

Rio Linda Elverta CWD

Rate Study / Cost of Service Study



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LECHOWICZ + TSENG
MUNICIPAL CONSULTANTS

Alison Lechowicz
Project Manager



Background

- Water rates are subject to Proposition 218
- Rates must be based on the reasonable cost of service
- Rates must proportionally recover costs based on how customers take service
- Covers rates over a maximum 5-year period
- Procedural requirements: conduct a rate study, mail a notice to property owners, hold a hearing a minimum of 45 days later, protest vote



Rate Study Goals

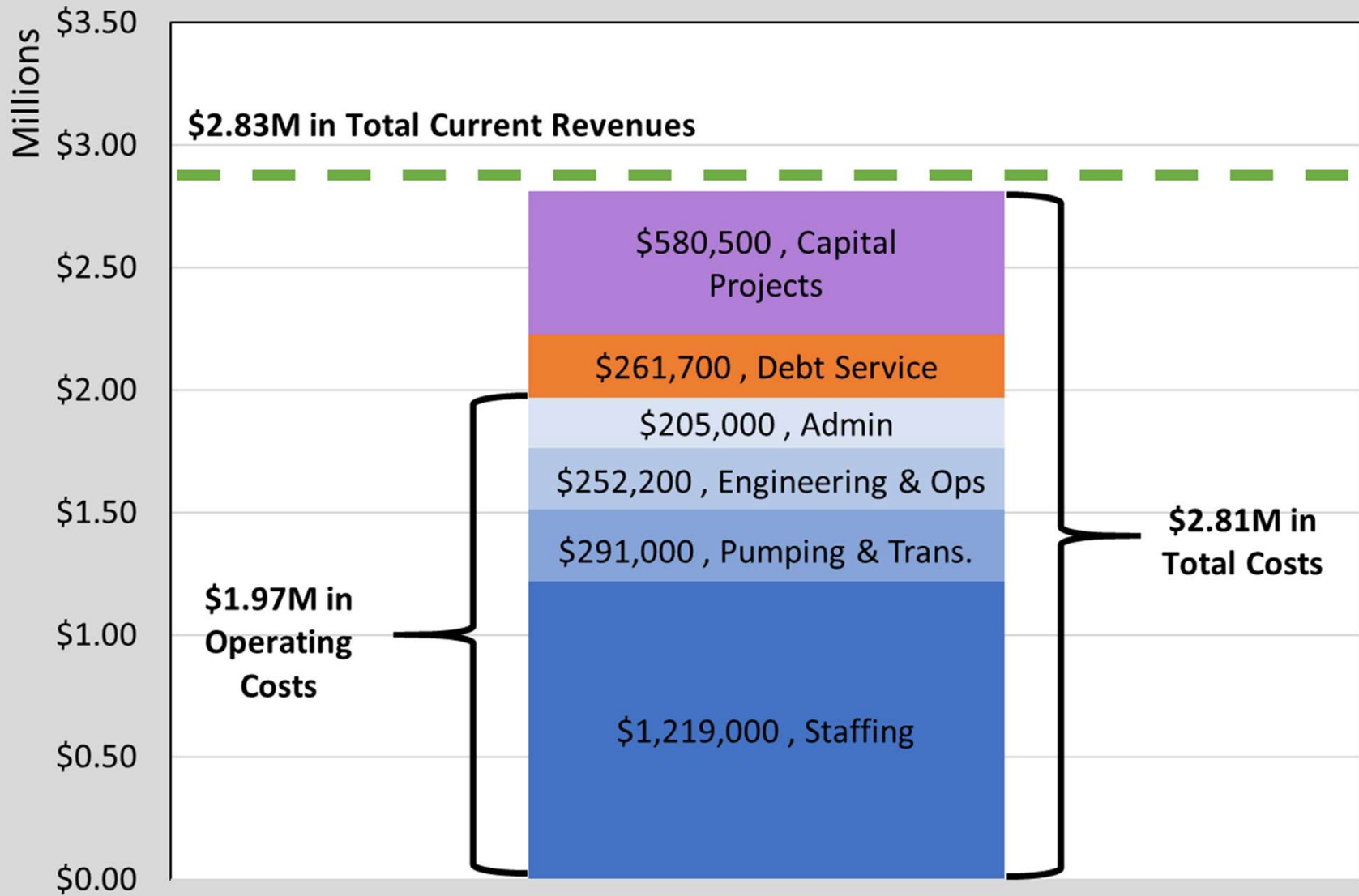
- Update the cost of service
 - Collect sufficient funds to cover:
 - Operations
 - Debt obligations
 - Repair and replacement of infrastructure
 - Funding of reserves for emergencies
 - Meet legal requirements
 - Prop 218
 - Water conservation requirements
 - New rates effective July 1, 2021
- This rate study does not evaluate:
 - Existing capital surcharges that are pledged to repay debt
 - Standby fire protection charges that were analyzed in 2018



