

CITY OF ROLLING MEADOWS

Utility Rate Study

- *Tim Chan, PE*
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■ City Background

The City serves approximately 24,000 customers in Cook County. The City's infrastructure serves a variety of Residential, Commercial, and Industrial customers.

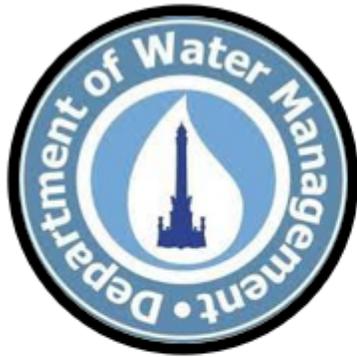
■ Water

- The City purchases water from Northwest Suburban Municipal Joint Action Water Agency (NSM JAWA) and distributes the water to its customers.

■ Wastewater

- The City owns, operates, and maintains a sanitary sewer conveyance system that is set to the Metropolitan Water Reclamation District of Greater Chicago (MWRD) for treatment.

Water and Sewer System Overview



**Chicago Department of
Water Management (CDWM)**



**Northwest Suburban
Municipal Joint Action
Water Agency
(NSMJAWA)**



**City of Rolling
Meadows Customers
(>24,000)**



**Metropolitan Water
Reclamation District of Greater
Chicago (MWRD)**

Project Overview

✓ Cost of Service Analysis

- Determine Operations & Maintenance, Capital Improvement Project costs, and Debt Service to operate the water, sewer, and stormwater utility, now and through FY 2031.

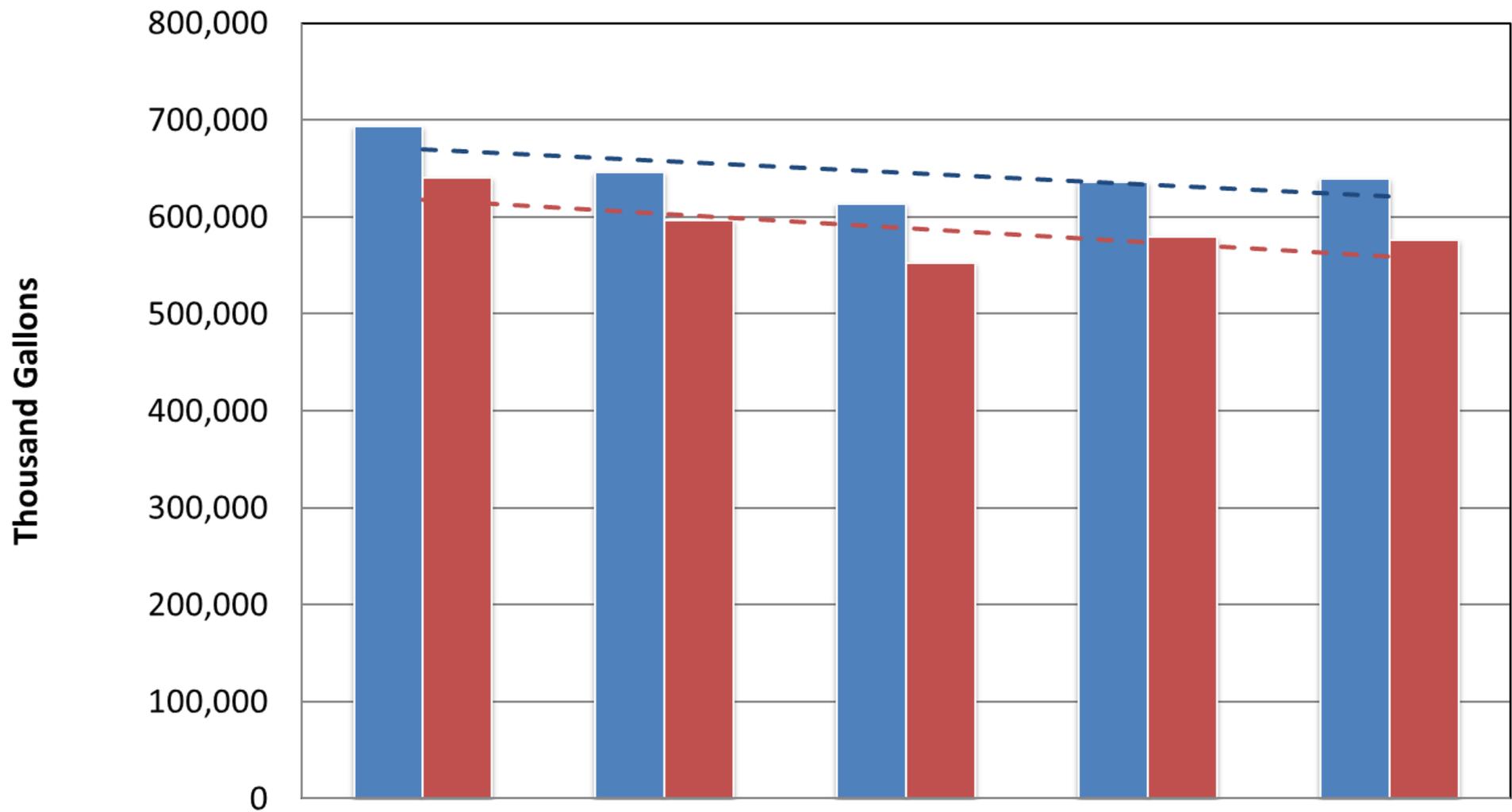
✓ User Group and Rate Structure Analysis

- Identify the major tiers of users in the City and assess their sufficiency and equity to sustainably fund the City's utilities.
- Develop rate structures and rate increases that take into account the impacts to the City's customer base.

✓ Rate Stabilization Analysis

- The City of Rolling Meadows has passed minimal rate increases over the past several years.
- Determine what rate increases are necessary to provide both financially sound, fair, and equitable utility funding while maintaining a proactive stance towards its aging infrastructure.

