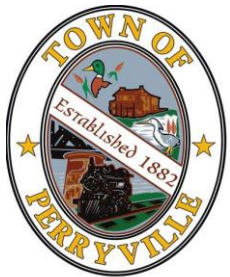




March 21, 2023 | Town of Perryville | Water and Sewer Rate Study

Presentation: Rate Study Findings



Mike Maker
Deputy Director
Water Practice



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Guiding Principles and Objective

- The water and sewer enterprise fund should 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*

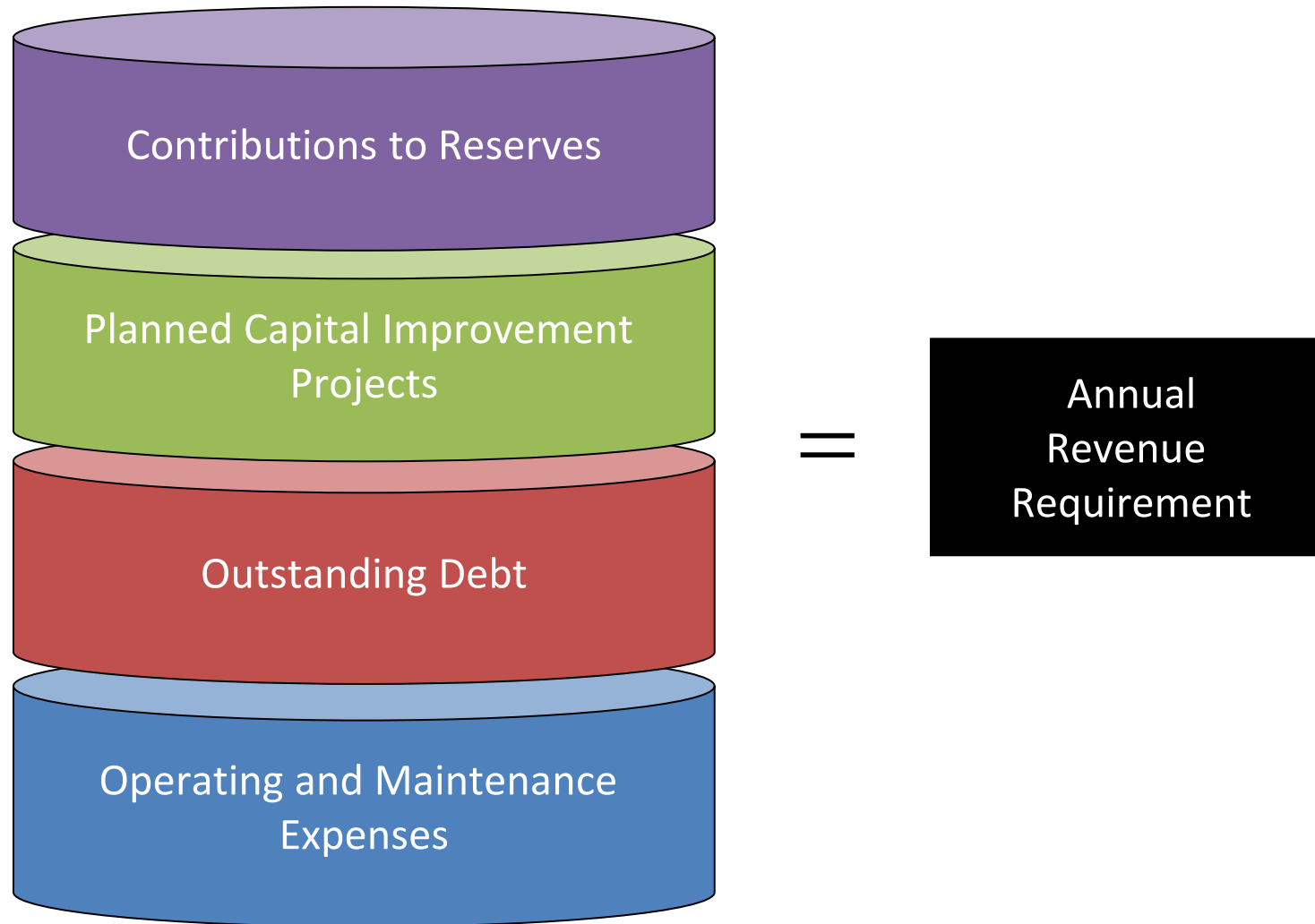
Objective: Ensure rates are stable through sound financial management and system maintenance

