



Town of Vienna

Water & Sewer Rate Study Rates Results Presentation

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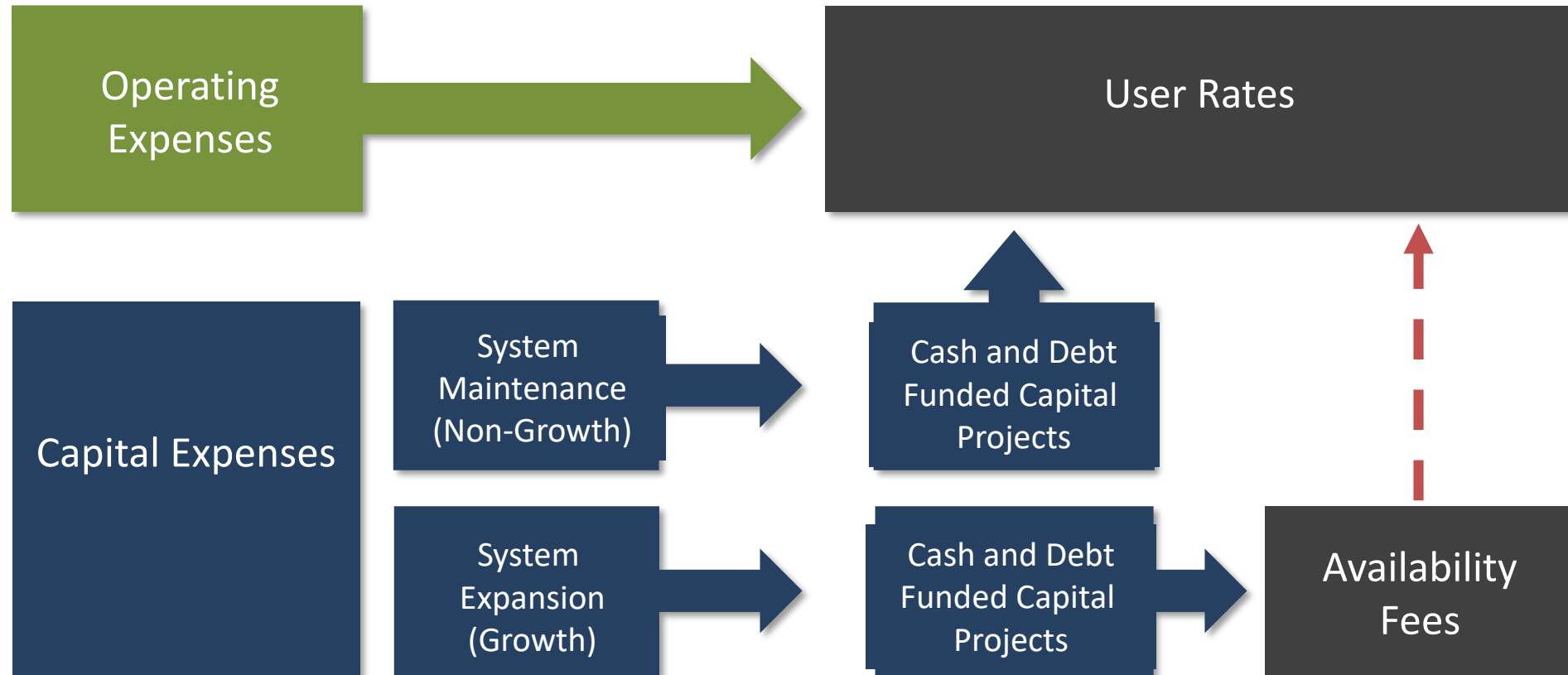
Guiding Principles and Objective

- The water and sewer systems must each be financially self-supporting
- The utility should maintain reserves to provide for contingencies and unplanned expenses
- Water and sewer rates should be kept as low as possible *over time*

Objective: Ensure rates are stable through sound financial management and system maintenance

- ✓ Review water and sewer funds to maintain financial stability
- ✓ Prepare long-term financial plan that includes capital investments required for a sustainable system

Flow of Funds



If availability fees are set at less than cost or anticipated growth does not occur, existing customers will have to make up the difference via higher user rates.

