for public benefits

PROPOSED RW RATES

Meter Size (inch)	Monthly Fixed Service Charges (FSC)				
	Billing & CS	Meters & Services	Capacity	Total FSC	Current FSC
¾	\$9.40	\$10.59	\$24.75	\$44.74	\$41.59
1	\$9.40	\$17.64	\$41.25	\$68.29	\$54.12
1 ½	\$9.40	\$35.27	\$82.49	\$127.16	\$77.23
2	\$9.40	\$56.43	\$131.98	\$197.81	\$113.03
3	\$9.40	\$112.86	\$263.95	\$386.21	\$184.39
4	\$9.40	\$176.34	\$412.43	\$598.17	\$293.17
6	\$9.40	\$352.68	\$824.85	\$1,186.93	\$523.95

PROPOSED RW RATES

Proposed Rates	FY 2018 Proposed Rates	Current Rates
Caltrans (Contract)	\$3.51	\$3.51
Orange Groove (Contract)	\$4.96	\$4.55
Sports Park & Youth Baseball (SP&YB)	\$2.15	\$1.66
Non-Contract RW Sales	\$4.31	\$4.43
Non-revenue RW Sales	\$0.00	\$0.00
Potable Water Rates		
Potable Irrigation Rates	\$5.79	
Potable Residential Tier 1	\$5.70	
Potable Residential Tier 2	\$5.80	
RW Non-Contract Rates as % of Potable Rates		
Potable Irrigation Rates	74%	
Residential Tier 1	76%	
Average Residential Tiers 1 & 2	75%	

Proposed Drought Rates



PROPOSED FY 2018 DROUGHT RATES

Drought Levels	FY 2018 Base Rates	Level 1	Level 2	Levels 3 & 4
Reduction Goals		10%	20%	40%
Commercial Ag (CA)	\$4.89	\$0.25	\$0.48	\$1.14
Commercial Ag Domestic (CB)				
Tier 1	\$5.70	\$0.29	\$0.56	\$1.32
Tier 2	\$4.89	\$0.25	\$0.48	\$1.14
Residential (D, LD, M)				
Tier 1	\$5.70	\$0.29	\$0.56	\$1.32
Tier 2	\$5.80	\$0.30	\$0.56	\$1.35
Tier 3	\$7.05	\$0.36	\$0.69	\$1.64
Non-Residential (C,I,G)				
Commercial (C)	\$5.88	\$0.30	\$0.57	\$1.37
Irrigation Only (I)	\$5.79	\$0.30	\$0.56	\$1.34
Government (G)	\$5.89	\$0.30	\$0.57	\$1.37

Q & A

THANK YOU

MSRB REGISTERED MUNICIPAL ADVISOR: RFC is a Registered Municipal Advisor with the MSRB and SEC under the Dodd-Frank Act and is fully qualified and capable of providing advice related to all aspects of utility financial and capital planning, including the size, timing, and terms of future debt issues. Any opinion, information, or recommendation included in this presentation, related to the size, timing, and terms of a future debt issue may be relied upon only for its intended purpose. This information is not intended as a recommendation to undertake a specific course of action related to the issuance of debt, or to indicate that a particular set of assumptions for the size, timing and terms of issuing debt will be available at the time debt is actually issued.

CONTACT:

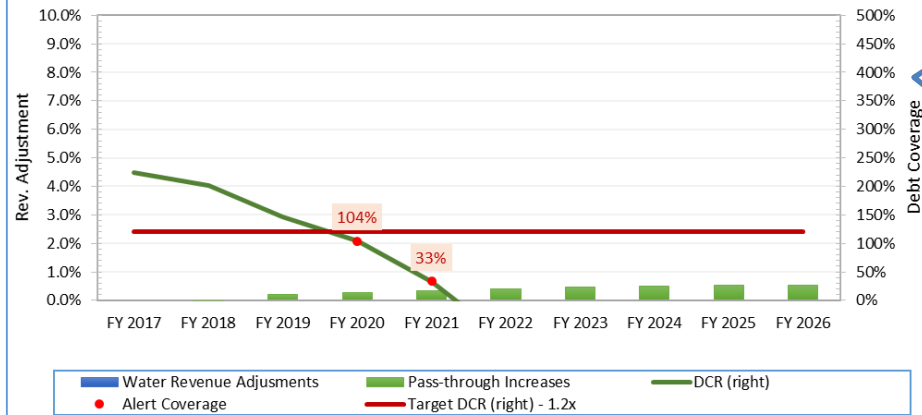
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WATER FINANCIAL PLAN