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

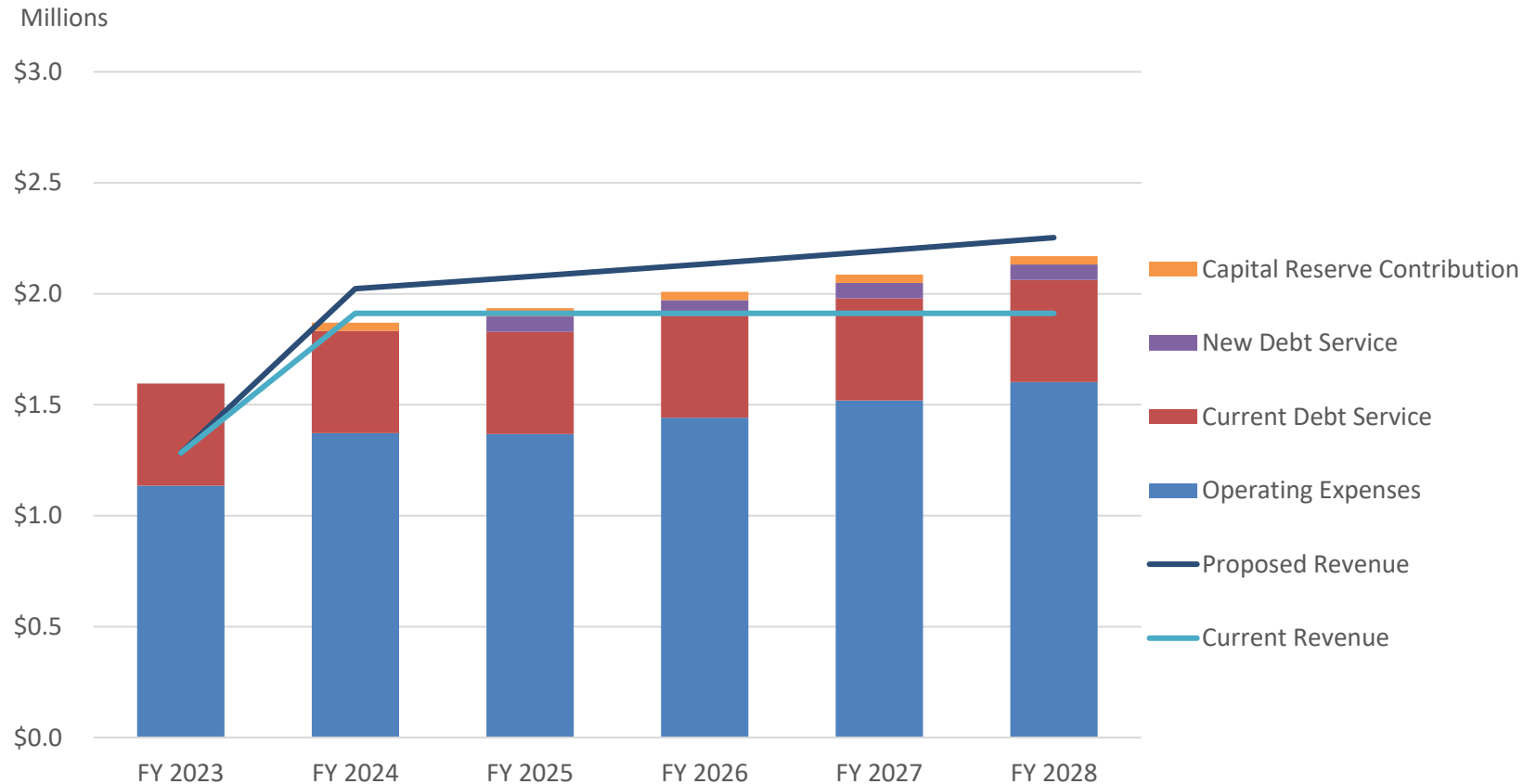
Factors Affecting Charges and Rates

- Operating and maintenance expense changes
 - 10% escalation rate per year for Healthcare and Electric expenses
 - 5% escalation rate per year for other expenses
- Capital improvement plans
 - investment in the treatment, distribution, and collection systems
- Debt service
 - existing and future debt
- Customer changes
 - Addition of 10-inch meter expected in FY 2024
- Water usage and sewage generation changes
 - Significant increase in usage expected in FY 2024
- Miscellaneous revenue changes
 - no growth
- Reserve target
 - minimum operating fund balance of 90 days (25%) of operating expenses