Financial Position

- Current operating reserves of about \$660,000 which is well in excess of target of 1 month of expenses (approx. \$164,000)
- Current total expenses of \$2.81M:
 - \$1.97M operations
 - \$261,700 in 2015 Umpqua Loan and AMI meter loan debt service
 - \$580,500 in capital improvements and misc. expenses
- Current total revenues of \$2.83M

Current Water Operations Revenues and Expenses



FY2021

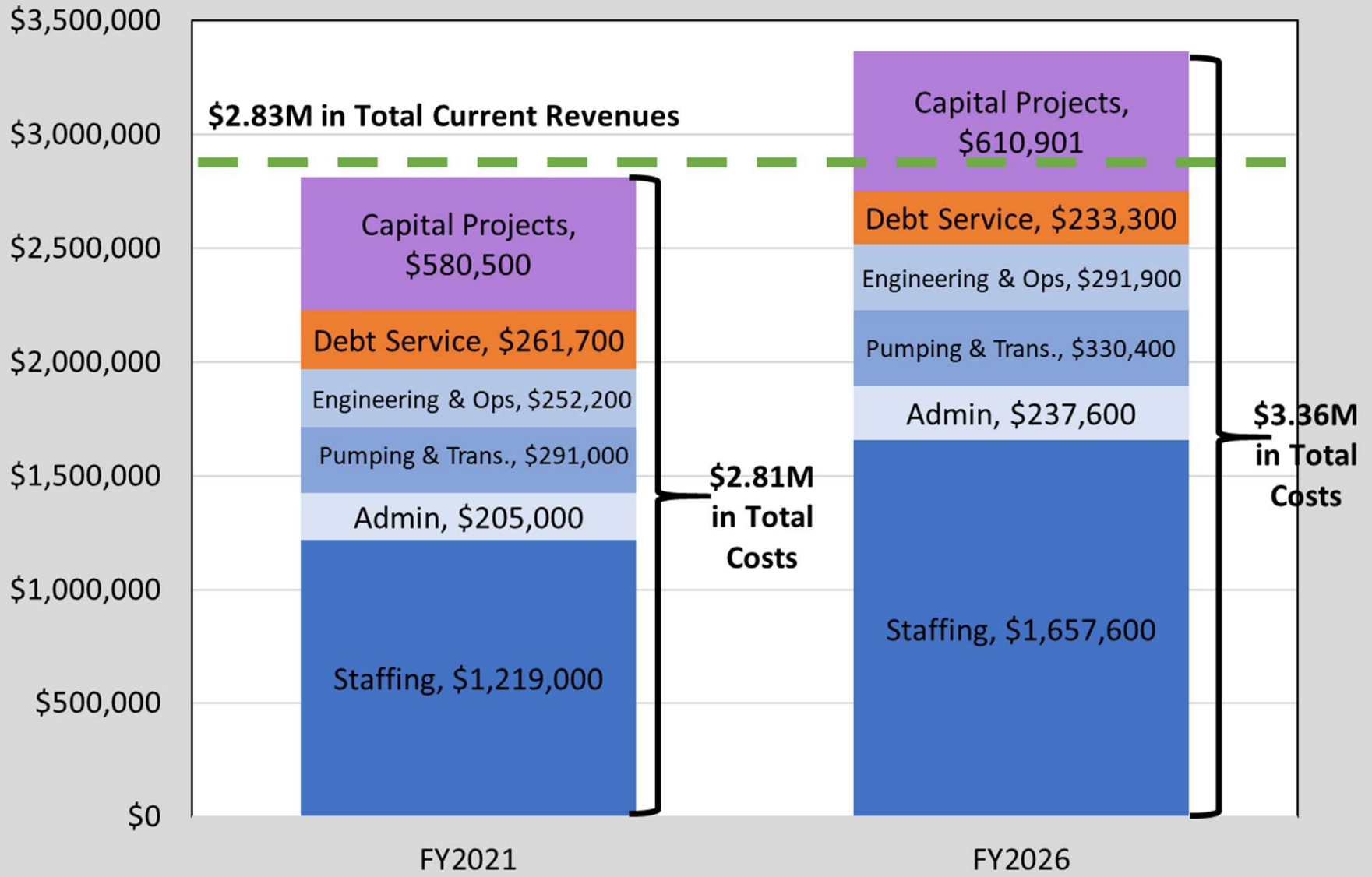


5-Year Projection

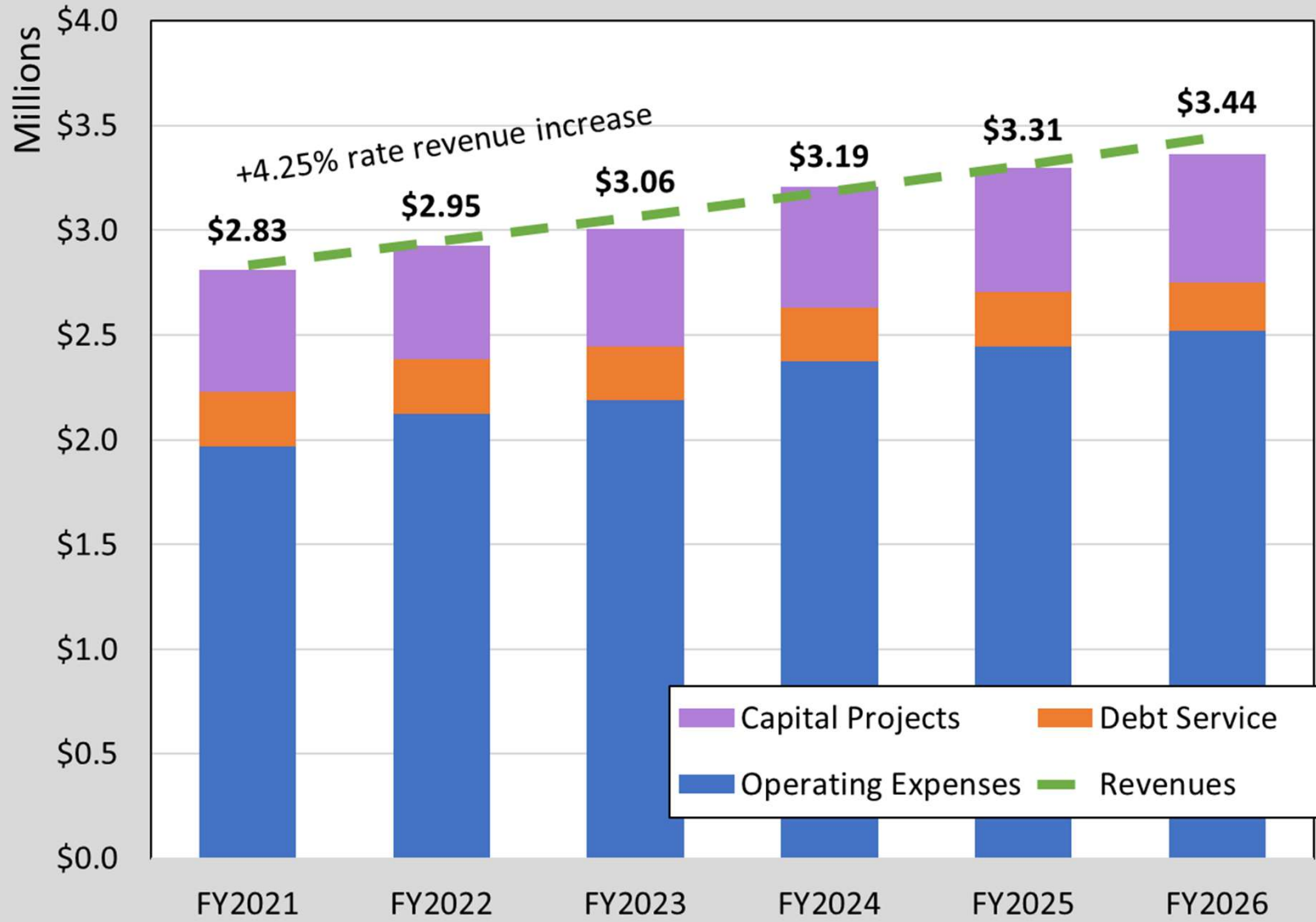
- Most operating expenses projected to increase by 3% annually
- New operator treatment licenses and certifications in FY2022
- New administrative manager position in FY2024
- AMI meter loan paid off in FY2026 (half payment in FY2025)
- Continue annual capital set-asides +3%/yr:

