

# Town of Reading

# FY 2025 Water and Sewer Rate Study

The Abrahams Group

June 2024

# Recent History - Water

- The Town implemented a four-tier rate structure for FY 2024.
  - Flat Rate for all usage prior
  - Multi-unit accounts are charged as one unit currently.
- Healthy retained earnings balance of \$4.7 million (58.5% of fund expenses)
- The Town typically balances the budget using retained earnings to ensure rate stabilization.
- The Town typically funds some capital improvements as part of the operating budget to avoid additional costs incurred from borrowings.

# Recent Results – Water

Recent Rate Changes shown in the table below. A comparison of budgeted certified surplus (retained earnings) and actual certified surplus, as well as the difference between the two, also shown. Negative actual amounts mean surplus regeneration. A negative difference means less surplus was used than budgeted. \* FY 2024 is projected

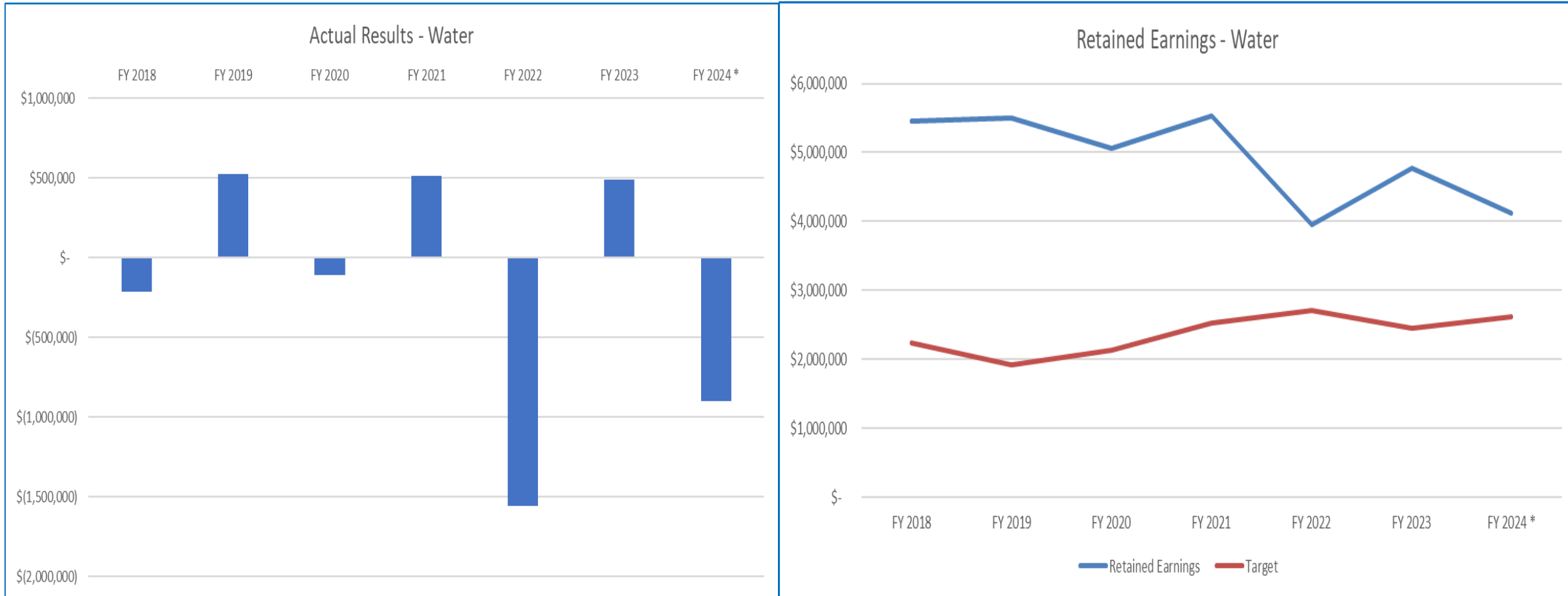
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Rate Change	3.7%	0.0%	3.7%	3.2%	1.9%	4.7%
Certified Surplus Used (Budgeted)	\$600,000	\$695,075	\$1,162,000	\$800,000	\$2,354,000	\$864,000
Certified Surplus Used (Actual)	\$214,600	\$(524,852)	\$109,883	\$(511,182)	\$1,556,413	\$(488,001)
Certified Surplus Used (Difference)	\$(385,400)	\$(1,219,927)	\$(1,052,117)	\$(1,311,182)	\$(797,587)	\$(1,352,001)
	FY 2024 *					
Rate Change (Tier 1)	-5.8%					
Rate Change (Tier 2)	2.5%					
Rate Change (Tier 3)	5.2%					
Rate Change (Tier 4)	9.6%					
Certified Surplus Used (Budgeted)	\$850,000					
Certified Surplus Used (Actual)	\$901,466					
Certified Surplus Used (Difference)	\$51,466					

# Recent Results – Water (Cont.)

Actual results compares fund revenues and expenses in graph to left; Graph up from \$0 is surplus, down is deficit