Revenue Requirement

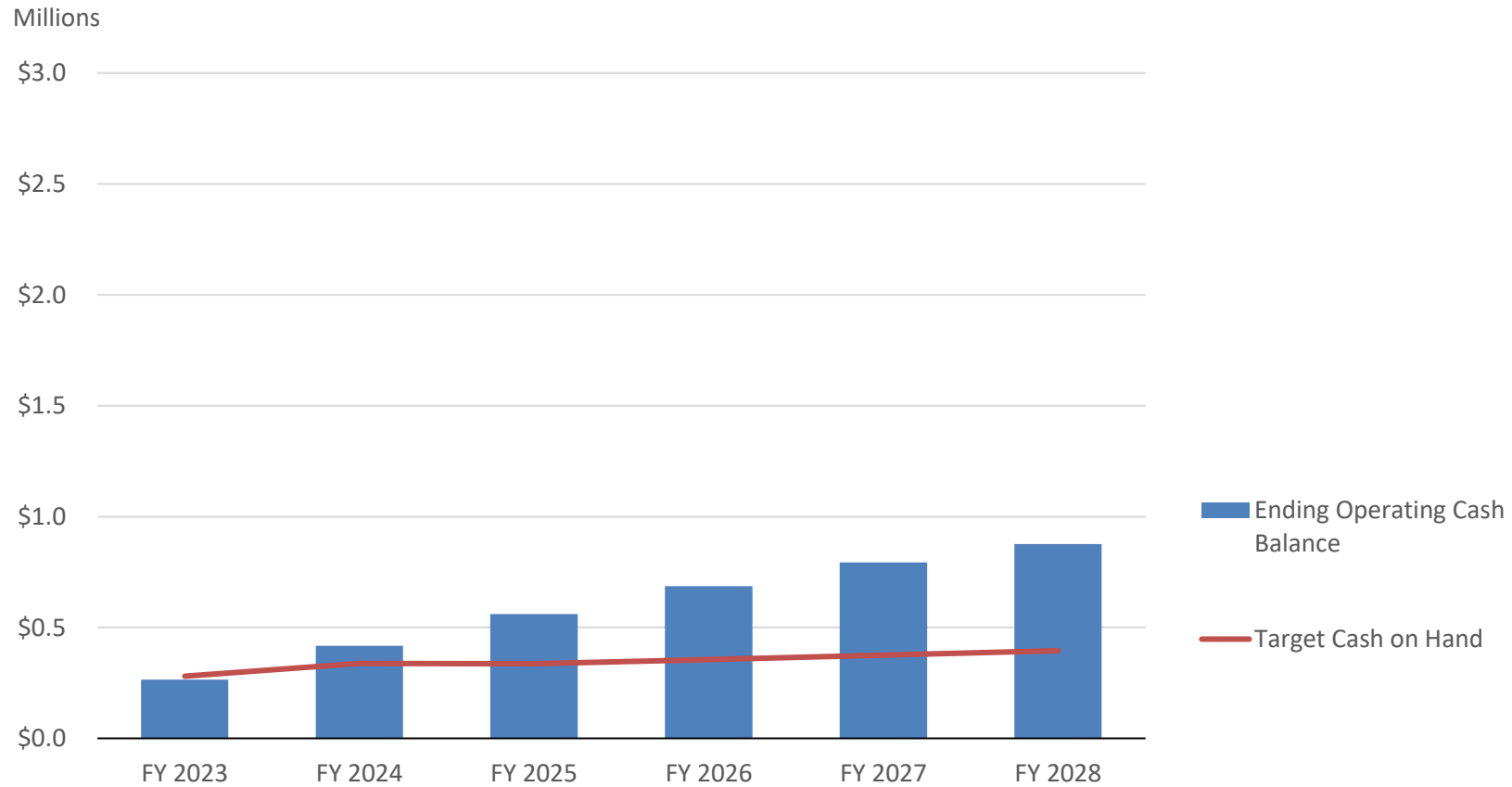


Revenue Requirements vs. Current and Proposed Revenue – Water



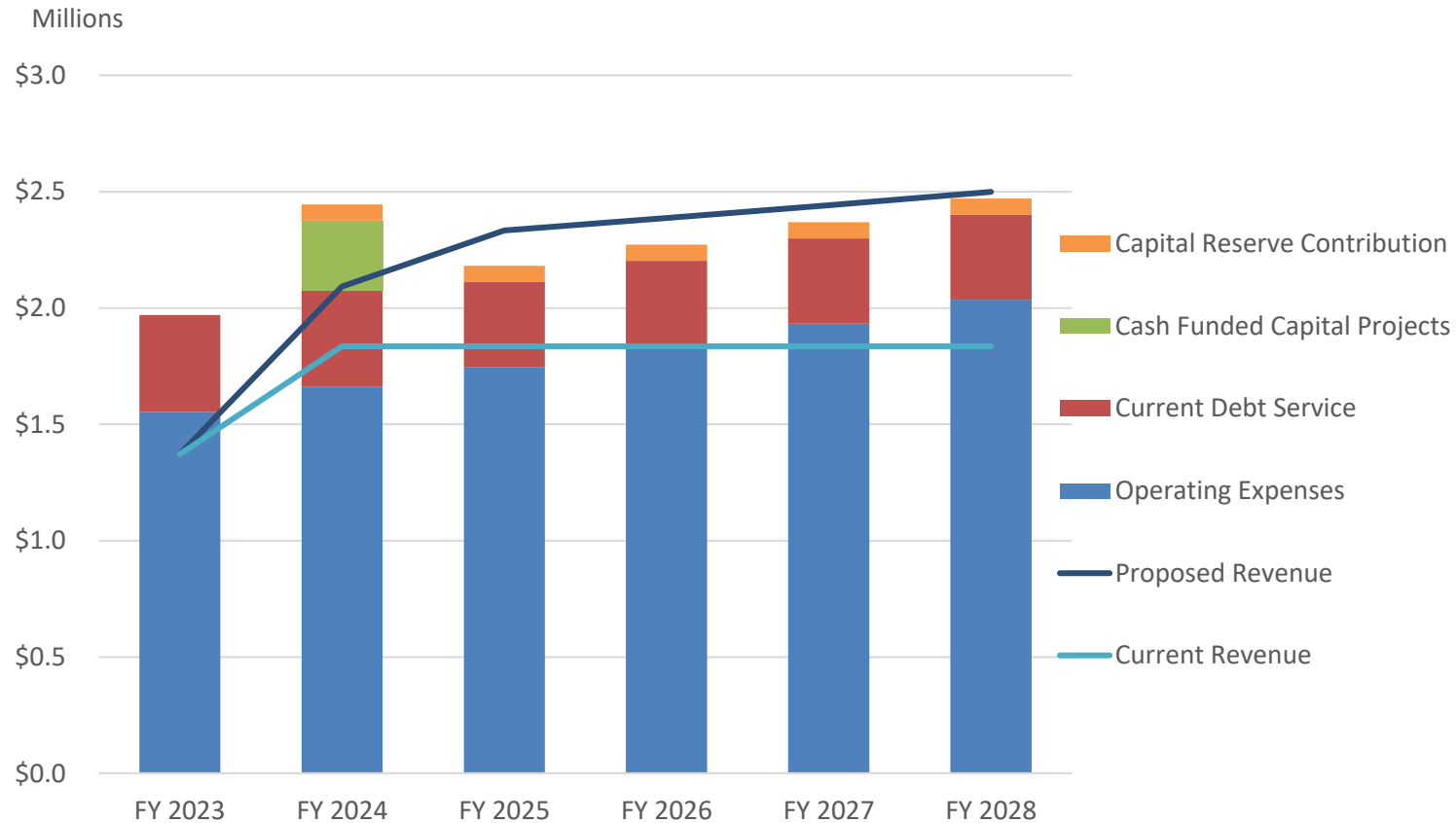
Proposed Revenue reflects a 3% increase