Factors Affecting Rates and Fees

- Operating and maintenance expense changes
 - D.C. WASA: 4%
 - Fairfax Sewer: 3%
 - Water Wholesale: 1%
 - 3.0% escalation rate per year for all other expenses
- Capital improvement plans
 - Fairfax Water/Fairfax County water and sewer treatment expenses
 - Vehicle purchases
- Debt service
 - existing and future debt
- Customers, water usage/sewage generation, miscellaneous revenue
 - no growth
- Minimum cash balance
 - 90 days of operating expenses

Fiscal Year 2018 Revenue Requirements

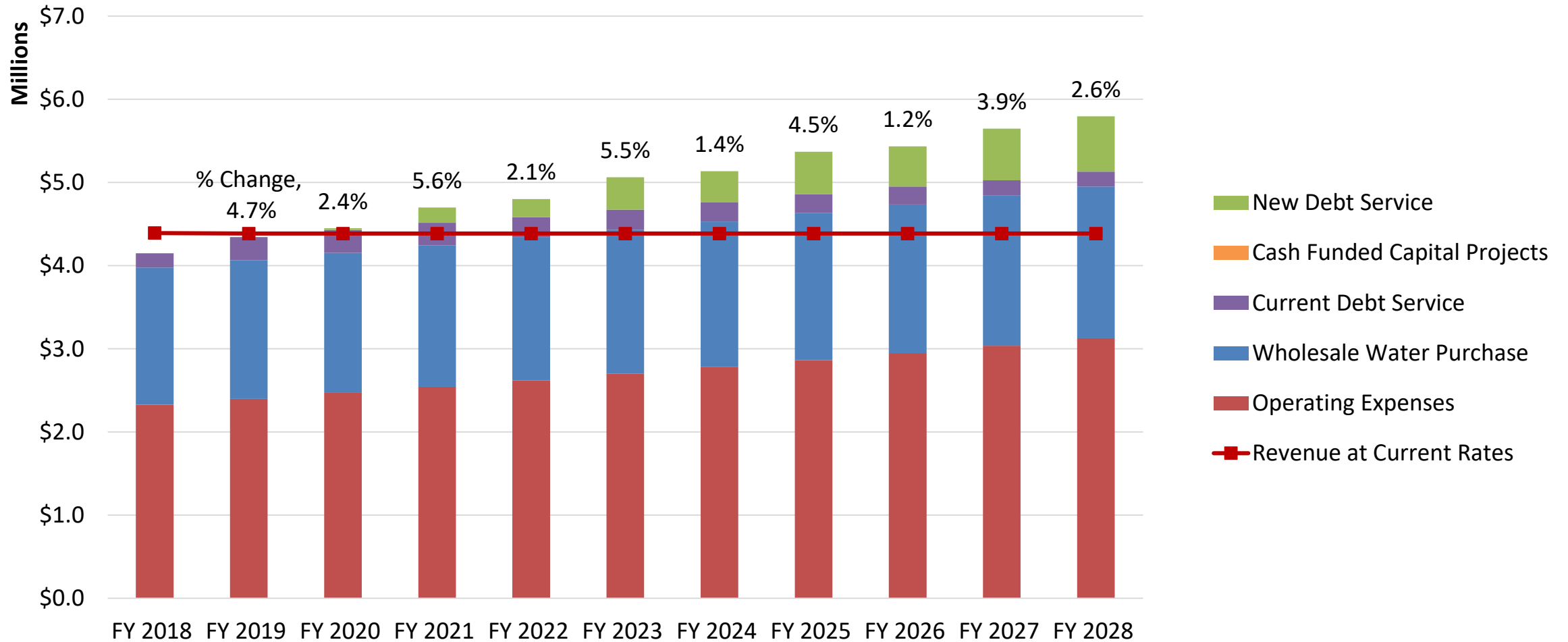
WATER

- Operating & Maintenance expenses
 - \$2,327,272
- Wholesale Water Purchase
 - \$1,650,000
- Current Debt Service
 - \$171,262
- Less out Miscellaneous Revenues
 - (\$389,083)
- TOTAL
 - **\$3,759,451**