Annual Water Purchased vs. Water Billed

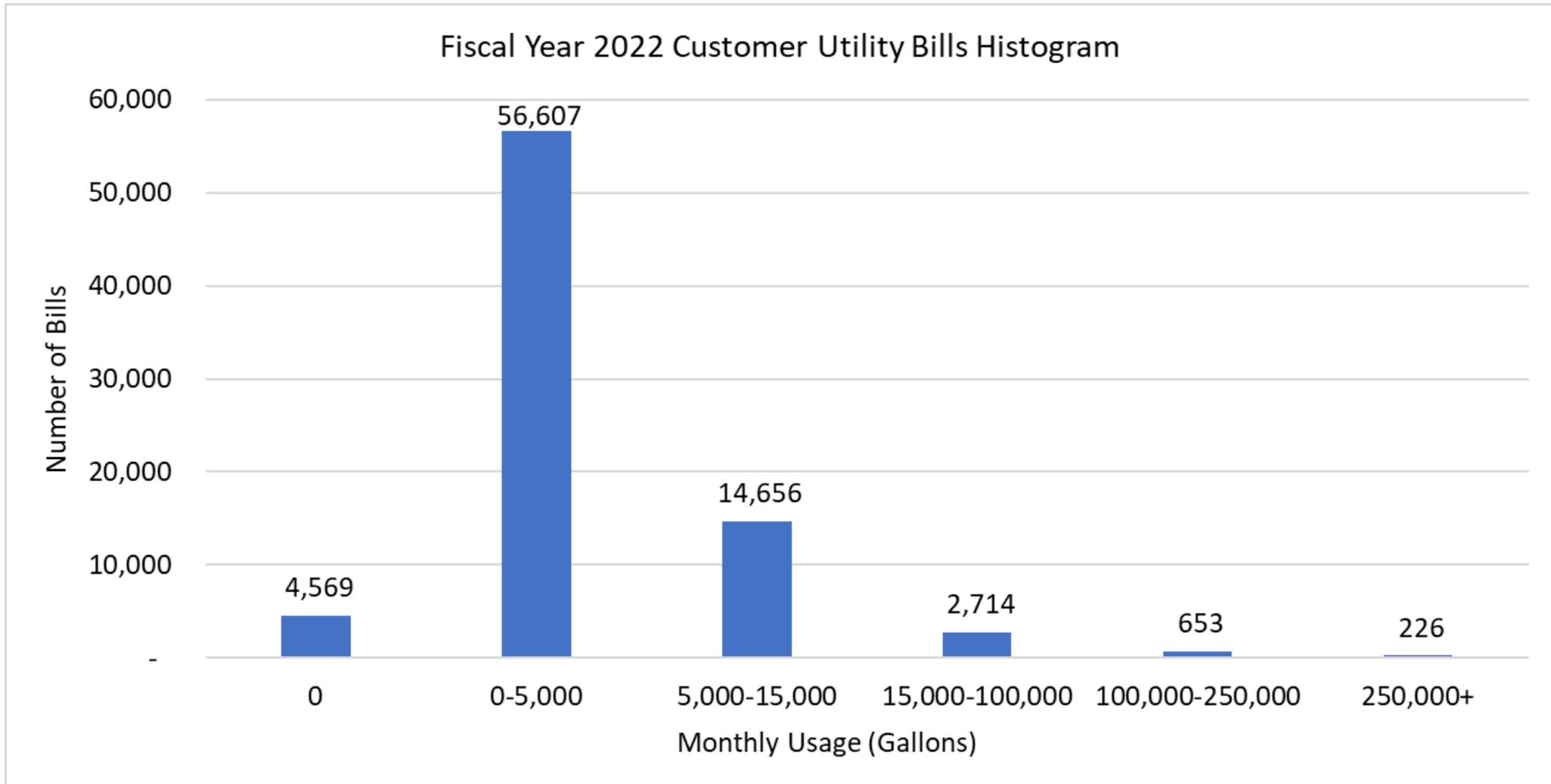


	2018	2019	2020	2021	2022
Water Purchased	693,634	646,507	612,796	635,928	638,915
Water Billed	639,884	596,409	552,673	579,168	575,662

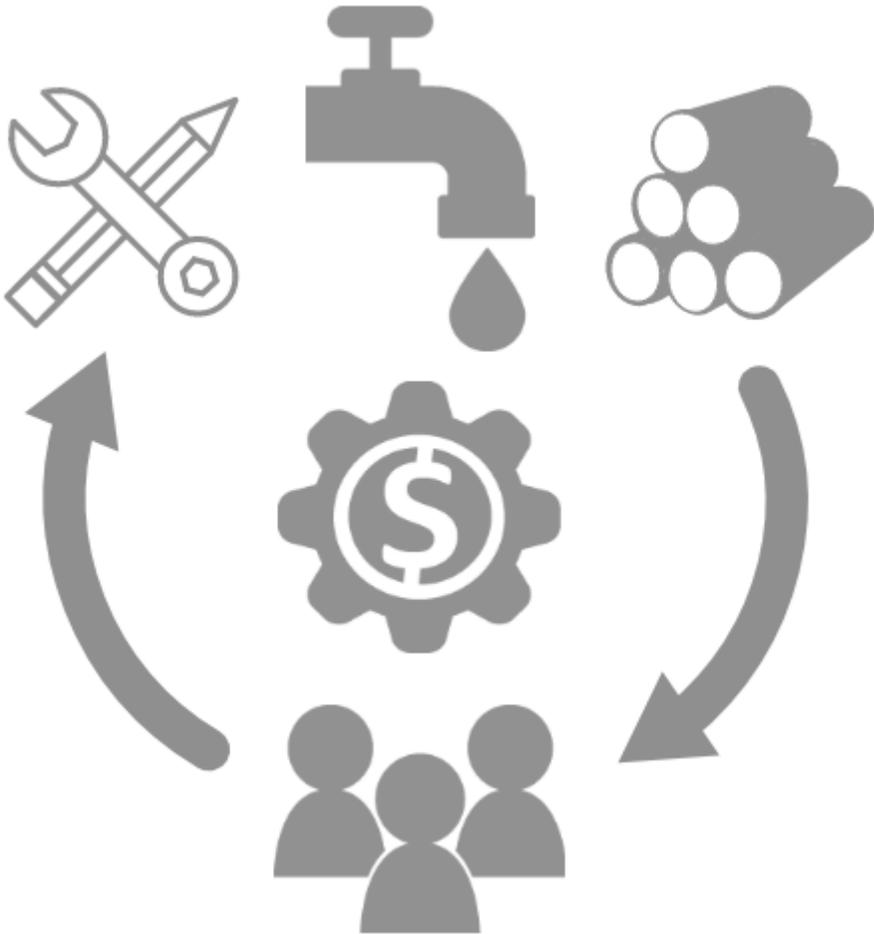
Existing Utility Rate Structure

City of Rolling Meadows - Fiscal Year 2023 Utility Rates				
Rates and Charges	Volumetric (per 1,000 gallons)		Fixed (per monthly bill)	
	Up to 15,000 Gallons per Month	Over 15,000 Gallons per Month	Access Fee	Stormwater Fee (per ERU)
Water	\$12.36	\$14.12	\$2.00	-
Sewer	\$3.62	\$4.28	\$1.00	-
Stormwater	-	-	-	\$4.76

Customer Base Analysis



■ Enterprise Fund: City Water & Sewer Fund



An enterprise fund is an account for operations that is financed and operated in a manner similar to private business enterprises – where the intent of the utility provider is to primarily finance and recover the costs of providing goods or services to the general public on a continuing basis through user charges.