in rates each year from FY 2024 to FY 2028

Fund Balance – Water



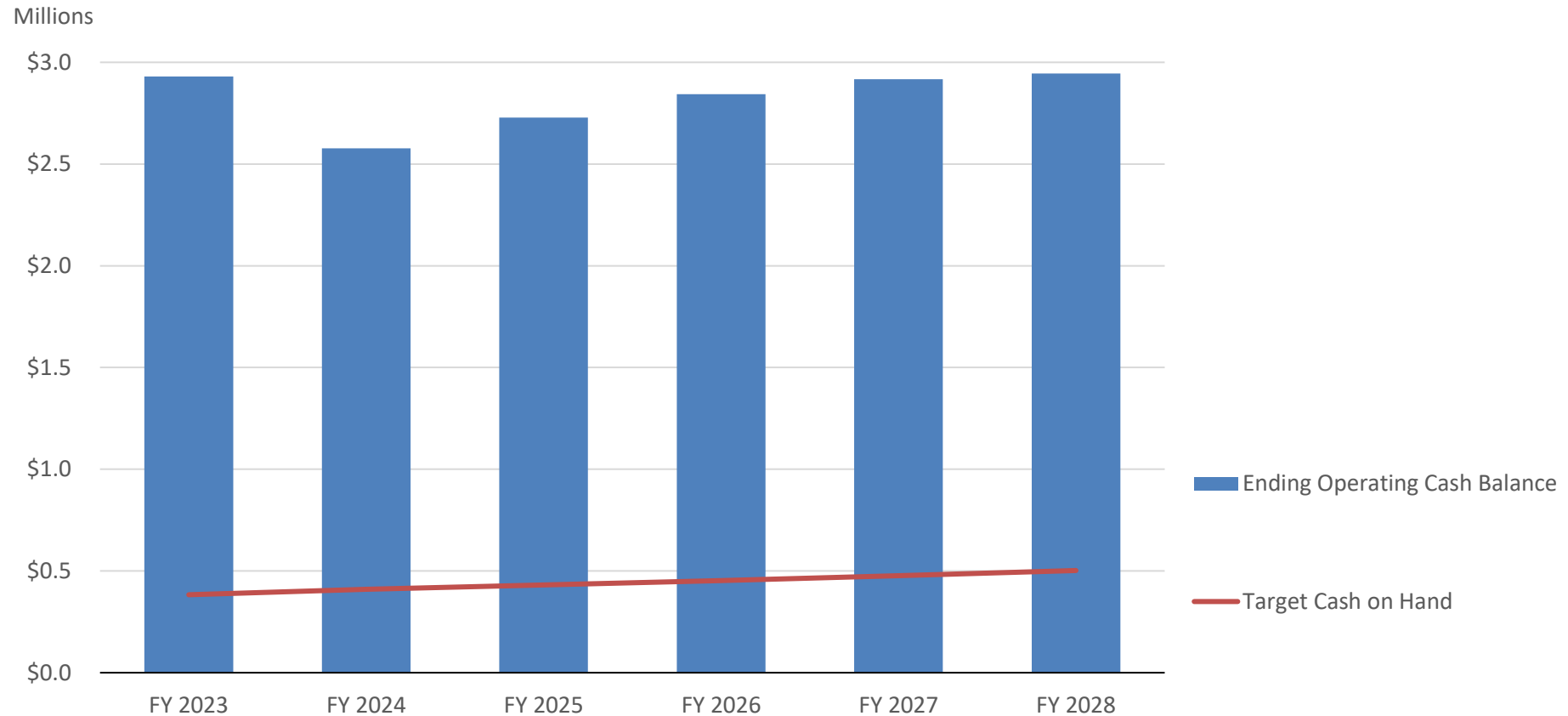
The red line represents target equal to operating fund balance of 90 days (25%) of operating expenses