Project	Annual Funding FY2022
Pump Replacements	\$40,000
Service Replacements	\$30,000
Meter Replacements	\$125,000
Pipeline Replacements	\$211,200
Well 12A	<u>\$134,400</u>
Total	\$540,600

Water Operations Revenues and Expenses



Water Operations Revenues and Expenses





Current Bimonthly Rates

Meter Size	Service Charge	Capital Surcharge	Surcharge	Total Fixed Charge
5/8"	\$59.86	\$19.00	\$15.80	\$94.66
3/4"	\$59.86	\$19.00	\$15.80	\$94.66
1"	\$99.77	\$19.00	\$15.80	\$134.57
1.5"	\$199.53	\$19.00	\$15.80	\$234.33
2"	\$319.25	\$19.00	\$15.80	\$354.05
3"	\$698.37	\$19.00	\$15.80	\$733.17
4"	\$1,257.06	\$19.00	\$15.80	\$1,291.86
Inactive	\$59.86	\$19.00	\$15.80	\$94.66

Tier	Use in Tier	Rate (\$/ccf)
Tier 1	0 to 6 ccf	\$0.00
Tier 2	Above 6 ccf	\$0.81



Current Fire and Backflow Rates

Standby Fire Protection	Service Charge
1.5"	\$4.12
4"	\$40.00
6"	\$60.00
8"	\$80.00

Backflow Prevention	Service Charge
Per device	\$8.33



Rate Design Considerations

- Capital surcharges are not proposed to be adjusted
- Implement fire protection rates calculated in the 2018 memo
- Formalize inoperable meter fixed charges
- Reduce fixed fees and recover a higher % of revenue from volume rates
- Adopt a rate structure compliant with water conservation mandates:
 - SB 606, AB 1668 – target indoor water use of 52.5 gallons per capita per day by 2025
 - Eliminate the free allotment of 6 ccf per bimonthly period
 - Review a tiered rate structure - not illegal but must be cost-justified per the San Juan Capistrano legal ruling
- Utilize industry standard methodology – American Water Works Association “base + extra”



Rate Design Proposal

- 2-Tier single family rate structure:
 - Tier 1: 0 to 17ccf per bimonthly period – 52.5 gallons per capita per day for a 4 person household
 - Tier 2: use above 17 ccf
- Tier 1 = recovers costs for base, average day use
- Tier 2 = recovers costs for some base, average day use plus peak use
- Peaking costs include engineering, debt service, and capital costs associated with providing service at maximum demands on the system
- Commercial, industrial, and institutional (CII) and irrigation are proposed to each have a single rate that recovers costs for both base and peak use. Irrigation customers have high peaking costs.
- Fixed charges are reduced
- Inoperable meter charges = typical bill for the season (warm or cold weather)



Current and Proposed Rates

Meter Size	Current Fee	Proposed Fee
5/8"	\$59.86	\$32.34
3/4"	\$59.86	\$32.34
1"	\$99.77	\$50.77
1.5"	\$199.53	\$96.86
2"	\$319.25	\$152.16
3"	\$698.37	\$327.27
4"	\$1,257.06	\$585.34
Inactive	\$59.86	\$32.34

Current Tier	\$/ccf
Tier 1: 0 to 6 ccf	\$0.00
Tier 2: above 6 ccf	\$0.81

Proposed SF Tier	\$/ccf
Tier 1: 0 to 17 ccf	\$1.63
Tier 2: above 17 ccf	\$2.08

Proposed Class	\$/ccf
Commercial, industrial, institutional	\$1.85
Irrigation	\$2.11