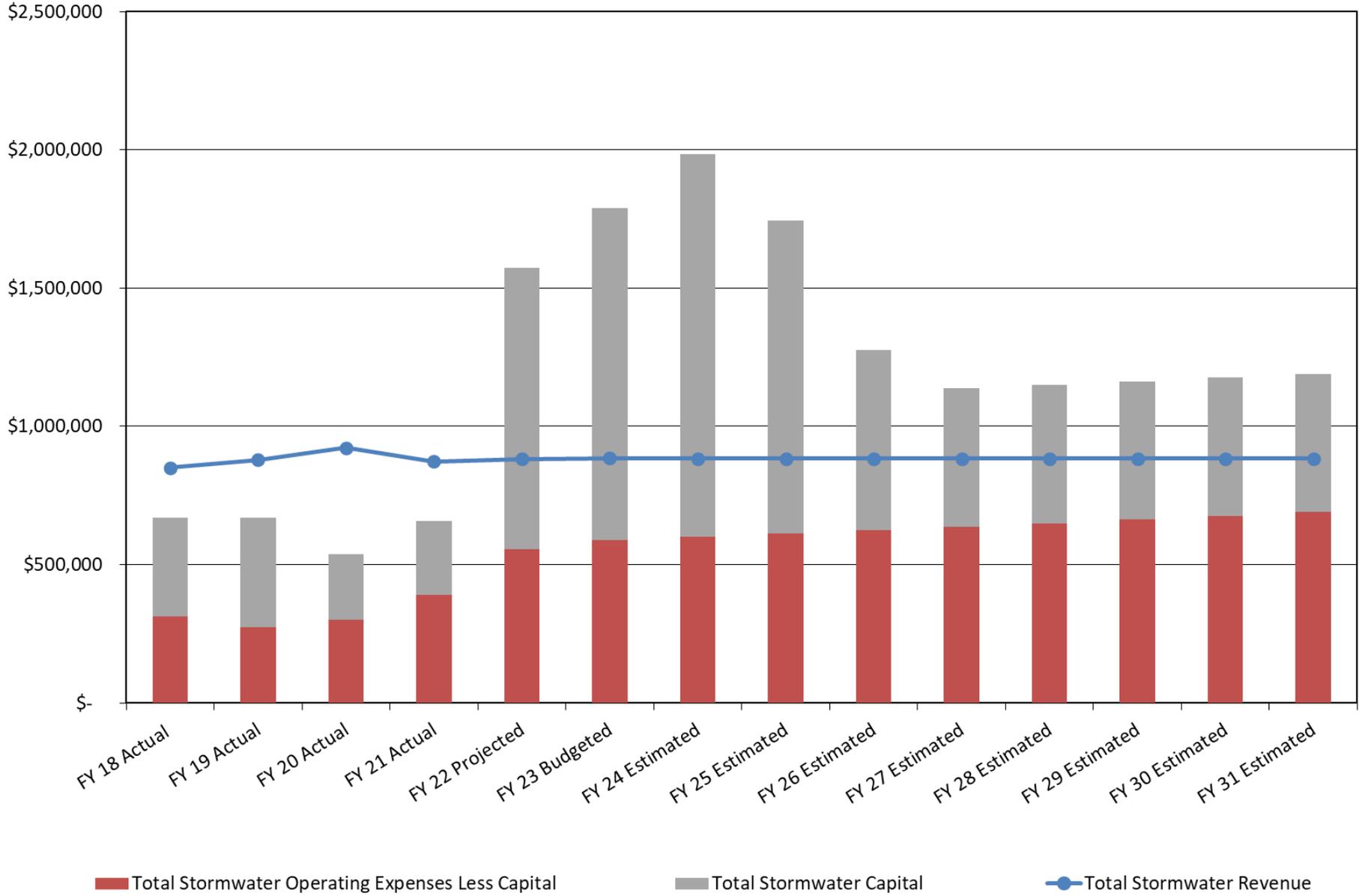
■ Operating Reserve Goal

- The American Water Works Association (AWWA) emphasizes the importance of identifying and maintaining adequate financial reserves (operating, capital projects, debt payments, etc.)
- In discussions with the City's finance department, a 25% Operating Reserve Goal was identified which approximately amounts to \$3 million and an additional \$2 million was identified as a Capital Reserve Goal.

■ Stormwater Management Fee

- In general, Stormwater Management Fees are an independent recovery fee that are designed to base their charges on the proportional Impervious Surface Area of a parcel.
- The City's existing Equivalent Residential Unit (ERU) is 3,604 square feet of impervious surface area. No changes to this value were made.
- Specific increases to the Stormwater Management Fee were calculated to allow the City to allow its stormwater related expenses to continue operating independently.

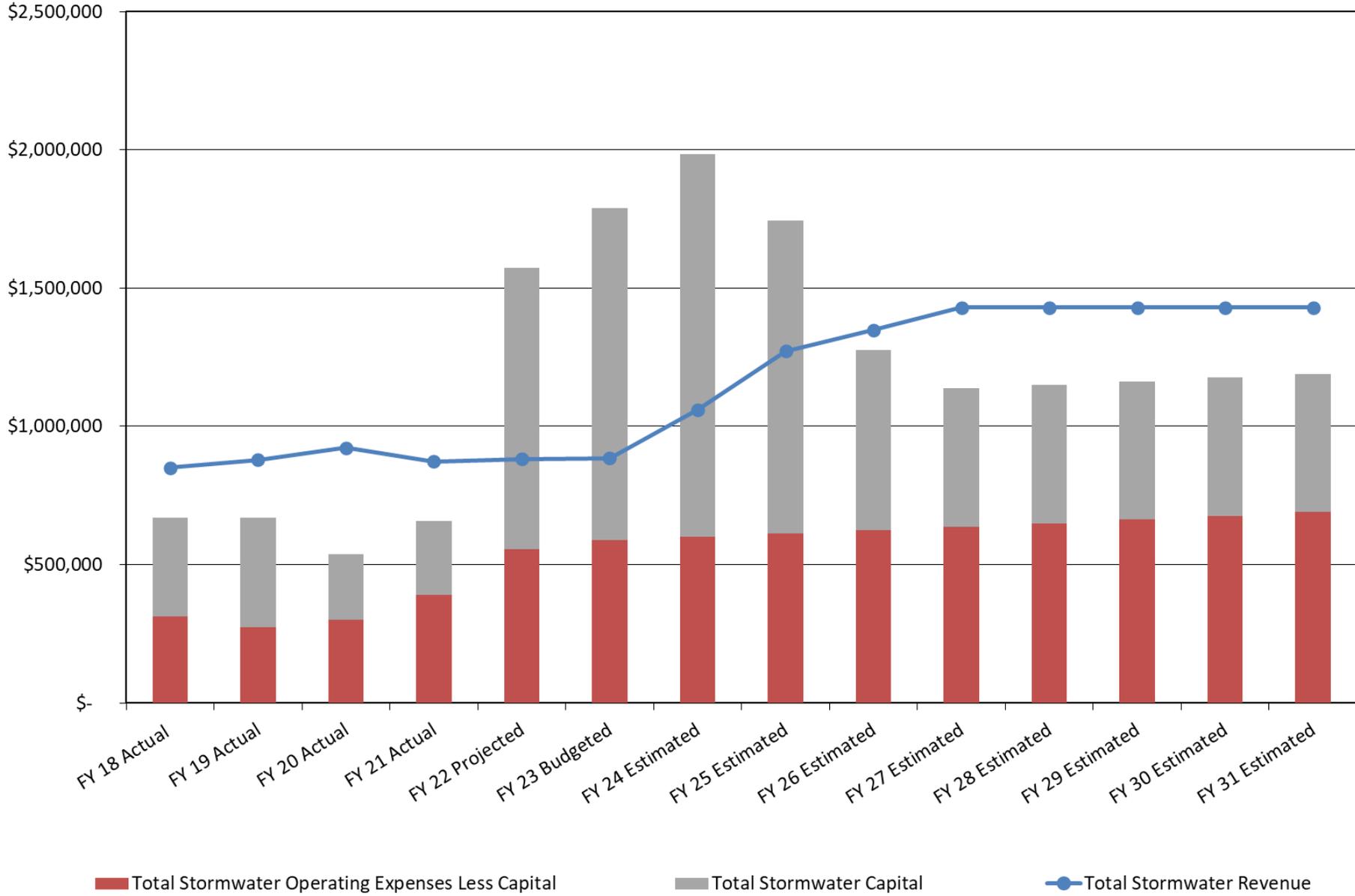
City of Rolling Meadows - Utility Rate Study
Utility Fund Cash Flow Projection
Stormwater Management Fee with No Rate Increases