Revenue Requirements vs. Current and Proposed Revenue - Sewer



Proposed Revenue reflects a 15.5% increase in FY 2024 and FY 2025 and a 3% in each year from FY 2026 to FY 2028

Fund Balance – Sewer



The red line represents target equal to operating fund balance of 90 days (25%) of operating expenses

Current Charges and Rates (FY 2023)

	Min Usage	Water Charge	Sewer Charge
Quarterly Base Service Charge			
5/8	3,000	\$19.62	\$18.41
3/4	4,500	\$29.44	\$27.64
1	6,000	\$39.29	\$36.85
1 1/2	15,000	\$98.19	\$92.12
2	21,000	\$137.43	\$128.96
4	30,000	\$196.33	\$184.22
6	75,000	\$490.82	\$460.54
Quarterly O&M Service Charge			
5/8	3,000	\$35.44	\$26.15
3/4	4,500	\$53.15	\$39.22
1	6,000	\$70.88	\$52.30
1 1/2	15,000	\$177.16	\$130.74
2	21,000	\$248.02	\$183.03
4	30,000	\$354.30	\$261.46
6	75,000	\$885.74	\$653.60
Over Min Rate			
Per 1,000 gallons		\$11.81	\$8.72

These are In Town charges and rates. Out of Town charges and rates are two times In Town.

Rate Designs

Current - Quarterly Service Charges and Over Minimum Rate

Alternative - Quarterly Service Charges and Over Minimum Rate

- Revised meter size equivalents (and associated minimum usages) on which the quarterly service charges are based
- Added service charges (and associated minimum usages) for 3 inch, 8 inch, 10 inch, and 12 inch meter sizes

Equivalents

Meter Size (inches)	Accounts		Equivalents		Usage Minimums	
	Water	Sewer	Current	Alternative	Current	Alternative
5/8	1,435	1,434	1.0	1.0	3,000	3,000
3/4	26	25	1.5	1.4	4,500	4,200
1	4	4	2.0	2.2	6,000	6,600
1 1/2	21	21	5.0	5.0	15,000	15,000
2	17	17	7.0	6.4	21,000	19,200
3	-	-	-	20.0	-	60,000
4	3	3	10.0	50.0	30,000	150,000
6	-	-	25.0	80.0	75,000	240,000
8	-	-	-	160.0	-	480,000
10	1	1	-	260.0	-	780,000
12	-	-	-	320.0	-	960,000

Projected Water Rates (Current Rate Design)

	Min Usage	Current	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Quarterly Base Service Charge							
5/8	3,000	\$19.62	\$20.21	\$20.81	\$21.44	\$22.08	\$22.74
3/4	4,500	\$29.44	\$30.31	\$31.22	\$32.16	\$33.12	\$34.12
1	6,000	\$39.29	\$40.42	\$41.63	\$42.88	\$44.16	\$45.49
1 1/2	15,000	\$98.19	\$101.04	\$104.07	\$107.20	\$110.41	\$113.72
2	21,000	\$137.43	\$141.46	\$145.70	\$150.08	\$154.58	\$159.21
4	30,000	\$196.33	\$202.09	\$208.15	\$214.39	\$220.82	\$227.45
6	75,000	\$490.82	\$505.22	\$520.37	\$535.98	\$552.06	\$568.62
Quarterly O&M Service Charge							
5/8	3,000	\$35.44	\$36.49	\$37.59	\$38.72	\$39.88	\$41.07
3/4	4,500	\$53.15	\$54.74	\$56.38	\$58.07	\$59.82	\$61.61
1	6,000	\$70.88	\$72.99	\$75.18	\$77.43	\$79.75	\$82.15
1 1/2	15,000	\$177.16	\$182.46	\$187.94	\$193.58	\$199.38	\$205.37
2	21,000	\$248.02	\$255.45	\$263.11	\$271.01	\$279.14	\$287.51
4	30,000	\$354.30	\$364.93	\$375.88	\$387.15	\$398.77	\$410.73
6	75,000	\$885.74	\$912.32	\$939.69	\$967.88	\$996.92	\$1,026.83
Over Min Rate							
Per 1,000 gallons		\$11.81	\$12.16	\$12.53	\$12.91	\$13.29	\$13.69