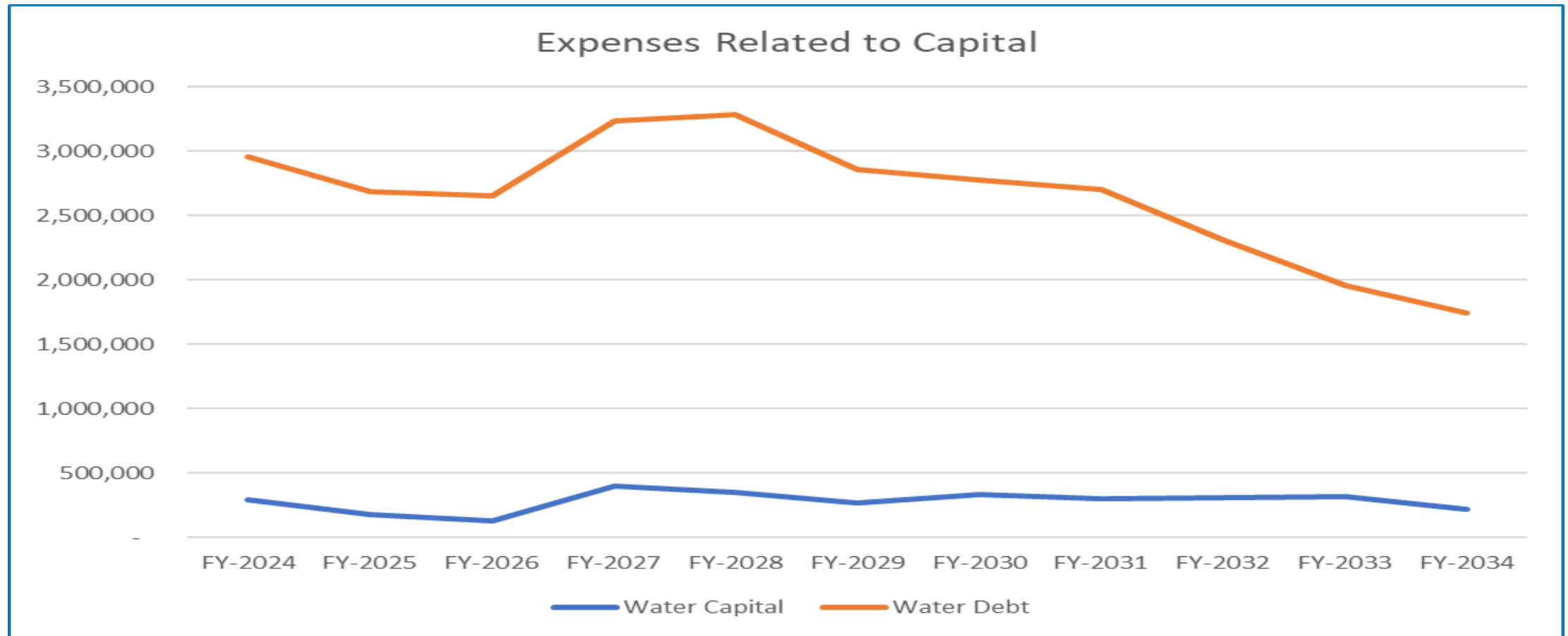
Recent retained earnings certification amounts compared to targeted 30% in graph to the right

\* FY 2024 is projected



# Capital Investment - Water

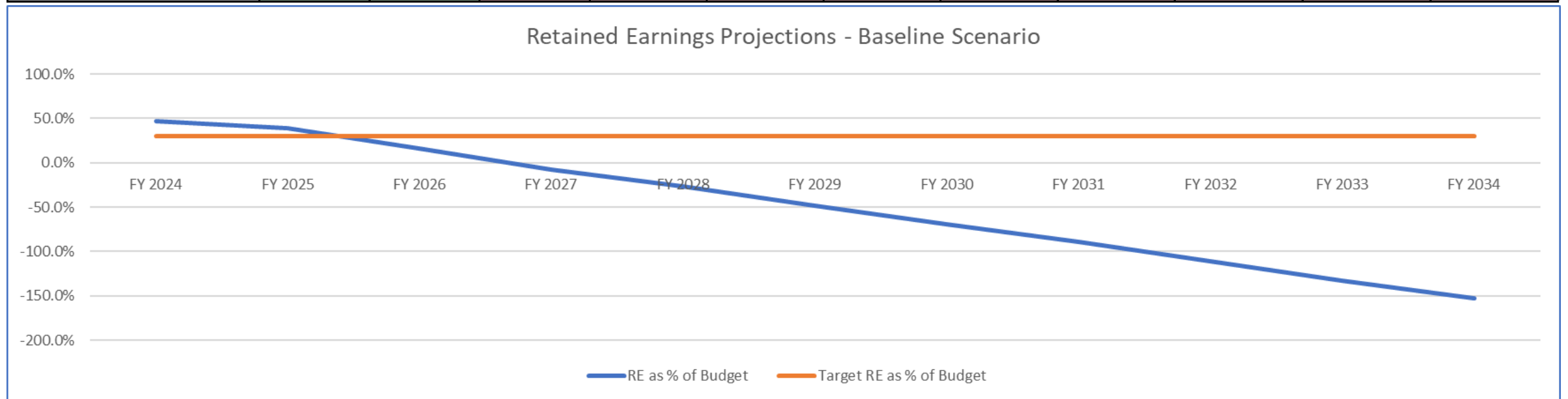
Actual and projected expenses related to capital  
Orange line is debt and blue line is capital outlay