■ Proposed Stormwater Management Fee Increases

Fiscal Year	Stormwater Management Fee per ERU/Month	Increases to Stormwater Management Fee
2023	\$4.76	-
2024	\$5.71	\$0.95
2025	\$6.85	\$1.14
2026	\$7.27	\$0.42
2027	\$7.70	\$0.43
2028	\$7.70	-
2029	\$7.70	-
2030	\$7.70	-
2031	\$7.70	-

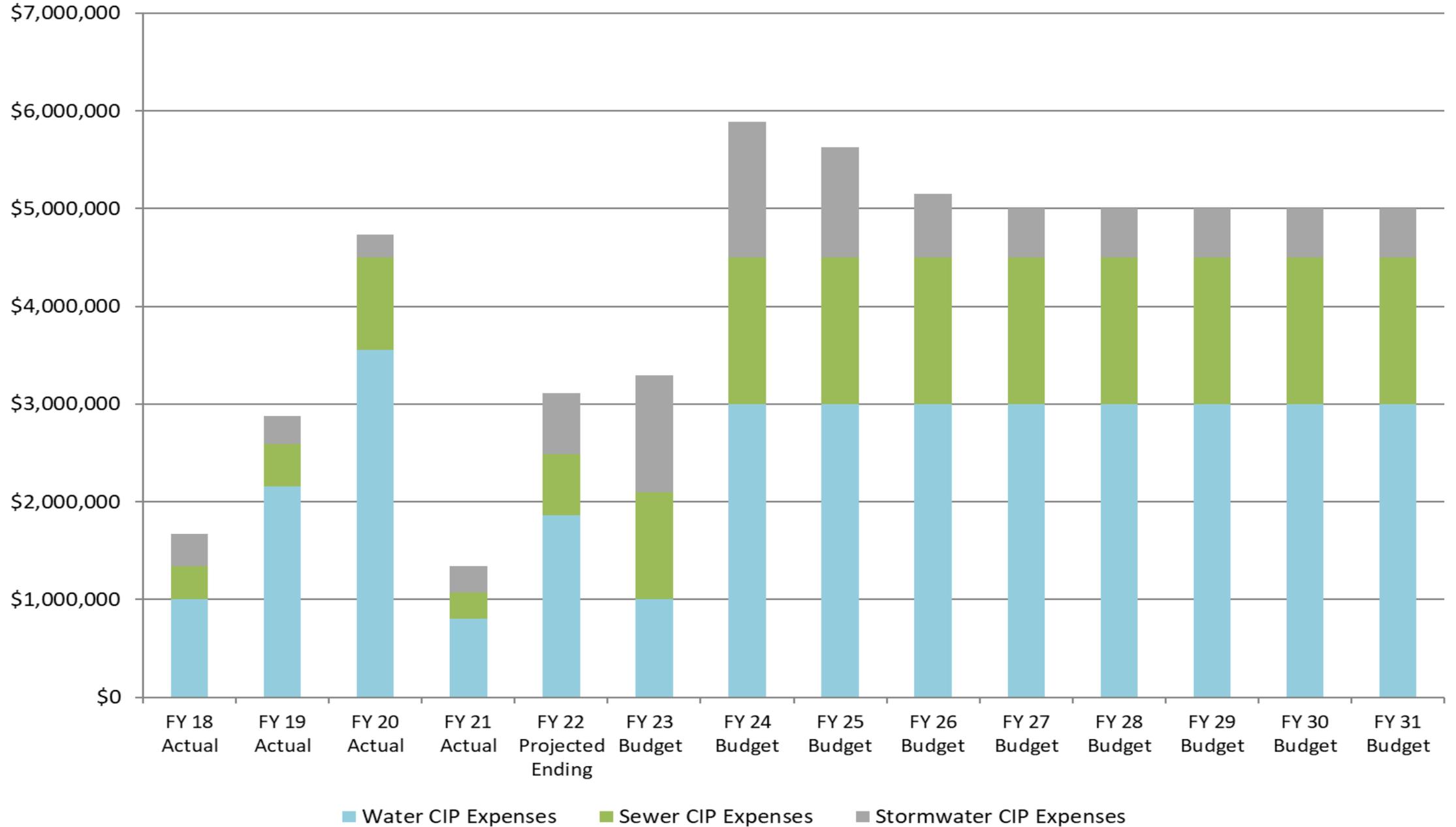
City of Rolling Meadows - Utility Rate Study
Utility Fund Cash Flow Projection
Stormwater Management Fee with Proposed Rate Increases



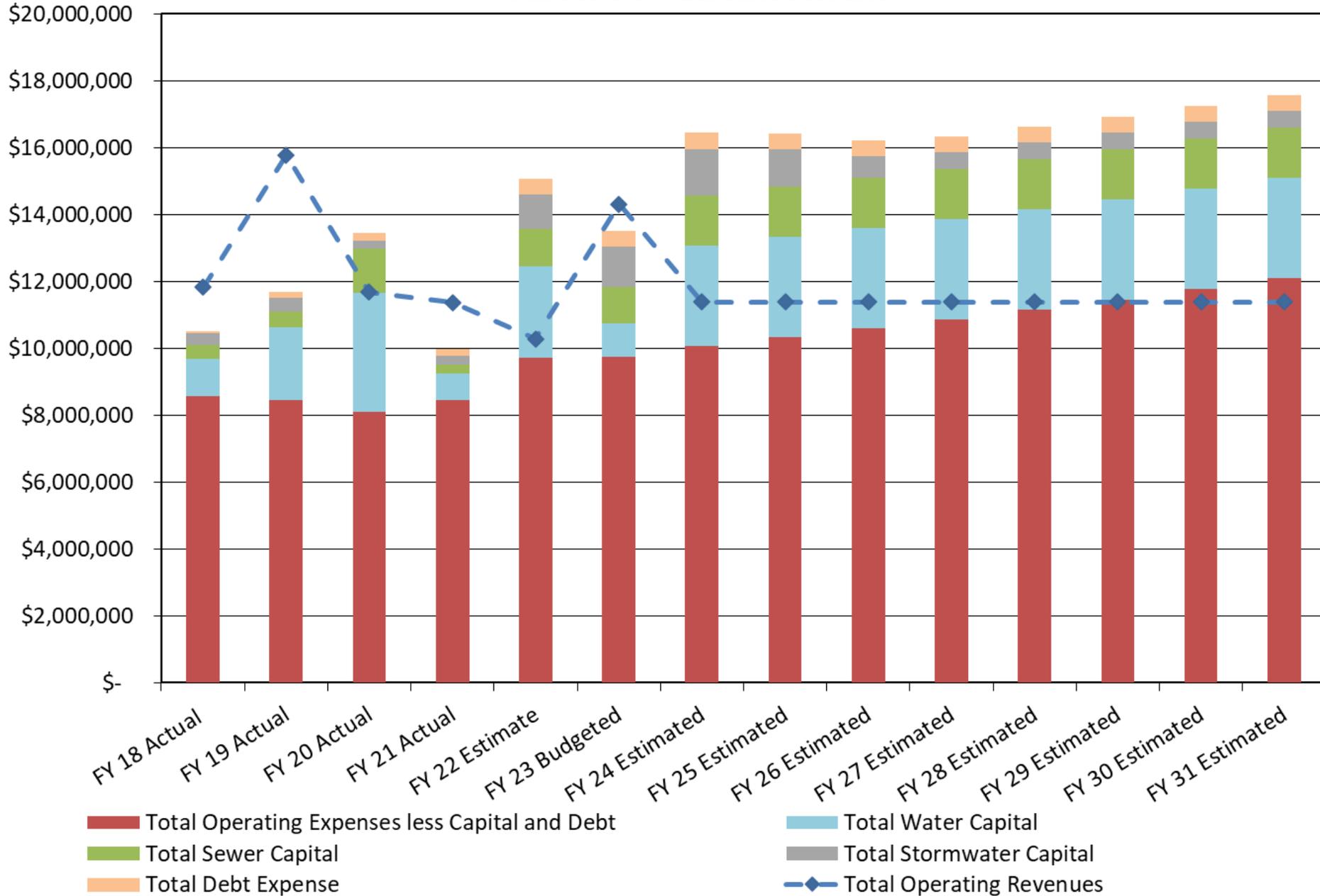
■ Full-Scale Capital Improvement Projects Expenditure