These are In Town charges and rates. Out of Town charges and rates are two times In Town.

Projected Sewer Rates (Current Rate Design)

	Min Usage	Current	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Quarterly Base Service Charge							
5/8	3,000	\$18.41	\$21.26	\$24.56	\$25.30	\$26.06	\$26.84
3/4	4,500	\$27.64	\$31.90	\$36.84	\$37.94	\$39.08	\$40.26
1	6,000	\$36.85	\$42.53	\$49.12	\$50.59	\$52.11	\$53.67
1 1/2	15,000	\$92.12	\$106.32	\$122.80	\$126.48	\$130.28	\$134.18
2	21,000	\$128.96	\$148.84	\$171.92	\$177.07	\$182.39	\$187.86
4	30,000	\$184.22	\$212.64	\$245.59	\$252.96	\$260.55	\$268.37
6	75,000	\$460.54	\$531.59	\$613.99	\$632.40	\$651.38	\$670.92
Quarterly O&M Service Charge							
5/8	3,000	\$26.15	\$30.21	\$34.90	\$35.95	\$37.02	\$38.13
3/4	4,500	\$39.22	\$45.32	\$52.35	\$53.92	\$55.54	\$57.20
1	6,000	\$52.30	\$60.43	\$69.80	\$71.89	\$74.05	\$76.27
1 1/2	15,000	\$130.74	\$151.07	\$174.49	\$179.73	\$185.12	\$190.67
2	21,000	\$183.03	\$211.50	\$244.29	\$251.62	\$259.16	\$266.94
4	30,000	\$261.46	\$302.15	\$348.98	\$359.45	\$370.23	\$381.34
6	75,000	\$653.60	\$755.37	\$872.45	\$898.63	\$925.58	\$953.35
Over Min Rate							
Per 1,000 gallons		\$8.72	\$10.07	\$11.63	\$11.98	\$12.34	\$12.71

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Projected Water Rates (Alternative Rate Design) – Base Charge

	Min Usage	Current	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Quarterly Base Service Charge							
5/8	3,000	\$19.62	\$20.21	\$20.81	\$21.44	\$22.08	\$22.74
3/4	4,200	\$29.44	\$28.29	\$29.14	\$30.02	\$30.92	\$31.84
1	6,600	\$39.29	\$44.46	\$45.79	\$47.17	\$48.58	\$50.04
1 1/2	15,000	\$98.19	\$101.04	\$104.07	\$107.20	\$110.41	\$113.72
2	19,200	\$137.43	\$129.34	\$133.22	\$137.21	\$141.33	\$145.57
3	60,000	-	\$404.17	\$416.30	\$428.79	\$441.65	\$454.90
4	150,000	\$196.33	\$1,010.43	\$1,040.74	\$1,071.97	\$1,104.12	\$1,137.25
6	240,000	\$490.82	\$1,616.69	\$1,665.19	\$1,715.14	\$1,766.60	\$1,819.60
8	480,000	-	\$3,233.38	\$3,330.38	\$3,430.29	\$3,533.20	\$3,639.19
10	780,000	-	\$5,254.24	\$5,411.86	\$5,574.22	\$5,741.45	\$5,913.69
12	960,000	-	\$6,466.75	\$6,660.75	\$6,860.58	\$7,066.39	\$7,278.39

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Projected Water Rates (Alternative Rate Design) – O&M / Over Min Rate