# Baseline Scenario - Water

- Projected results for future years, assuming no revenue changes

Baseline	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
Surplus/Deficit	\$ (901,466)	\$ (630,445)	\$ (818,515)	\$ (1,897,384)	\$ (2,129,112)	\$ (1,852,674)	\$ (2,085,450)	\$ (2,230,182)	\$ (2,110,748)	\$ (2,040,892)	\$ (2,020,073)
Projected Retained Earnings	\$ 4,126,099	\$ 3,277,139	\$ 1,379,755	\$ (749,357)	\$ (2,602,031)	\$ (4,687,481)	\$ (6,917,663)	\$ (9,028,411)	\$ (11,069,303)	\$ (13,089,376)	\$ (15,109,449)
RE as % of Budget	47.2%	38.6%	15.9%	-7.7%	-26.1%	-48.3%	-69.6%	-89.6%	-111.1%	-132.3%	-153.1%



# Water Rate Option 1 – 4.0% in FY 2025

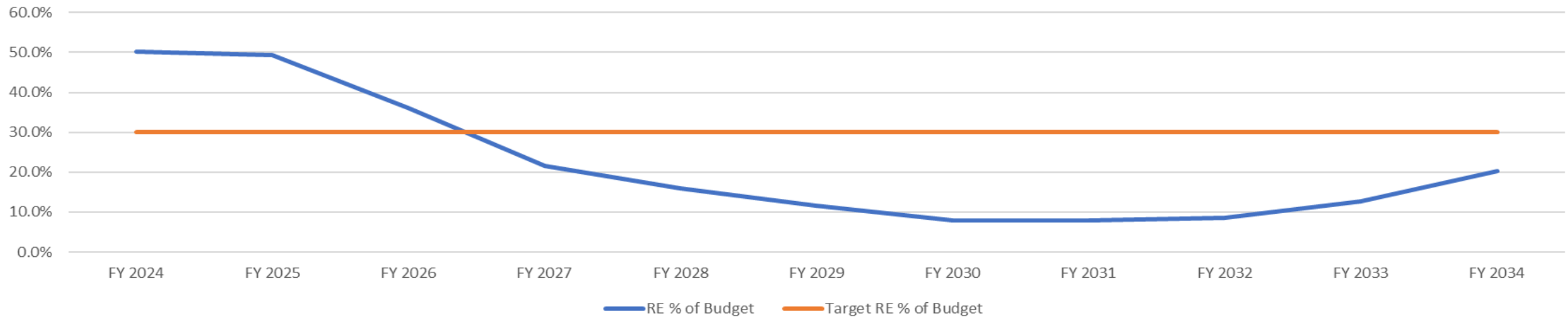
- Projected results for future years, with additional revenue from rate changes

Rate Changes:	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
		4.00%	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

Rate Impact	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
		PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
Surplus/Deficit	\$ (901,466)	\$ (332,979)	\$ (211,684)	\$ (1,049,249)	\$ (1,032,433)	\$ (499,996)	\$ (469,092)	\$ (342,233)	\$ 56,939	\$ 414,925	\$ 732,519
Projected Retained Earnings	\$4,393,120	\$4,181,436	\$3,132,187	\$ 2,099,754	\$ 1,599,758	\$1,130,666	\$ 788,433	\$ 788,433	\$ 845,372	\$1,260,297	\$1,992,816
RE % of Budget	50.3%	49.3%	36.1%	21.5%	16.0%	11.7%	7.9%	7.8%	8.5%	12.7%	20.2%

Retained Earnings Projections - with Rate Changes



# Water Rate Option 1 – 4.0% in FY 2025 (Cont.)

## User Impact

User Impact (per Bill) - Water Bills Only			New Bills									
User Type	Usage	Current Bill	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Low-End User	500	\$ 53.75	\$ 55.90	\$ 58.14	\$ 59.88	\$ 61.68	\$ 63.53	\$ 65.43	\$ 67.40	\$ 69.42	\$ 71.50	\$ 73.64
Avg. Residential User (45 gpd)	1,500	\$ 166.00	\$ 172.64	\$ 179.55	\$ 184.93	\$ 190.48	\$ 196.19	\$ 202.08	\$ 208.14	\$ 214.39	\$ 220.82	\$ 227.44
Avg. Residential User (65 gpd)	2,200	\$ 247.90	\$ 257.82	\$ 268.13	\$ 276.17	\$ 284.46	\$ 292.99	\$ 301.78	\$ 310.83	\$ 320.16	\$ 329.76	\$ 339.66
Large Residential User	4,500	\$ 525.50	\$ 546.52	\$ 568.38	\$ 585.43	\$ 603.00	\$ 621.09	\$ 639.72	\$ 658.91	\$ 678.68	\$ 699.04	\$ 720.01
Large Commercial User	10,000	\$ 1,213.00	\$ 1,261.52	\$ 1,311.98	\$ 1,351.34	\$ 1,391.88	\$ 1,433.64	\$ 1,476.65	\$ 1,520.95	\$ 1,566.57	\$ 1,613.57	\$ 1,661.98
Very Large Commercial User	100,000	\$12,463.00	\$12,961.52	\$ 13,479.98	\$ 13,884.38	\$14,300.91	\$14,729.94	\$15,171.84	\$15,626.99	\$16,095.80	\$16,578.68	\$17,076.04

- Average Residential User: \$6.64 - \$9.92 increase per bill in FY 2025 (\$26.56 - \$39.66 annually)
- Large Residential User: \$21.02 increase per bill in FY 2025 (\$84.08 annually)