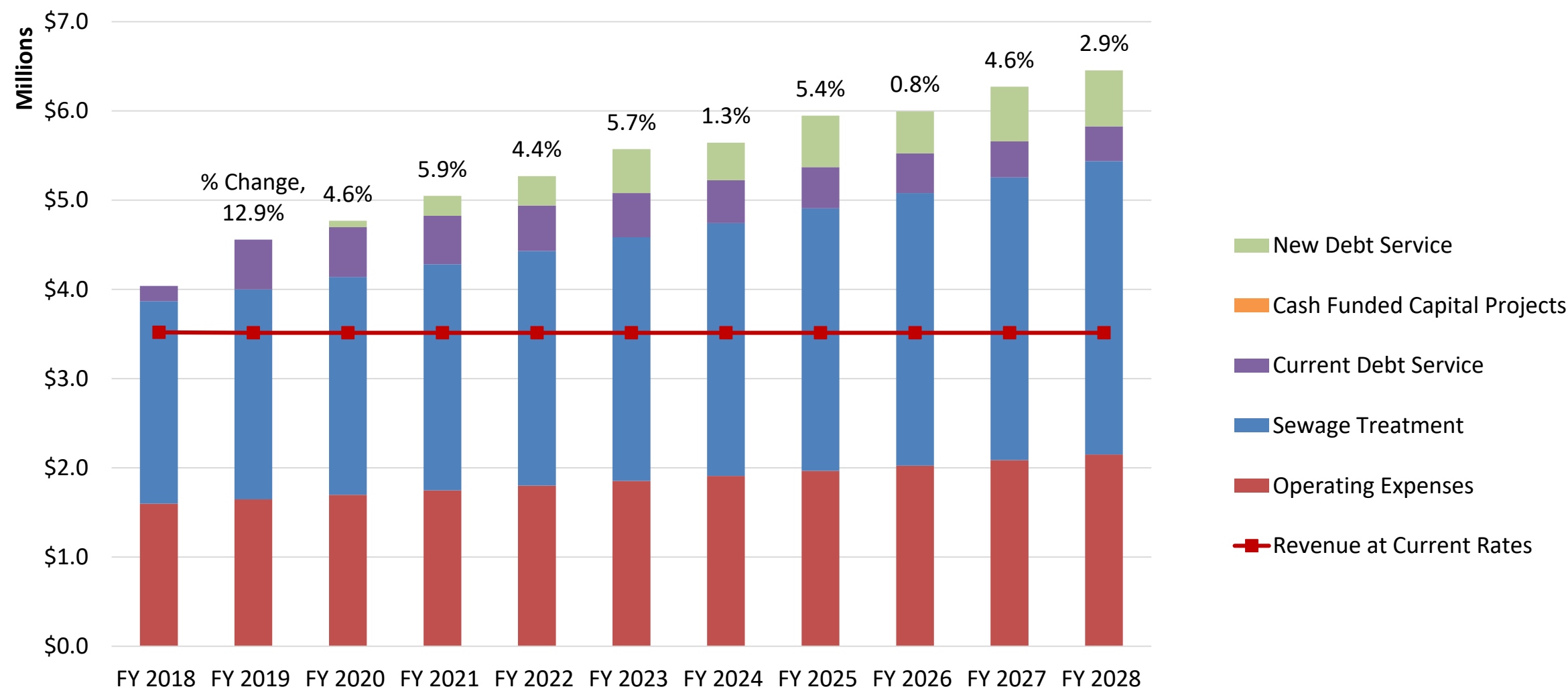
SEWER

- Operating & Maintenance expenses
 - \$1,597,961
- Sewage Treatment
 - \$2,268,420
- Current Debt Service
 - \$171,262
- Less out Miscellaneous Revenues
 - (\$255,237)
- TOTAL
 - **\$3,782,406**