	Min Usage	Current	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Quarterly O&M Service Charge							
5/8	3,000	\$35.44	\$36.49	\$37.59	\$38.72	\$39.88	\$41.07
3/4	4,200	\$53.15	\$51.09	\$52.62	\$54.20	\$55.83	\$57.50
1	6,600	\$70.88	\$80.28	\$82.69	\$85.17	\$87.73	\$90.36
1 1/2	15,000	\$177.16	\$182.46	\$187.94	\$193.58	\$199.38	\$205.37
2	19,200	\$248.02	\$233.55	\$240.56	\$247.78	\$255.21	\$262.87
3	60,000	-	\$729.86	\$751.75	\$774.31	\$797.54	\$821.46
4	150,000	\$354.30	\$1,824.65	\$1,879.38	\$1,935.77	\$1,993.84	\$2,053.65
6	240,000	\$885.74	\$2,919.43	\$3,007.01	\$3,097.23	\$3,190.14	\$3,285.85
8	480,000	-	\$5,838.86	\$6,014.03	\$6,194.45	\$6,380.28	\$6,571.69
10	780,000	-	\$9,488.15	\$9,772.80	\$10,065.98	\$10,367.96	\$10,679.00
12	960,000	-	\$11,677.73	\$12,028.06	\$12,388.90	\$12,760.57	\$13,143.39
Over Min Rate							
Per 1,000 gallons		\$11.81	\$12.16	\$12.53	\$12.91	\$13.29	\$13.69

These are In Town charges and rates. Out of Town charges and rates are two times In Town.

Projected Sewer Rates (Alternative Rate Design) – Base Charge

	Min Usage	Current	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Quarterly Base Service Charge							
5/8	3,000	\$18.41	\$21.26	\$24.56	\$25.30	\$26.06	\$26.84
3/4	4,200	\$27.64	\$29.77	\$34.38	\$35.41	\$36.48	\$37.57
1	6,600	\$36.85	\$46.78	\$54.03	\$55.65	\$57.32	\$59.04
1 1/2	15,000	\$92.12	\$106.32	\$122.80	\$126.48	\$130.28	\$134.18
2	19,200	\$128.96	\$136.09	\$157.18	\$161.90	\$166.75	\$171.76
3	60,000	-	\$425.27	\$491.19	\$505.92	\$521.10	\$536.73
4	150,000	\$184.22	\$1,063.18	\$1,227.97	\$1,264.81	\$1,302.75	\$1,341.84
6	240,000	\$460.54	\$1,701.08	\$1,964.75	\$2,023.69	\$2,084.41	\$2,146.94
8	480,000	-	\$3,402.17	\$3,929.50	\$4,047.39	\$4,168.81	\$4,293.88
10	780,000	-	\$5,528.52	\$6,385.44	\$6,577.01	\$6,774.32	\$6,977.55
12	960,000	-	\$6,804.34	\$7,859.01	\$8,094.78	\$8,337.62	\$8,587.75

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Projected Sewer Rates (Alternative Rate Design) – O&M / Over Min Rate

	Min Usage	Current	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Quarterly O&M Service Charge							
5/8	3,000	\$26.15	\$30.21	\$34.90	\$35.95	\$37.02	\$38.13
3/4	4,200	\$39.22	\$42.30	\$48.86	\$50.32	\$51.83	\$53.39
1	6,600	\$52.30	\$66.47	\$76.78	\$79.08	\$81.45	\$83.89
1 1/2	15,000	\$130.74	\$151.07	\$174.49	\$179.73	\$185.12	\$190.67
2	19,200	\$183.03	\$193.37	\$223.35	\$230.05	\$236.95	\$244.06
3	60,000	-	\$604.30	\$697.96	\$718.90	\$740.47	\$762.68
4	150,000	\$261.46	\$1,510.74	\$1,744.90	\$1,797.25	\$1,851.17	\$1,906.70
6	240,000	\$653.60	\$2,417.18	\$2,791.85	\$2,875.60	\$2,961.87	\$3,050.73
8	480,000	-	\$4,834.37	\$5,583.70	\$5,751.21	\$5,923.74	\$6,101.45
10	780,000	-	\$7,855.85	\$9,073.50	\$9,345.71	\$9,626.08	\$9,914.86
12	960,000	-	\$9,668.74	\$11,167.39	\$11,502.41	\$11,847.48	\$12,202.91
Over Min Rate							
Per 1,000 gallons		\$8.72	\$10.07	\$11.63	\$11.98	\$12.34	\$12.71