# Water Rate Option 2 – 3.5% in FY 2025

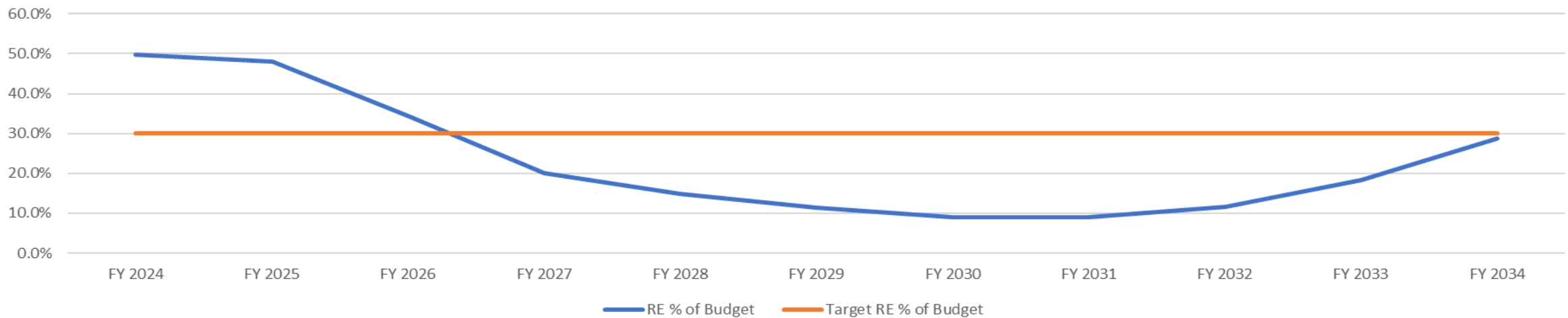
- Projected results for future years, with additional revenue from rate changes

Rate Changes:	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
		3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%

Rate Impact	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
Surplus/Deficit	\$ (901,466)	\$ (370,162)	\$ (288,840)	\$ (1,088,887)	\$ (1,032,035)	\$ (456,917)	\$ (380,558)	\$ (205,336)	\$ 245,251	\$ 657,849	\$ 1,033,407
Projected Retained Earnings	\$ 4,355,937	\$ 4,067,097	\$ 2,978,210	\$ 1,946,175	\$ 1,489,258	\$ 1,108,700	\$ 903,364	\$ 903,364	\$ 1,148,615	\$ 1,806,464	\$ 2,839,871
RE % of Budget	49.9%	48.0%	34.4%	20.0%	14.9%	11.4%	9.1%	9.0%	11.5%	18.3%	28.8%

Retained Earnings Projections - with Rate Changes



# Water Rate Option 2 – 3.5% in FY 2025 (Cont.)

## User Impact

User Impact (per Bill) - Water Bills Only			New Bills									
User Type	Usage	Current Bill	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Low-End User	500	\$ 53.75	\$ 55.63	\$ 57.58	\$ 59.59	\$ 61.68	\$ 63.84	\$ 66.07	\$ 68.39	\$ 70.78	\$ 73.26	\$ 75.82
Avg. Residential User (45 gpd)	1,500	\$ 166.00	\$ 171.81	\$ 177.82	\$ 184.05	\$ 190.49	\$ 197.16	\$ 204.06	\$ 211.20	\$ 218.59	\$ 226.24	\$ 234.16
Avg. Residential User (65 gpd)	2,200	\$ 247.90	\$ 256.58	\$ 265.56	\$ 274.85	\$ 284.47	\$ 294.43	\$ 304.73	\$ 315.40	\$ 326.44	\$ 337.86	\$ 349.69
Large Residential User	4,500	\$ 525.50	\$ 543.89	\$ 562.93	\$ 582.63	\$ 603.02	\$ 624.13	\$ 645.97	\$ 668.58	\$ 691.98	\$ 716.20	\$ 741.27
Large Commercial User	10,000	\$ 1,213.00	\$ 1,255.46	\$ 1,299.40	\$ 1,344.87	\$ 1,391.95	\$ 1,440.66	\$ 1,491.09	\$ 1,543.27	\$ 1,597.29	\$ 1,653.19	\$ 1,711.06
Very Large Commercial User	100,000	\$12,463.00	\$12,899.21	\$ 13,350.68	\$ 13,817.95	\$14,301.58	\$14,802.13	\$15,320.21	\$15,856.42	\$16,411.39	\$16,985.79	\$17,580.29

- Average Residential User: \$5.81 - \$8.68 increase per bill in FY 2025 (\$23.24 - \$34.71 annually)
- Large Residential User: \$18.39 increase per bill in FY 2025 (\$73.57 annually)

# Recent History - Sewer

- The Town implemented a four-tier rate structure for FY 2024.
  - Flat Rate for all usage prior
  - Multi-unit accounts are charged as one unit currently.
- Healthy retained earnings balance of \$7.3 million (99.1% of fund expenses)
- The Town typically balances the budget using retained earnings to ensure rate stabilization.
- The Town typically funds some capital improvements as part of the operating budget to avoid additional costs incurred from borrowings.