Revenue Requirements vs. Revenue - Water



Revenue Requirements vs. Revenue - Sewer



Current Rate Design

Charge/Rate (per meter)	Residential	Non-Residential
Quarterly Service Charges		
5/8"	\$15.00	\$15.75
1"	\$15.00	\$17.85
1 1/2"	\$15.00	\$24.49
2"	\$15.00	\$32.00
3"	\$15.00	\$78.99
4"	\$15.00	\$130.00

Charge/Rate	Water	Sewer
Usage Rates (per 1,000 gallons)		
Residential		
1 st Tier (0-16,000)	\$4.98	\$6.09
2 nd Tier (16,001-32,000)	\$5.42	\$6.59
3 rd Tier (Over 32,000)	\$6.27	\$7.64
Non-Residential		
1 st Tier (0-90,000)	\$4.98	\$6.09
2 nd Tier (90,001-180,000)	\$5.42	\$6.59
3 rd Tier (Over 180,000)	\$6.27	\$7.64

Proposed Revenue Increases	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Service Charge Revenue (as a % of Total, currently 7.7%)	10.0%	12.5%	15.0%	15.0%	15.0%
Water Rate Revenue Percentage Increases	0.0%	0.0%	0.0%	3.0%	3.0%
Sewer Rate Revenue Percentage Increases	10.0%	10.0%	10.0%	10.0%	3.5%