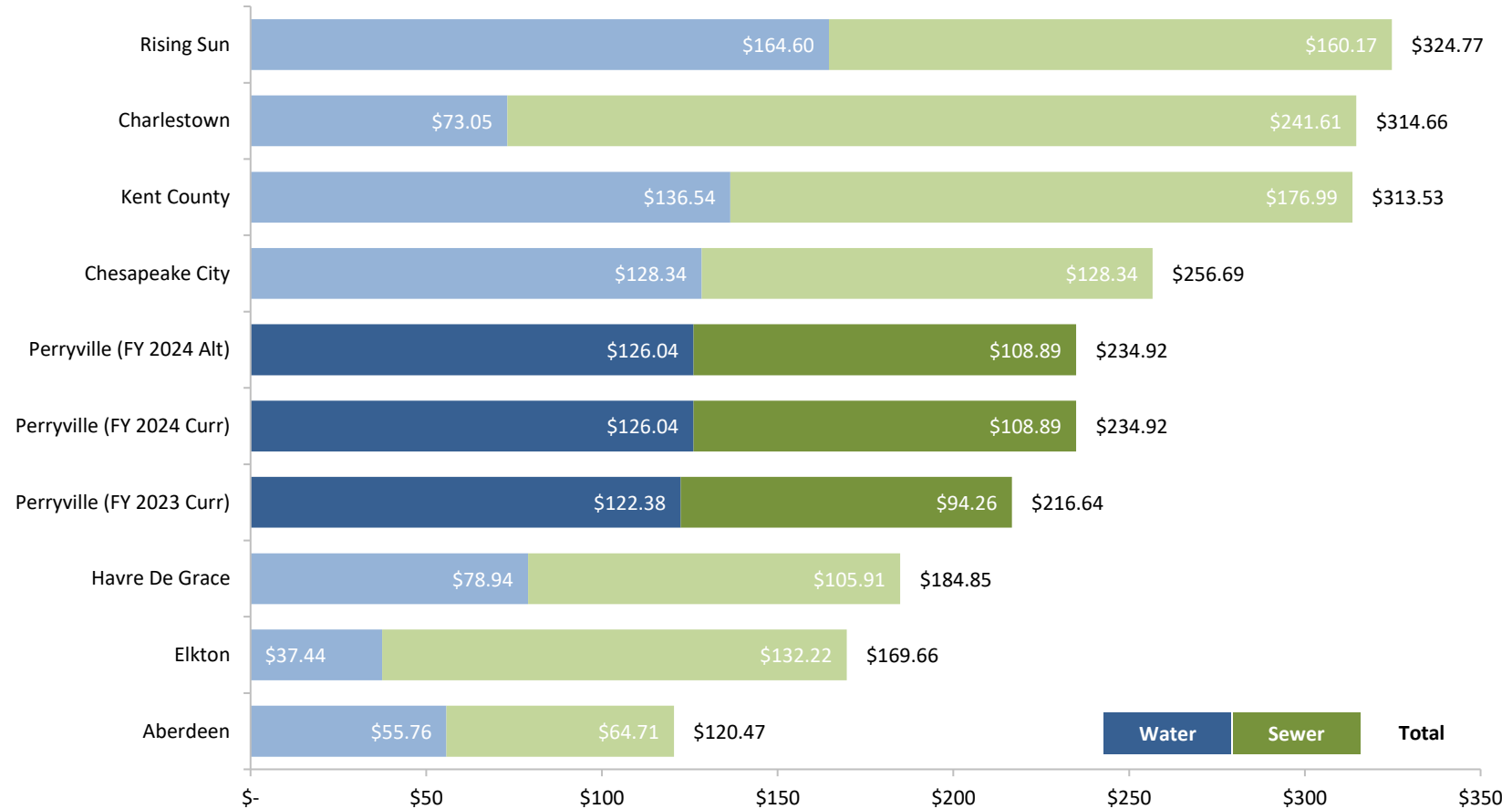
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FY 2024 Quarterly Bill Impact

User (Percentile)	Quarterly Usage (gallons)	Current Bill	FY 2024 Bill		FY 2024 Bill Increase	
			Current Design	Alternative Design	Current Design	Alternative Design
Small User (25th)						
Water Bill	5,500	\$84.59	\$87.11	\$87.11	\$2.53	\$2.53
Sewer Bill		\$66.36	\$76.66	\$76.66	\$10.30	\$10.30
Combined Bill		\$150.95	\$163.77	\$163.77	\$12.82	\$12.82
Median User (50th)						
Water Bill	8,700	\$122.38	\$126.04	\$126.04	\$3.66	\$3.66
Sewer Bill		\$94.26	\$108.89	\$108.89	\$14.62	\$14.62
Combined Bill		\$216.64	\$234.92	\$234.92	\$18.28	\$18.28
Large User (75th)						
Water Bill	13,200	\$175.52	\$180.78	\$180.78	\$5.26	\$5.26
Sewer Bill		\$133.50	\$154.21	\$154.21	\$20.70	\$20.70
Combined Bill		\$309.03	\$334.99	\$334.99	\$25.96	\$25.96

Residential customers with 5/8 inch meters

FY 2024 Combined Quarterly Bill Comparison



smallest meter size and 8,700 gallons of usage (median for Perryville customers)

Recommendations

- Adopt the alternative water and sewer rates for FY 2024 through FY 2028
- Review rates, charges, and fees on an annual basis and revise as needed
- Consider a full cost of service study for all rates, charges, and fees every three to five years



QUESTIONS?

NEWGEN STRATEGIES AND SOLUTIONS, LLC
911-A COMMERCE ROAD
ANNAPOLIS, MD 21401

MIKE MAKER
DEPUTY DIRECTOR
WATER PRACTICE
443-951-0355
mmaker@newgenstrategies.net