# Recent Results – Sewer

Recent Rate Changes shown in the table below. A comparison of budgeted certified surplus (retained earnings) and actual certified surplus, as well as the difference between the two, also shown. Negative actual amounts mean surplus regeneration. A negative difference means less surplus was used than budgeted. \* FY 2024 is projected

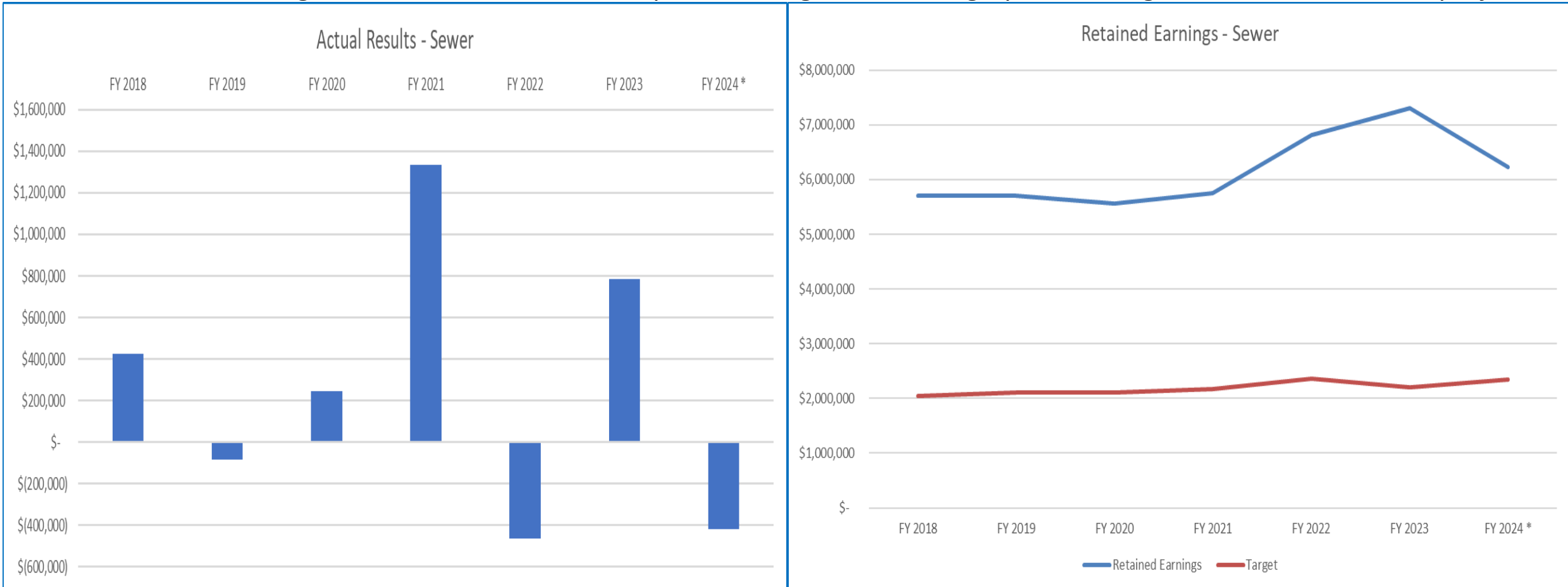
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Rate Change	2.9%	0.0%	8.5%	-3.0%	1.9%	-0.4%
Certified Surplus Used (Budgeted)	\$585,000	\$950,000	\$978,810	\$525,000	\$1,219,000	\$404,000
Certified Surplus Used (Actual)	\$(424,995)	\$85,823	\$(246,135)	\$(1,334,837)	\$464,648	\$(784,320)
Certified Surplus Used (Difference)	\$(1,009,995)	\$(864,177)	\$(1,224,945)	\$(1,859,837)	\$(754,352)	\$(1,188,320)
	FY 2024 *					
Rate Change (Tier 1)	-6.1%					
Rate Change (Tier 2)	2.7%					
Rate Change (Tier 3)	5.9%					
Rate Change (Tier 4)	10.5%					
Certified Surplus Used (Budgeted)	\$850,000					
Certified Surplus Used (Actual)	\$418,646					
Certified Surplus Used (Difference)	\$(431,354)					

# Recent Results – Sewer (Cont.)

Actual results compares fund revenues and expenses in graph to left; Graph up from \$0 is surplus, down is deficit