Recommended Water Rates

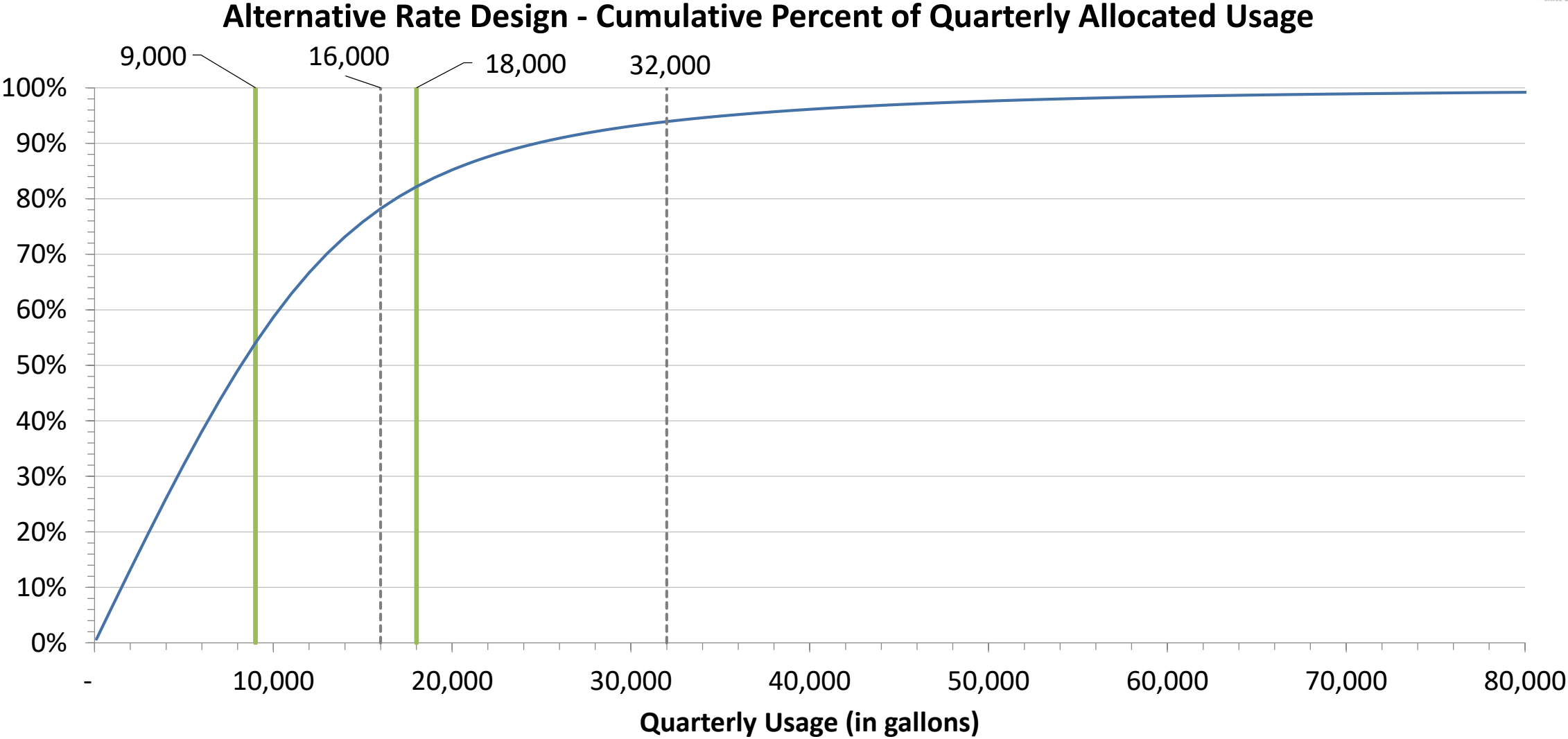


	Equivalents	Current FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Quarterly Service Charges							
Residential	All Meters	\$15.00	\$17.44	\$22.64	\$28.84	\$29.86	\$31.65
Commercial	AWWA						
5/8"	1.00	\$15.75	\$25.06	\$32.52	\$41.44	\$42.90	\$45.47
1"	2.50	\$39.38	\$62.64	\$81.31	\$103.60	\$107.25	\$113.68
1 1/2"	5.00	\$78.75	\$125.29	\$162.61	\$207.21	\$214.49	\$227.36
2"	8.00	\$126.00	\$200.46	\$260.18	\$331.53	\$343.19	\$363.78
3"	16.00	\$252.00	\$400.92	\$520.36	\$663.07	\$686.38	\$727.56
4"	25.00	\$393.75	\$626.44	\$813.07	\$1,036.04	\$1,072.47	\$1,136.81
Water Usage Rates (per 1,000 gallons)							
Residential							
1 st Tier (0-9,000)		\$4.98	\$4.88	\$4.88	\$4.88	\$5.02	\$5.18
2 nd Tier (9,001-18,000)		\$5.42	\$5.31	\$5.31	\$5.31	\$5.47	\$5.63
3 rd Tier (Over 18,000)		\$6.27	\$6.14	\$6.14	\$6.14	\$6.33	\$6.52
Non-Residential							
1 st Tier (0-120,000)		\$4.98	\$4.88	\$4.88	\$4.88	\$5.02	\$5.18
2 nd Tier (120,001-360,000)		\$5.42	\$5.31	\$5.31	\$5.31	\$5.47	\$5.63
3 rd Tier (Over 360,000)		\$6.27	\$6.14	\$6.14	\$6.14	\$6.33	\$6.52