STATUS QUO – NO REV INCREASE, CALPERS+\$3M AND NO SMCUP

Water Rev. Adjustment and Debt Coverage

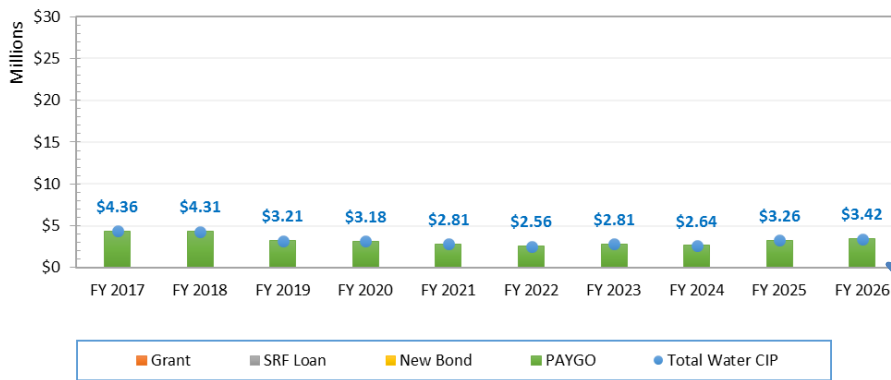


Water Revenue Adjustments and Debt Coverage

- **Blue** bars – No Revenue Adjustment (left axis)
- **Green** bars – Pass-through Increases from RTS & IAC (left axis)
- **Red** line – Target debt coverage 120% (right axis)
- **Green** line – Projected debt coverage for Whole FPUD (right axis)
- **Red** dot – Alert coverage when falling below target

Water CIP Funding Sources

Master CIP, No SMCUP



Water CIP & Funding Sources

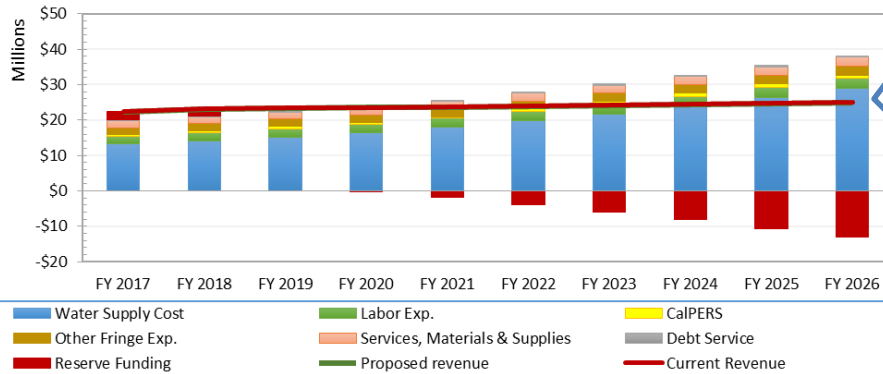
- **Orange** bar – Grant
- **Grey** bar – SRF Loan (for SMCUP CIP)
- **Yellow** bar – New Bond
- **Green** bar – PAYGO
- **Blue** dot – Total Water CIP

WATER FINANCIAL PLAN

STATUS QUO – NO REV INCREASE, CALPERS+\$3M AND NO SMCUP

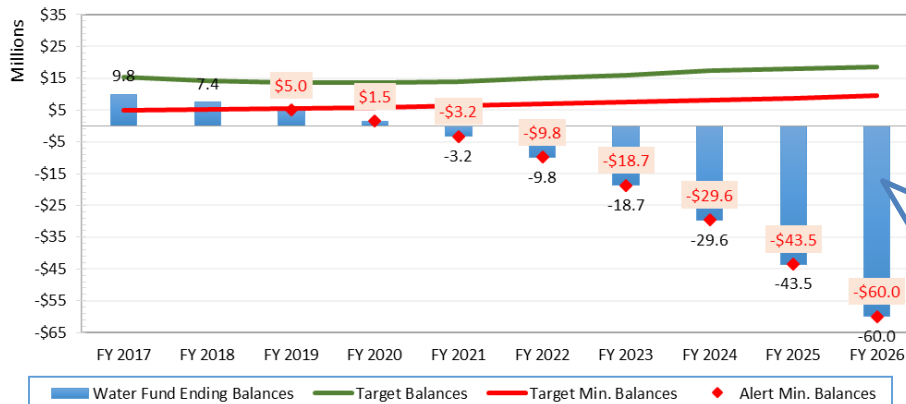
Water Fund Operating Financial Plan

No SMCUP; Current Water Sales; Increased CalPERS_UL



Note: Revenues incl. non-op. revenues (i.e. Capital improvement charge)

Water Fund Ending Balances



Operating Financial Plan

- Lines – revenues
 - **Red** – current rates with pass-through RTS/IAC costs
 - **Green** – proposed rates with pass-through RTS/IAC costs (no revenue adjustments → same as current)
- Stacked bars - Expenses
 - **Blue** – Water Supply Costs
 - **Green** – Labor Expenses
 - **Yellow** – CalPERS
 - **Dark Yellow** – Other Fringe Expenses
 - **Light Orange** – Service, Materials & Supplies
 - **Grey** – Debt Service
 - **Red** – Reserve Funding (+) or Funding from Reserve (-)

Projected Reserve Balances

- **Blue** bars – Projected ending fund balances
- **Green** line – Target balances
- **Red** line – Minimum target balances (3 months of O&M)
- **Red** dot – alert balances when ending balances fall below target levels