Current and Proposed Rates

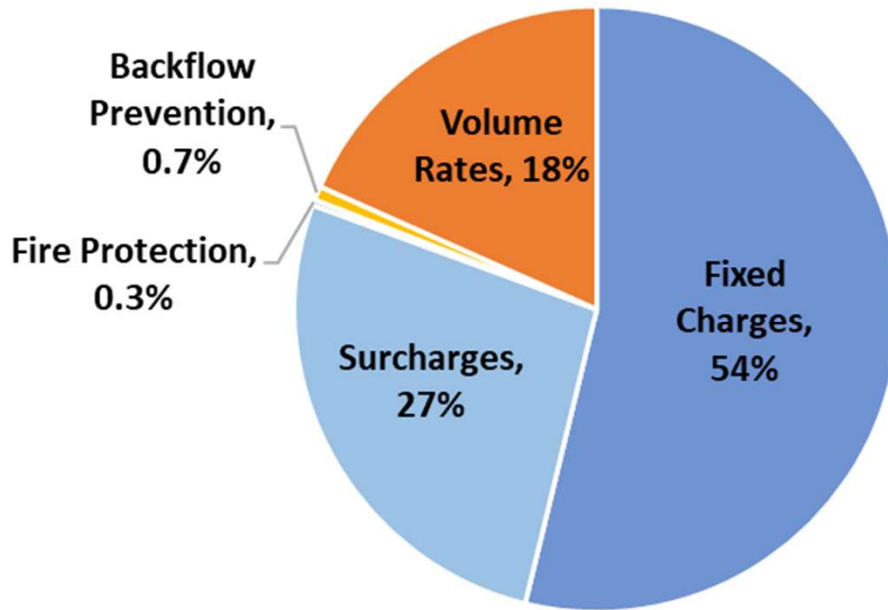
Fire and Backflow	Current	Proposed
Fire 1.5"	\$4.12	\$4.12
Fire 4"	\$40.00	\$54.38
Fire 6"	\$60.00	\$157.96
Fire 8"	\$80.00	\$157.96
Backflow Prevention	\$8.33	\$6.75

Inoperable Meter Fees	Proposed
5/8" - Cold Weather (19 ccf)	\$64.21
5/8" - Warm Weather (43 ccf)	\$114.13
3/4" - Cold Weather (19 ccf)	\$64.21
3/4" - Warm Weather (43 ccf)	\$114.13
1" - Cold Weather (19 ccf)	\$82.64
1" - Warm Weather (43 ccf)	\$132.56