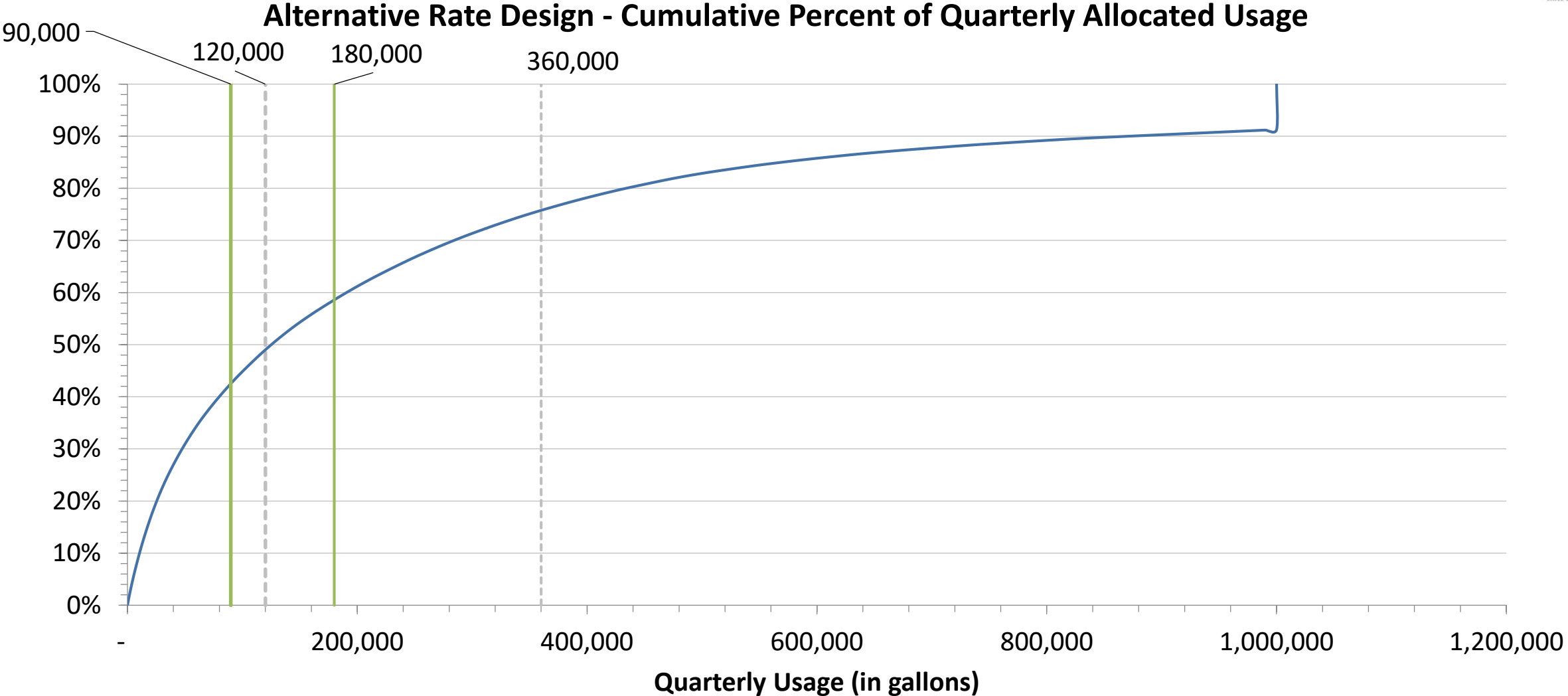
Recommended Sewer Rates

	Current FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Sewer Usage Rates (per 1,000 gallons)						
Residential						
1 st Tier (0-9,000)	\$6.09	\$6.59	\$7.25	\$7.98	\$8.77	\$9.08
2 nd Tier (9,001-18,000)	\$6.59	\$7.13	\$7.85	\$8.63	\$9.50	\$9.83
3 rd Tier (Over 18,000)	\$7.64	\$8.27	\$9.10	\$10.01	\$11.01	\$11.39
Non-Residential		\$6.59	\$7.25	\$7.98	\$8.77	\$9.08
1 st Tier (0-120,000)	\$6.09	\$7.13	\$7.85	\$8.63	\$9.50	\$9.83
2 nd Tier (120,001-360,000)	\$6.59	\$8.27	\$9.10	\$10.01	\$11.01	\$11.39
3 rd Tier (Over 360,000)	\$7.64	\$6.59	\$7.25	\$7.98	\$8.77	\$9.08