- Based on the City's latest studies for a Water, Sewer, and Stormwater Masterplan, a full-scale Capital Improvement Projects (CIP) was evaluated to observe the impact to the City's current position starting in Fiscal Year 2024.
- For FY23, existing identified CIP were included.
- The full-scale CIP was broken out into the following categories:
 - \$3 million in Water CIP
 - \$1.5 million in Sewer CIP
 - \$500 thousand in Stormwater CIP

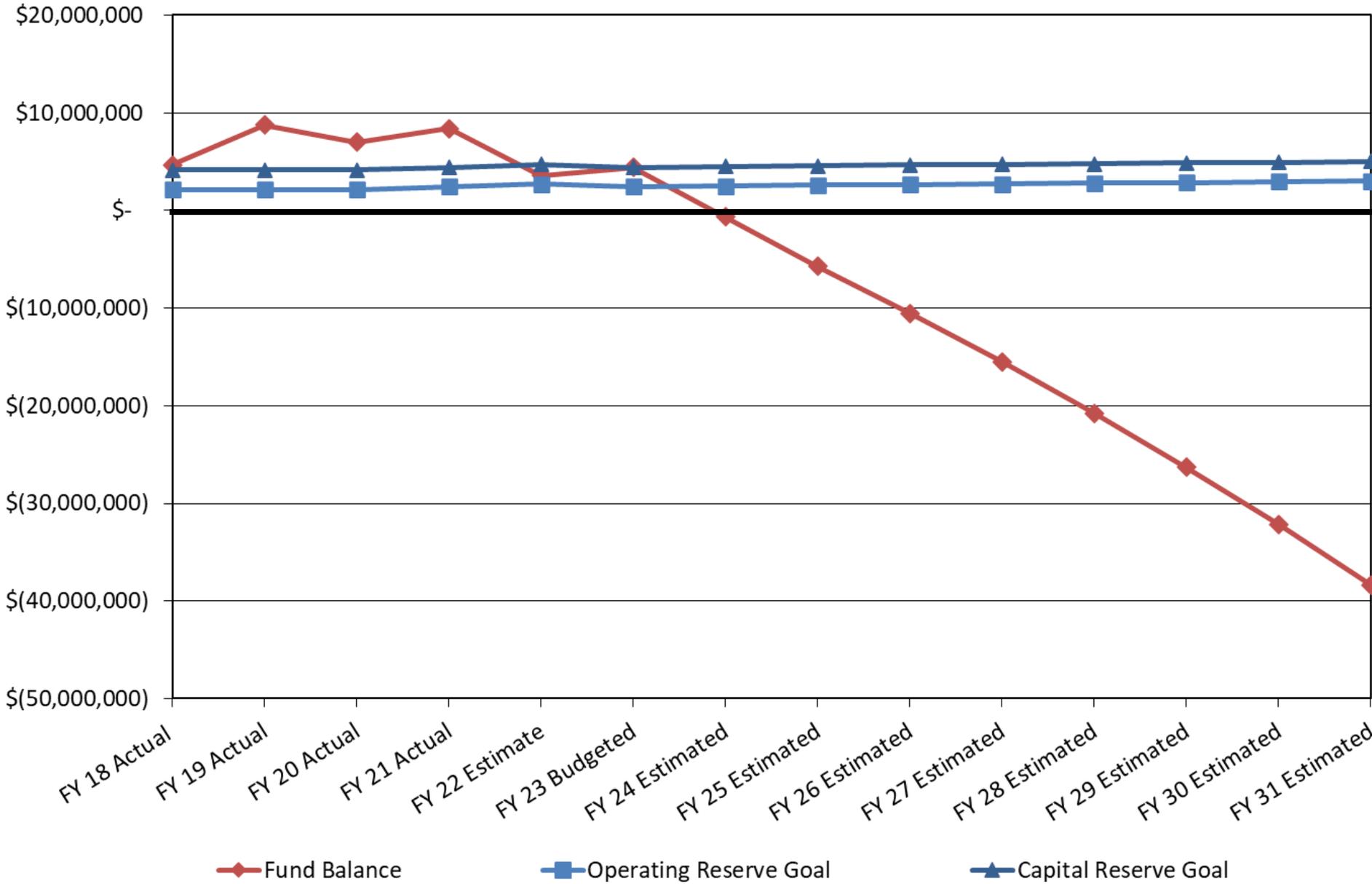
City of Rolling Meadows Capital Improvements Plan: 2023 to 2031



City of Rolling Meadows - Utility Rate Study
Utility Fund Cash Flow Projection
Full Scale CIP: Baseline Scenario



City of Rolling Meadows - Utility Rate Study
Utility Fund Balance Projection
Full Scale CIP: Baseline Scenario