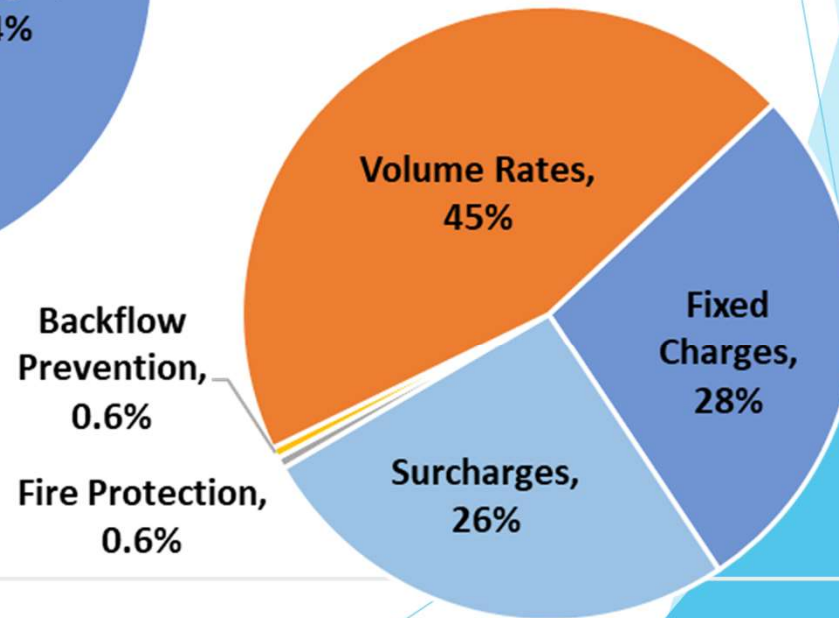
Current and Proposed Rate Revenue

Current - \$3.58M



NOTE: Graphs include surcharges; does not include non-rate revenue

Proposed FY2022 - \$3.70M





Typical Single Family Bills

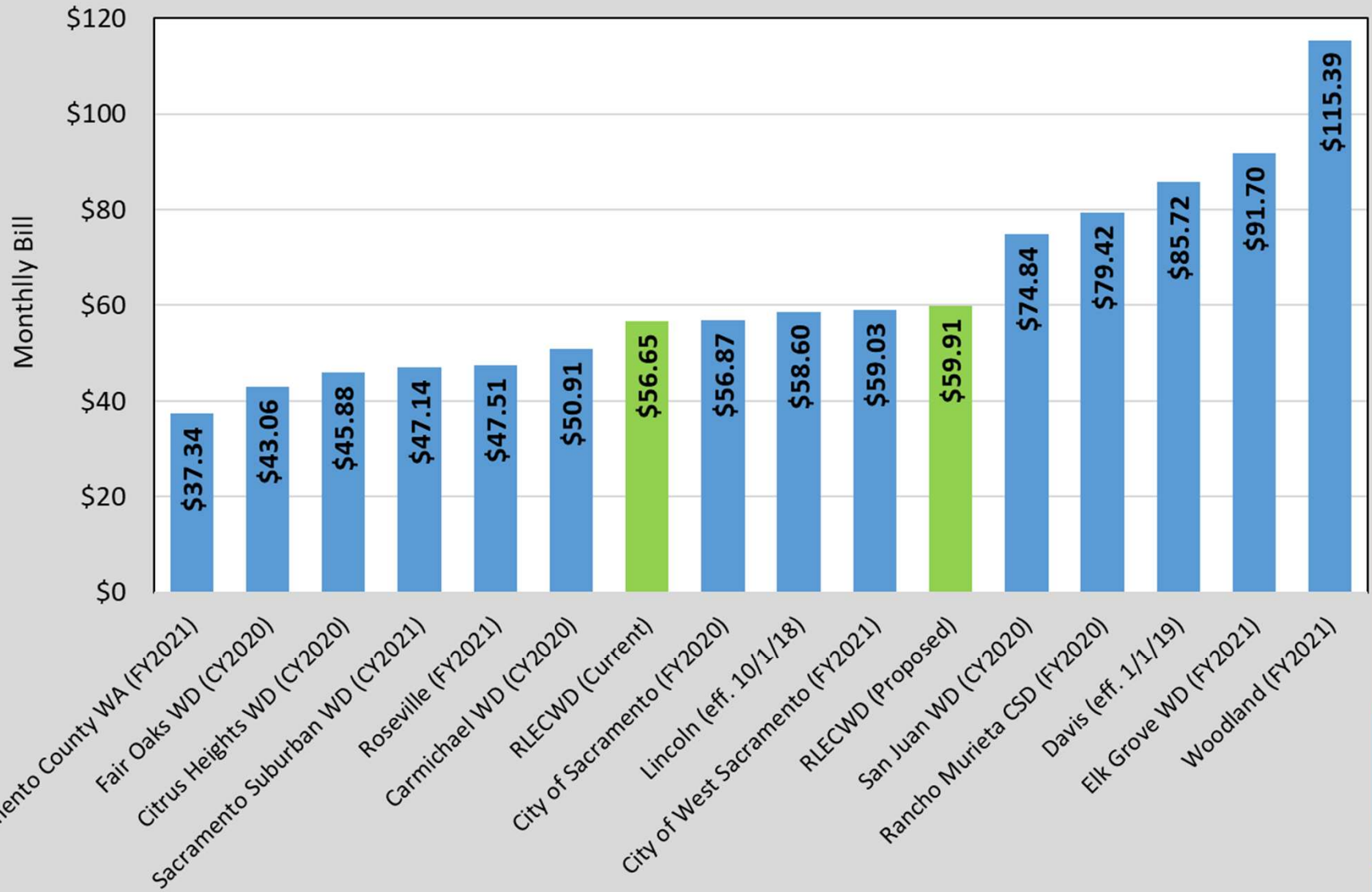
Typical bill – 29 ccf per bimonthly period

	Current			
	Count	Rate	Fees	%
Fixed Fees				
5/8" Meter	1	\$59.86	\$59.86	53%
Surcharge 1	1	\$19.00	\$19.00	17%
Surcharge 2	1	\$15.80	<u>\$15.80</u>	<u>14%</u>
Subtotal Fixed			\$94.66	84%
Volume Fees				
Tier 1: 0-6 ccf	6	\$0.00	\$0.00	0%
Tier 2: 6+ ccf	<u>23</u>	\$0.81	<u>\$18.63</u>	<u>16%</u>
Subtotal Volume	29		\$18.63	16%
Total Bimonthly			\$113.29	100%
Monthly Bill			\$56.65	