Residential Tier Adjustment



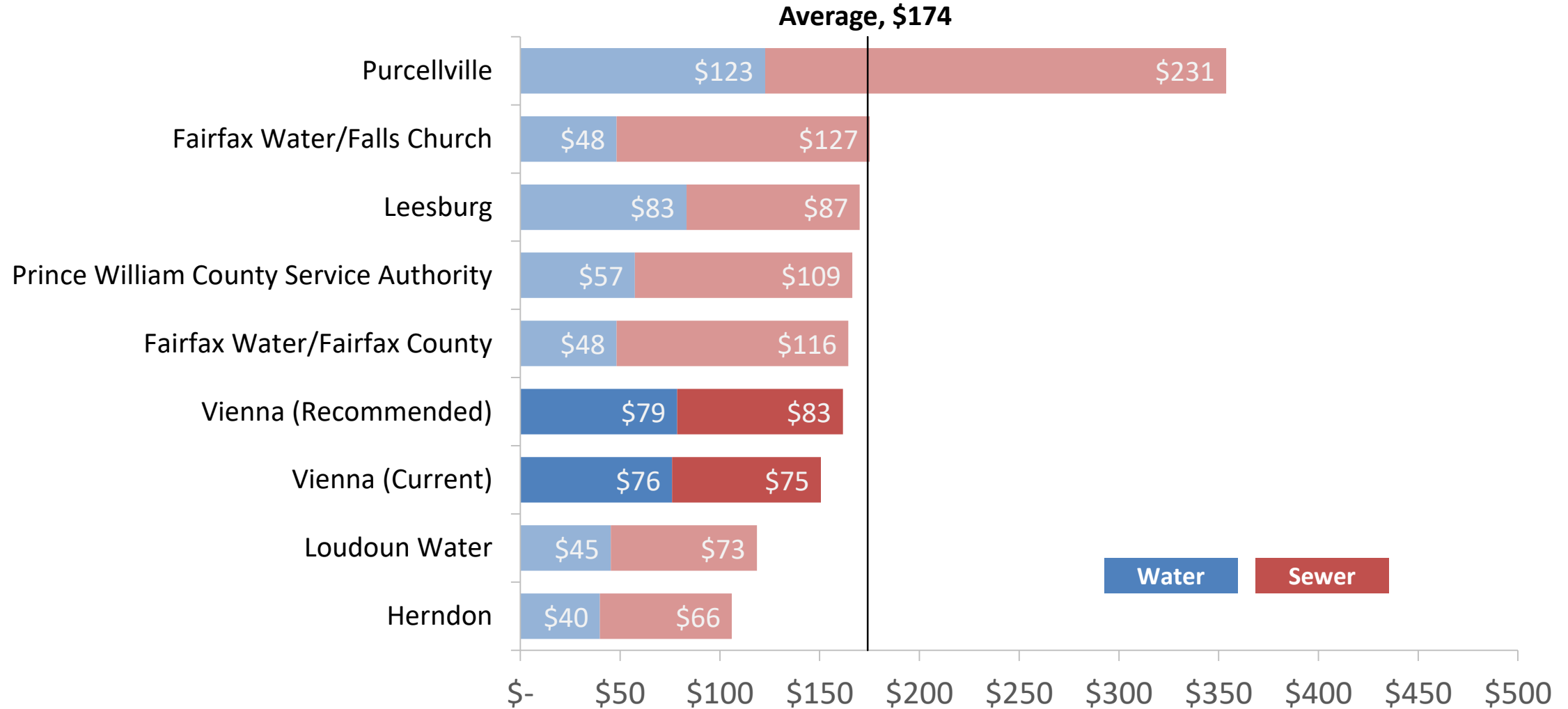
Non-Residential Tier Adjustment



What's the quarterly bill impact on typical water and sewer customers (Residential 5/8 inch meter size)?