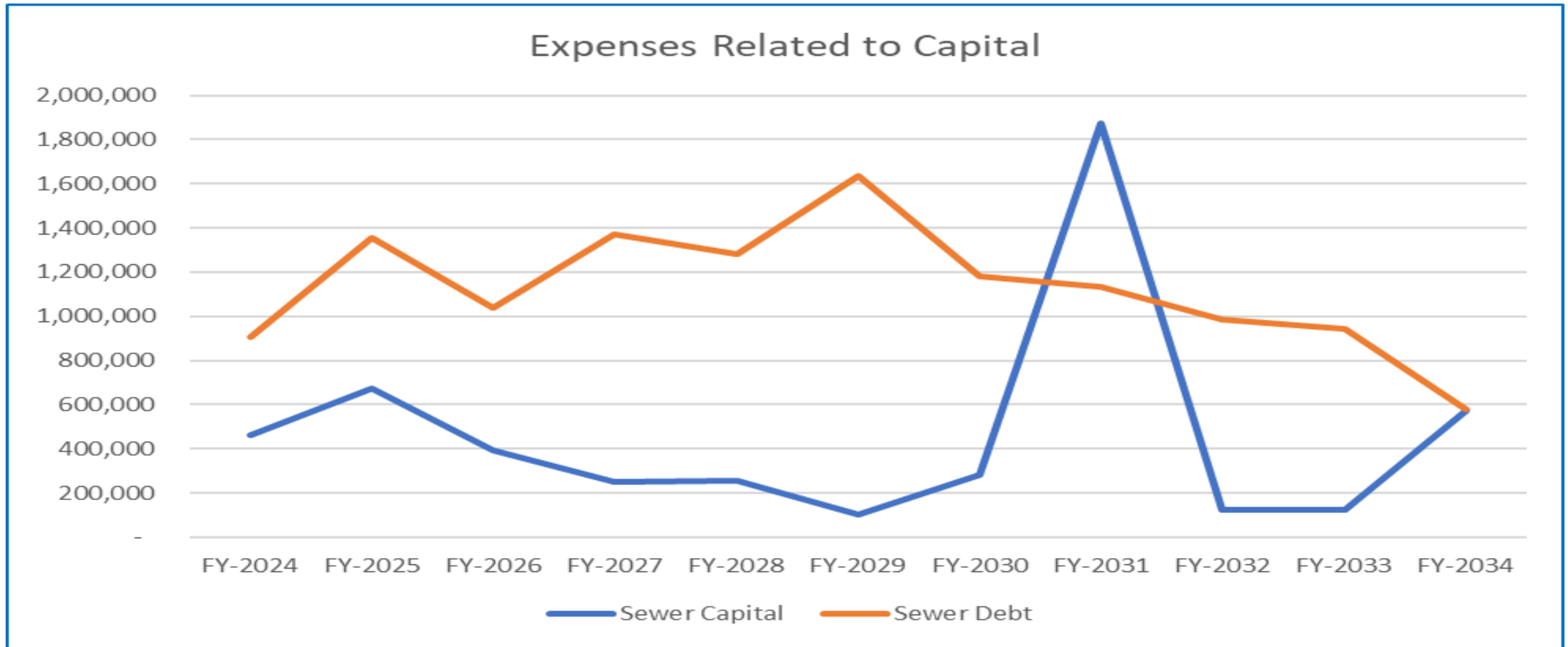
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# Capital Investment - Sewer

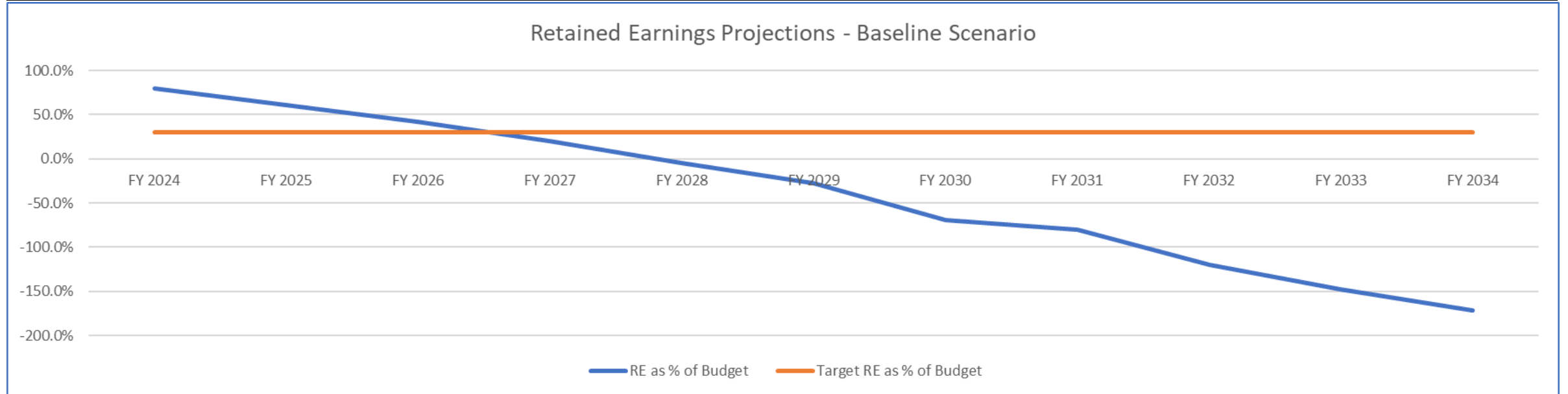
Actual and projected expenses related to capital  
Orange line is debt and blue line is capital outlay



# Baseline Scenario - Sewer

- Projected results for future years, assuming no revenue changes

Baseline	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
Surplus/Deficit	\$ (418,646)	\$ (1,172,402)	\$ (1,180,883)	\$ (1,609,455)	\$ (1,770,883)	\$ (2,230,089)	\$ (2,218,408)	\$ (4,033,454)	\$ (2,419,830)	\$ (2,670,324)	\$ (3,055,657)
Projected Retained Earnings	\$ 6,231,914	\$ 5,178,629	\$ 3,569,174	\$ 1,798,291	\$ (431,798)	\$ (2,650,206)	\$ (6,683,660)	\$ (9,103,490)	\$ (11,773,814)	\$ (14,829,471)	\$ (17,885,128)
RE as % of Budget	80.0%	60.5%	41.7%	20.0%	-4.7%	-27.6%	-69.6%	-79.7%	-120.1%	-147.5%	-171.3%