	Proposed FY2022			
	Count	Rate	Fees	%
Fixed Fees				
5/8" Meter	1	\$32.34	\$32.34	27%
Surcharge 1	1	\$19.00	\$19.00	16%
Surcharge 2	1	\$15.80	<u>\$15.80</u>	<u>13%</u>
Subtotal Fixed			\$67.14	56%
Volume Fees				
Tier 1: 0-17 ccf	17	\$1.63	\$27.71	23%
Tier 2: 17+ ccf	<u>12</u>	\$2.08	<u>\$24.96</u>	<u>21%</u>
Subtotal Volume	29		\$52.67	44%
Total Bimonthly Bill			\$119.81	100%
% Change from Current			5.8%	
Monthly Bill			\$59.91	

Monthly Residential Water Rate Survey

Based on 14.5 ccf of monthly water use and a 5/8" or 3/4" meter





Typical Single Family Bills

Indoor only bill – 17 ccf per bimonthly period

	Current			
	Count	Rate	Fees	%
Fixed Fees				
5/8" Meter	1	\$59.86	\$59.86	58%
Surcharge 1	1	\$19.00	\$19.00	18%
Surcharge 2	1	\$15.80	<u>\$15.80</u>	<u>15%</u>
Subtotal Fixed			\$94.66	91%
Volume Fees				
Tier 1: 0-6 ccf	6	\$0.00	\$0.00	0%
Tier 2: 6+ ccf	<u>11</u>	\$0.81	<u>\$8.91</u>	<u>9%</u>
Subtotal Volume	17		\$8.91	9%
Total Bimonthly Bill			\$103.57	100%
Monthly Bill			\$51.79	

	Proposed FY2022			
	Count	Rate	Fees	%
Fixed Fees				
5/8" Meter	1	\$32.34	\$32.34	34%
Surcharge 1	1	\$19.00	\$19.00	20%
Surcharge 2	1	\$15.80	<u>\$15.80</u>	<u>17%</u>
Subtotal Fixed			\$67.14	71%
Volume Fees				
Tier 1: 0-17 ccf	17	\$1.63	\$27.71	29%
Tier 2: 17+ ccf	<u>0</u>	\$2.08	<u>\$0.00</u>	<u>0%</u>
Subtotal Volume	17		\$27.71	29%
Total Bimonthly Bill			\$94.85	100%
% Change from Current			-8.4%	
Monthly Bill			\$47.43	