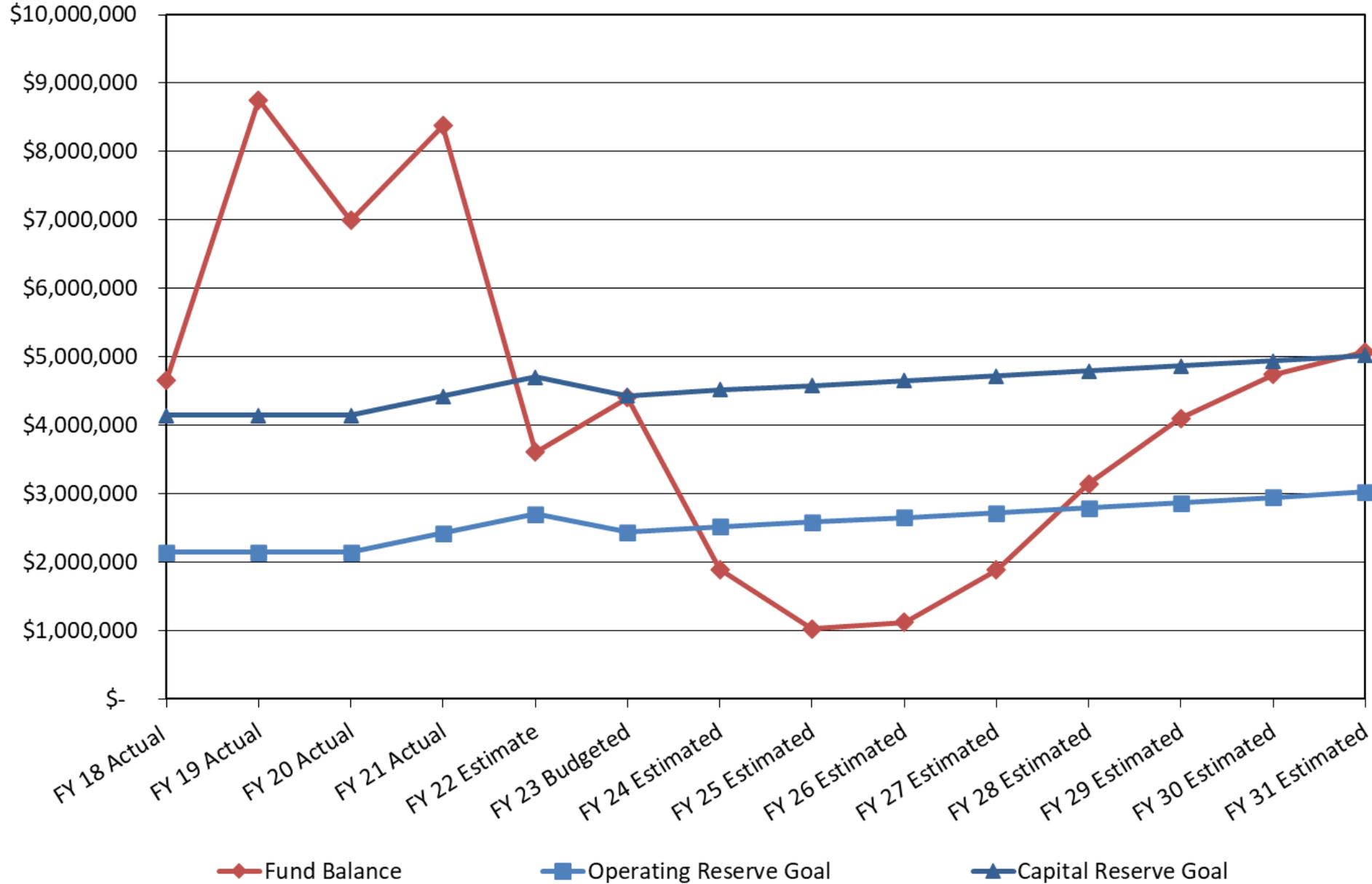
Full Scale CIP: Maintain Existing Rate Structure

Access Fees		2023	2024	2025	2026	2027	2028	2029	2030	2031
Water Access Fee	Increase in Dollars	\$ -	\$ 10.00	\$ 3.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Fee per Month	\$2.00	\$12.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00
Sewer Access Fee	Increase in Dollars	\$ -	\$ 8.00	\$ 3.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Fee per Month	\$1.00	\$9.00	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00

Volumetric Water Rate		2023	2024	2025	2026	2027	2028	2029	2030	2031
Up to 15 kgal	Rate Increases	0.0%	8.0%	8.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%
	Volumetric Rate	\$12.36	\$13.35	\$14.42	\$14.85	\$15.29	\$15.75	\$15.75	\$15.75	\$15.75
Over 15 kgal	Rate Increases	0.0%	9.0%	9.0%	9.0%	9.0%	9.0%	0.0%	0.0%	0.0%
	Volumetric Rate	\$14.12	\$15.39	\$16.78	\$18.29	\$19.93	\$21.73	\$21.73	\$21.73	\$21.73

Volumetric Sewer Rate		2023	2024	2025	2026	2027	2028	2029	2030	2031
Up to 15 kgal	Rate Increases	0.0%	8.0%	8.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%
	Volumetric Rate	\$3.62	\$3.91	\$4.22	\$4.35	\$4.48	\$4.61	\$4.61	\$4.61	\$4.61
Over 15 kgal	Rate Increases	0.0%	9.0%	9.0%	9.0%	9.0%	9.0%	0.0%	0.0%	0.0%
	Volumetric Rate	\$4.28	\$4.67	\$5.09	\$5.54	\$6.04	\$6.59	\$6.59	\$6.59	\$6.59

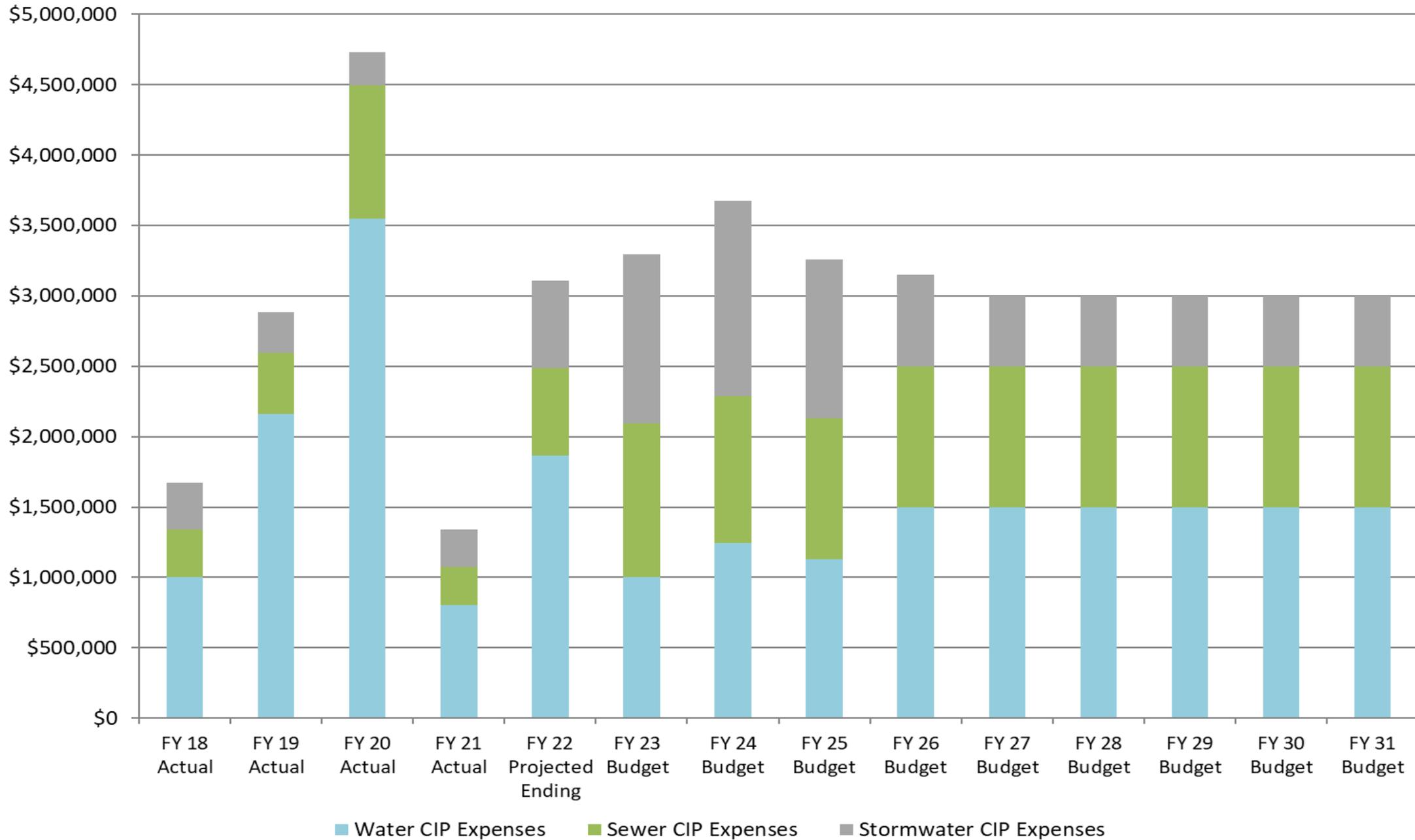
**City of Rolling Meadows - Utility Rate Study
Utility Fund Balance Projection
Full Scale CIP: Existing Rate Structure Increases**