User (Percentile)	Number of Customers Between Percentiles	Quarterly Usage (gallons)	Bill with Current Rates	Bill with Projected FY 2019 Rates	% Increase
Minimal User (10th)	674	5,000	\$70.35	\$74.80	6.3%
Small User (25th)	1,495	8,000	\$103.56	\$109.21	5.5%
Median (50th)	1,404	12,000	\$147.84	\$158.01	6.9%
Large User (75th)	824	17,000	\$203.63	\$220.23	8.2%
Excessive User (90th)	221	23,000	\$272.69	\$304.74	11.8%

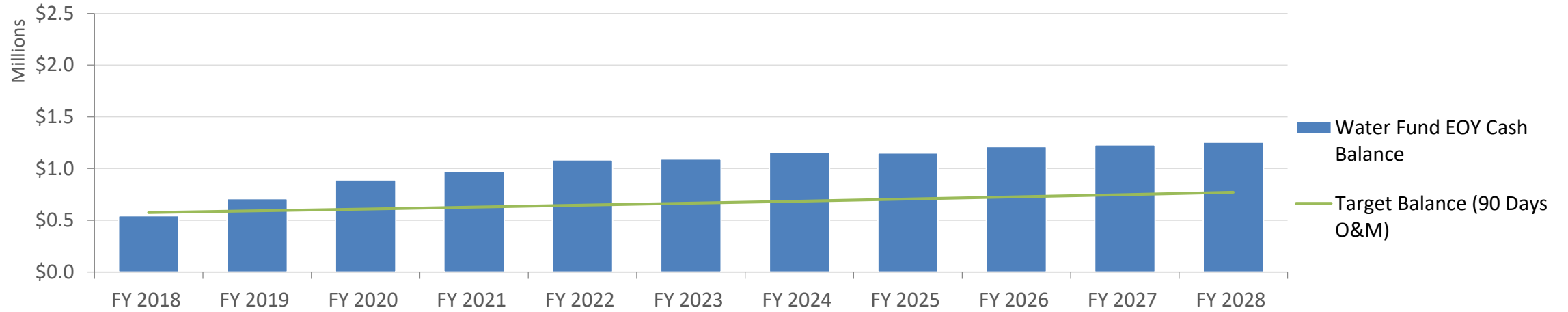
Combined Quarterly Residential Bill Comparison (Latest Available)



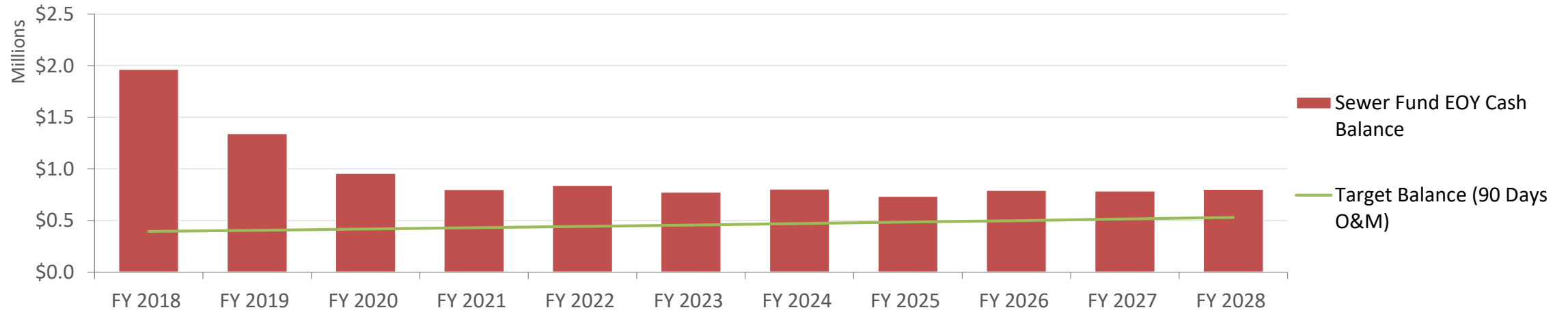
5/8 inch meter and 12,000 gallons of usage (median for Vienna customers)

End of Year Cash Balance

Water



Sewer



Minimum Balance equals 90 days of operating expenses

Discussion / Questions?