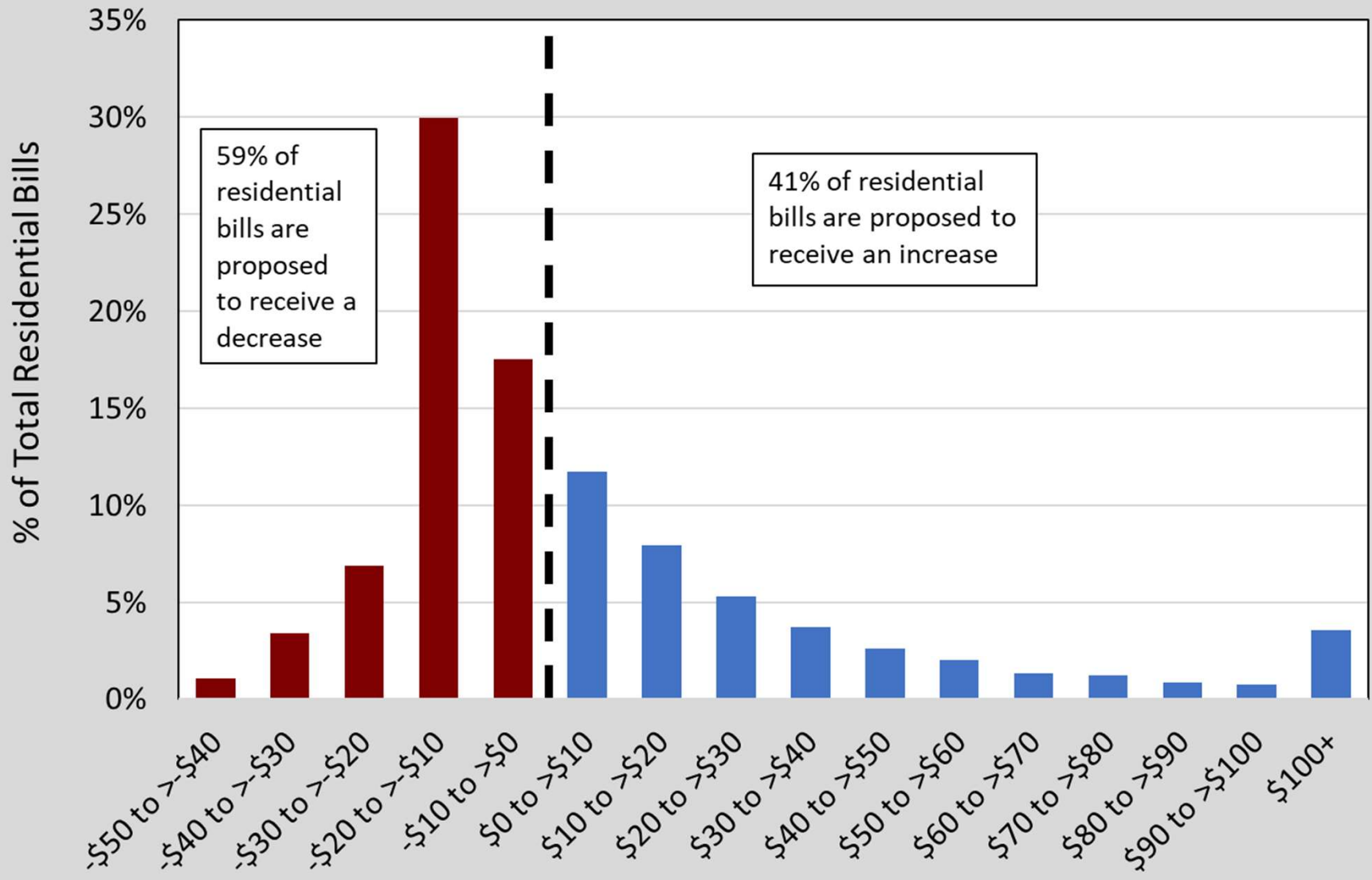
Typical Single Family Bills

Peak Summer Bill – 53 ccf per bimonthly period

Current				
	Count	Rate	Fees	%
Fixed Fees				
5/8" Meter	1	\$59.86	\$59.86	45%
Surcharge 1	1	\$19.00	\$19.00	14%
Surcharge 2	1	\$15.80	<u>\$15.80</u>	<u>12%</u>
Subtotal Fixed			\$94.66	71%
Volume Fees				
Tier 1: 0-6 ccf	6	\$0.00	\$0.00	0%
Tier 2: 6+ ccf	<u>47</u>	\$0.81	<u>\$38.07</u>	<u>29%</u>
Subtotal Volume	53		\$38.07	29%
Total Bimonthly Bill			\$132.73	100%
Monthly Bill			\$66.37	

Proposed FY2022				
	Count	Rate	Fees	%
Fixed Fees				
5/8" Meter	1	\$32.34	\$32.34	19%
Surcharge 1	1	\$19.00	\$19.00	11%
Surcharge 2	1	\$15.80	<u>\$15.80</u>	<u>9%</u>
Subtotal Fixed			\$67.14	40%
Volume Fees				
Tier 1: 0-17 ccf	17	\$1.63	\$27.71	16%
Tier 2: 17+ ccf	<u>36</u>	\$2.08	<u>\$74.88</u>	<u>44%</u>
Subtotal Volume	53		\$102.59	60%
Total Bimonthly Bill			\$169.73	100%
% Change from Current			27.9%	
Monthly Bill			\$84.87	

Single Family Residential Bill Impacts





Pros and Cons

Pros

- Compliant with water conservation mandates
- Free water allotment is eliminated – complies with SB555
- Encourages conservation from 0 to 6 ccf of use
- Equity: higher water users pay more and lower water users pay less
- Customers have greater control over their bills
- More in-line with fees charged by surrounding water agencies

Cons

- Less fixed revenue = greater potential revenue volatility
- High water users will have higher bill increases
- Tiers assume a 4-person household; larger households will have higher bill impacts



Rate Study Timeline

- Informational workshops with the Board Fall 2020 and Spring 2021
- Final Report in March or April 2021
- Proposition 218 notices mailed to customers in April
 - Customers have the right to protest the water rates, sewer rates, or both
 - Protests must be in writing and be received by the end of the public hearing
 - If more than 50% of property owners protest, rates cannot be implemented
- Public hearing in June (at least 45 days after the postmark date)
- If approved, rates will go into effect July 1
- Each year, Board will review the budget and rates (if approved). Board has the option to adopt lower rates without additional hearings.



Questions?