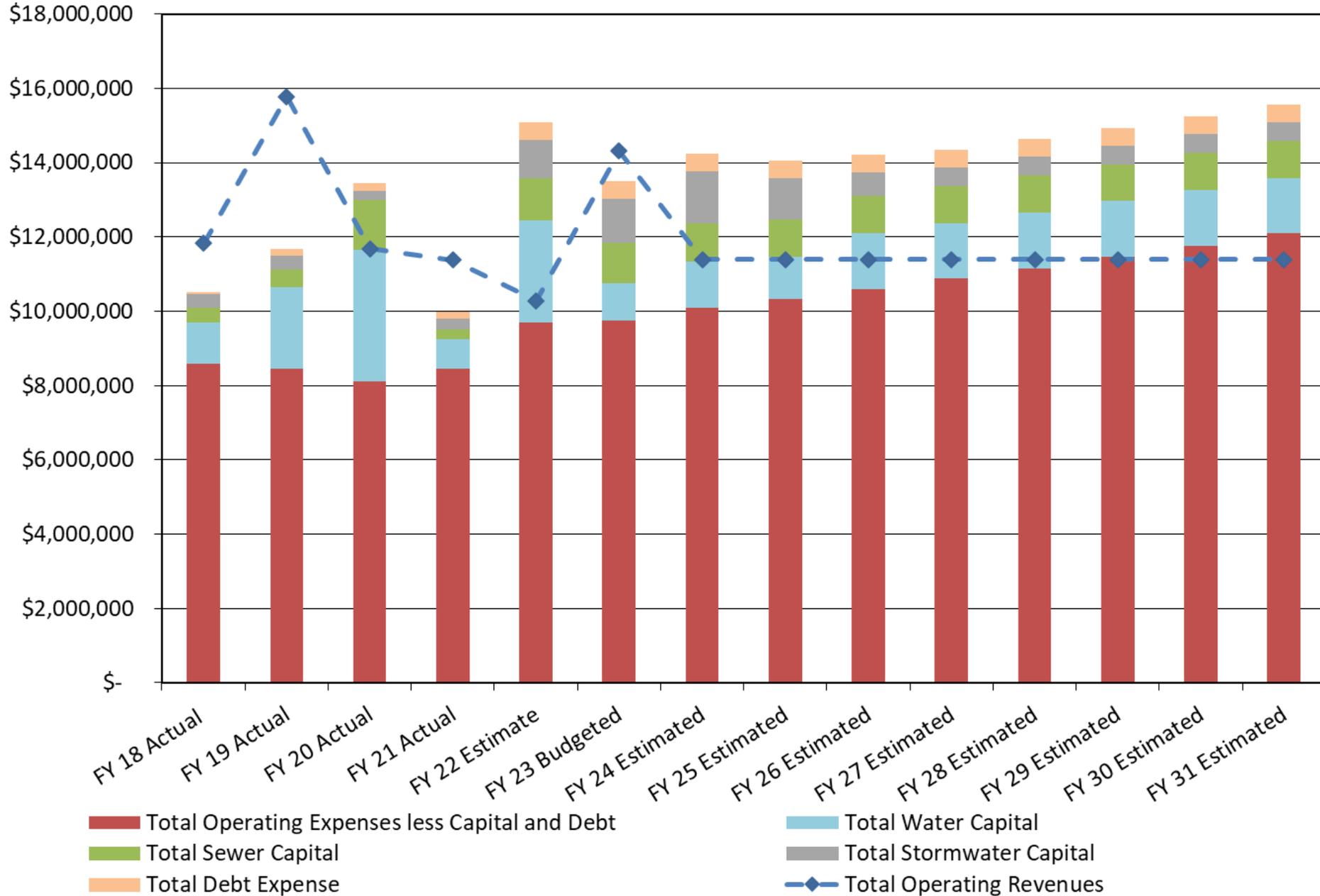
■ Reduced Capital Improvement Projects Expenditure

- Based on the City's latest studies for a Water, Sewer, and Stormwater Masterplan, a reduced Capital Improvement Projects (CIP) was evaluated to observe the impact to the City's current position starting in Fiscal Year 2026.
- For FY23 through FY25, existing identified CIP were included.
- The reduced CIP was broken out into the following categories:
 - \$1.5 million in Water CIP
 - \$1 million in Sewer CIP
 - \$500 thousand in Stormwater CIP