# Sewer Rate Option 1 – 4.0% in FY 2025

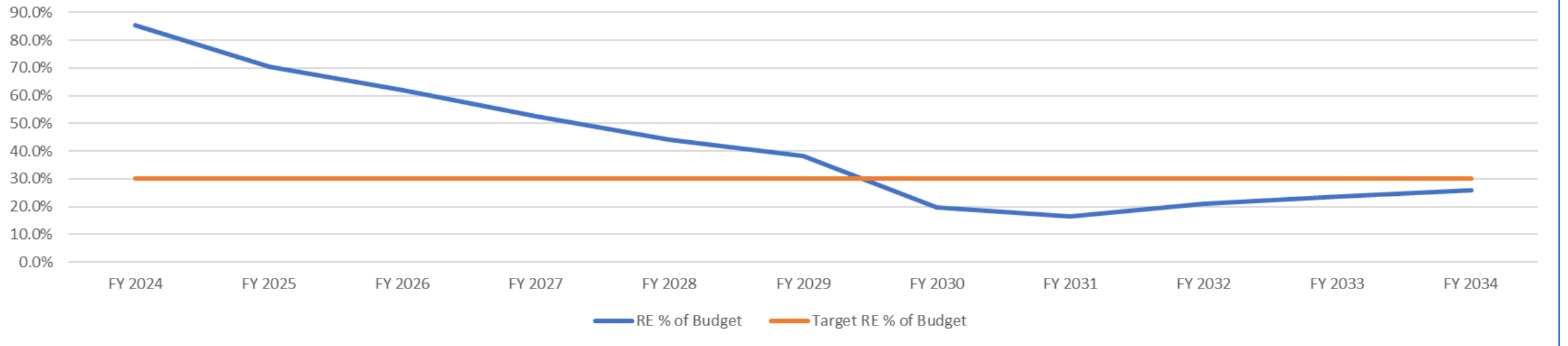
- Projected results for future years, with additional revenue from rate changes

Rate Changes:	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
		4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%

Rate Impact	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
Surplus/Deficit	\$ (418,646)	\$ (890,231)	\$ (605,254)	\$ (728,629)	\$ (572,653)	\$ (701,759)	\$ (346,773)	\$ (1,804,783)	\$ 180,159	\$ 315,836	\$ 332,120
Projected Retained Earnings	\$ 6,641,683	\$ 6,036,429	\$ 5,307,800	\$ 4,735,147	\$ 4,033,388	\$ 3,686,615	\$ 1,881,832	\$ 1,881,832	\$ 2,061,991	\$ 2,377,827	\$ 2,709,947
RE % of Budget	85.2%	70.6%	62.0%	52.7%	44.1%	38.3%	19.6%	16.5%	21.0%	23.7%	26.0%

Retained Earnings Projections - with Rate Changes





# Sewer Rate Option 1 – 4.0% in FY 2025 (Cont.)

## User Impact

User Impact (per Bill) - Sewer Bills Only			New Bills									
User Type	Usage	Current Bill	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Low-End User	500	\$ 51.00	\$ 53.04	\$ 55.16	\$ 57.37	\$ 59.66	\$ 62.05	\$ 64.53	\$ 67.11	\$ 69.80	\$ 72.59	\$ 75.49
Avg. Residential User (45 gpd)	1,500	\$ 157.75	\$ 164.06	\$ 170.62	\$ 177.45	\$ 184.55	\$ 191.93	\$ 199.60	\$ 207.59	\$ 215.89	\$ 224.53	\$ 233.51
Avg. Residential User (65 gpd)	2,200	\$ 235.80	\$ 245.23	\$ 255.04	\$ 265.24	\$ 275.85	\$ 286.89	\$ 298.36	\$ 310.30	\$ 322.71	\$ 335.62	\$ 349.04
Large Residential User	4,500	\$ 501.75	\$ 521.82	\$ 542.69	\$ 564.40	\$ 586.98	\$ 610.46	\$ 634.87	\$ 660.27	\$ 686.68	\$ 714.15	\$ 742.71
Large Commercial User	10,000	\$ 1,161.75	\$ 1,208.22	\$ 1,256.55	\$ 1,306.81	\$ 1,359.08	\$ 1,413.45	\$ 1,469.98	\$ 1,528.78	\$ 1,589.94	\$ 1,653.53	\$ 1,719.67
Very Large Commercial User	100,000	\$ 11,961.75	\$12,440.22	\$12,937.83	\$13,455.34	\$13,993.56	\$14,553.30	\$ 15,135.43	\$15,740.85	\$16,370.48	\$17,025.30	\$17,706.31

- Average Residential User: \$6.31 - \$9.43 increase per bill in FY 2025 (\$25.24 - \$37.72 annually)
- Large Residential User: \$20.07 increase per bill in FY 2025 (\$80.28 annually)

# Sewer Rate Option 2 – 3.0% in FY 2025

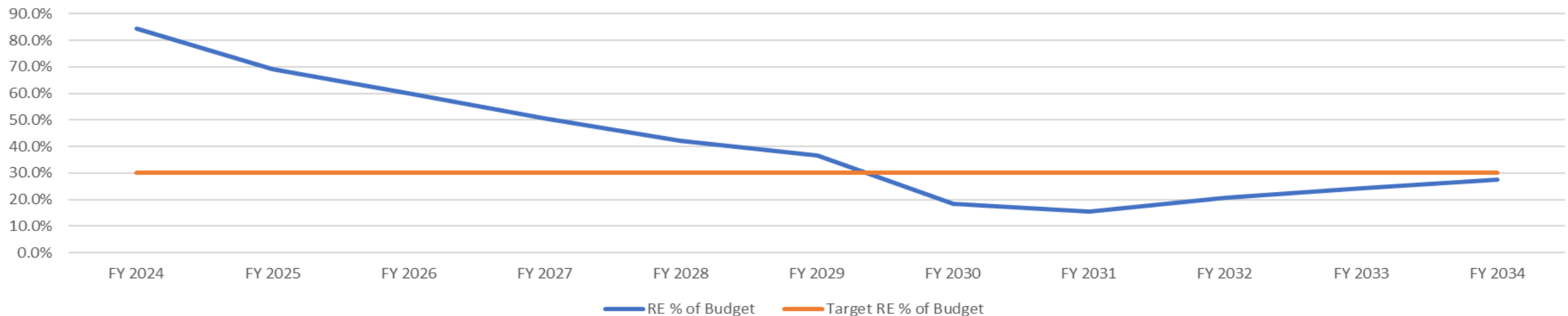
- Projected results for future years, with additional revenue from rate changes

Rate Changes:	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
		3.00%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%

Rate Impact	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
Surplus/Deficit	\$ (418,646)	\$ (960,774)	\$ (660,454)	\$ (767,100)	\$ (592,921)	\$ (702,258)	\$ (325,836)	\$ (1,760,641)	\$ 249,384	\$ 412,139	\$ 457,617
Projected Retained Earnings	\$ 6,571,140	\$ 5,910,686	\$ 5,143,586	\$ 4,550,665	\$ 3,848,407	\$ 3,522,571	\$ 1,761,930	\$ 1,761,930	\$ 2,011,314	\$ 2,423,453	\$ 2,881,070
RE % of Budget	84.3%	69.1%	60.1%	50.6%	42.0%	36.6%	18.3%	15.4%	20.5%	24.1%	27.6%

Retained Earnings Projections - with Rate Changes



# Sewer Rate Option 2 – 3.0% in FY 2025 (Cont.)

## User Impact

User Impact (per Bill) - Sewer Bills Only			New Bills									
User Type	Usage	Current Bill	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Low-End User	500	\$ 51.00	\$ 52.53	\$ 54.89	\$ 57.36	\$ 59.95	\$ 62.64	\$ 65.46	\$ 68.41	\$ 71.49	\$ 74.70	\$ 78.06
Avg. Residential User (45 gpd)	1,500	\$ 157.75	\$ 162.48	\$ 169.79	\$ 177.43	\$ 185.42	\$ 193.76	\$ 202.48	\$ 211.59	\$ 221.12	\$ 231.07	\$ 241.46
Avg. Residential User (65 gpd)	2,200	\$ 235.80	\$ 242.87	\$ 253.80	\$ 265.22	\$ 277.16	\$ 289.63	\$ 302.67	\$ 316.29	\$ 330.52	\$ 345.39	\$ 360.93
Large Residential User	4,500	\$ 501.75	\$ 516.80	\$ 540.06	\$ 564.36	\$ 589.76	\$ 616.30	\$ 644.03	\$ 673.01	\$ 703.30	\$ 734.95	\$ 768.02
Large Commercial User	10,000	\$ 1,161.75	\$ 1,196.60	\$ 1,250.45	\$ 1,306.72	\$ 1,365.52	\$ 1,426.97	\$ 1,491.18	\$ 1,558.29	\$ 1,628.41	\$ 1,701.69	\$ 1,778.27
Very Large Commercial User	100,000	\$ 11,961.75	\$12,320.60	\$12,875.03	\$13,454.41	\$14,059.85	\$14,692.55	\$ 15,353.71	\$16,044.63	\$16,766.64	\$17,521.14	\$18,309.59

- Average Residential User: \$4.73 - \$7.07 increase per bill in FY 2025 (\$18.92 - \$28.28 annually)
- Large Residential User: \$15.05 increase per bill in FY 2025 (\$60.20 annually)

# Multi-Unit Analysis

- An analysis of 54 multi-unit accounts was conducted, based on FY 2024 rates.
  - Total consumption = 5,498,100 cubic feet
- Current breakdown of usage by tier:
  - Tier 1 – 214,000 cubic feet (3.9%)
  - Tier 2 – 319,000 cubic feet (5.8%)
  - Tier 3 – 313,600 cubic feet (5.7%)
  - Tier 4 – 4,651,500 cubic feet (84.6%)
- Breakdown of usage by tier, if billed as individual units:
  - Tier 1 – 4,817,100 cubic feet (87.6%)
  - Tier 2 – 624,400 cubic feet (11.4%)
  - Tier 3 – 56,600 cubic feet (1.0%)
  - Tier 4 – 0 cubic feet (0.0%)

# Multi-Unit Analysis (Cont.)

- Rates per tier:
  - Tier 1 - \$10.75
  - Tier 2 - \$11.70
  - Tier 3 - \$12.00
  - Tier 4 - \$12.50
- Despite large usage differences in usage by tier, since rates in the four tiers are not drastically different (only \$1.75 between Tiers 1 and 4), the financial impact of billing by individual unit is not large:
  - Water – Savings of \$81,712 total for all 54 accounts annually
  - Sewer – Savings of \$84,167 total for all 54 accounts annually
- One Example (The Postmark):
  - Water – Savings of \$2,038 annually
  - Sewer – Savings of \$2,095 annually

Thank You!

Questions/Comments?