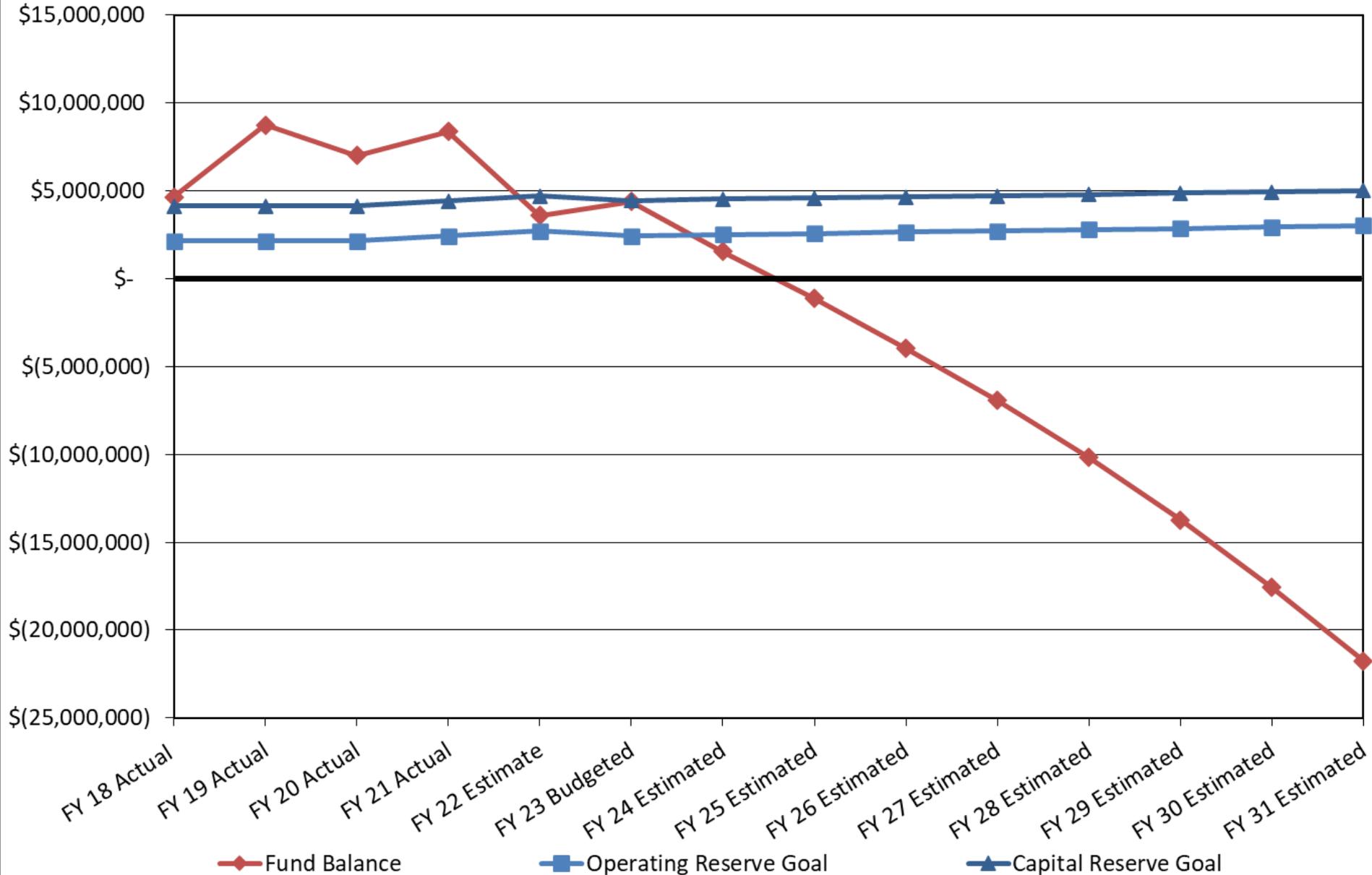
City of Rolling Meadows Capital Improvements Plan: 2023 to 2031



City of Rolling Meadows - Utility Rate Study
Utility Fund Cash Flow Projection
Scenario 1: Baseline - No Rate Increases



City of Rolling Meadows - Utility Rate Study
Utility Fund Balance Projection
Scenario 1: Baseline - No Rate Increases



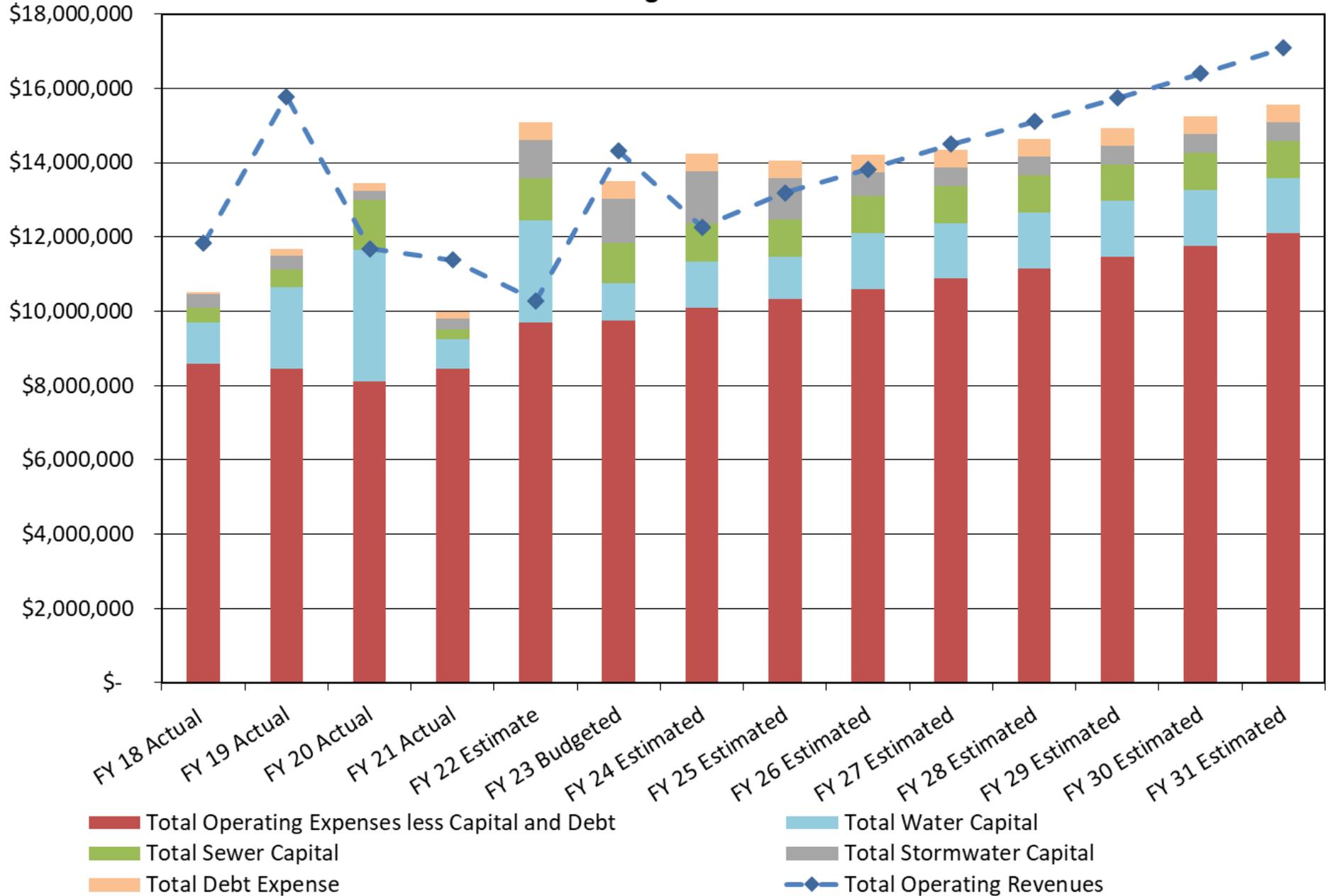
Scenario 2: Maintain Existing Rate Structure

Access Fees		2023	2024	2025	2026	2027	2028	2029	2030	2031
Water Access Fee	Increase in Dollars	\$ -	\$ 2.00	\$ 2.00	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50
	per Month Fee	\$2.00	\$4.00	\$6.00	\$6.50	\$7.00	\$7.50	\$8.00	\$8.50	\$9.00
Sewer Access Fee	Increase in Dollars	\$ -	\$ 1.00	\$ 1.00	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50
	per Month Fee	\$1.00	\$2.00	\$3.00	\$3.50	\$4.00	\$4.50	\$5.00	\$5.50	\$6.00

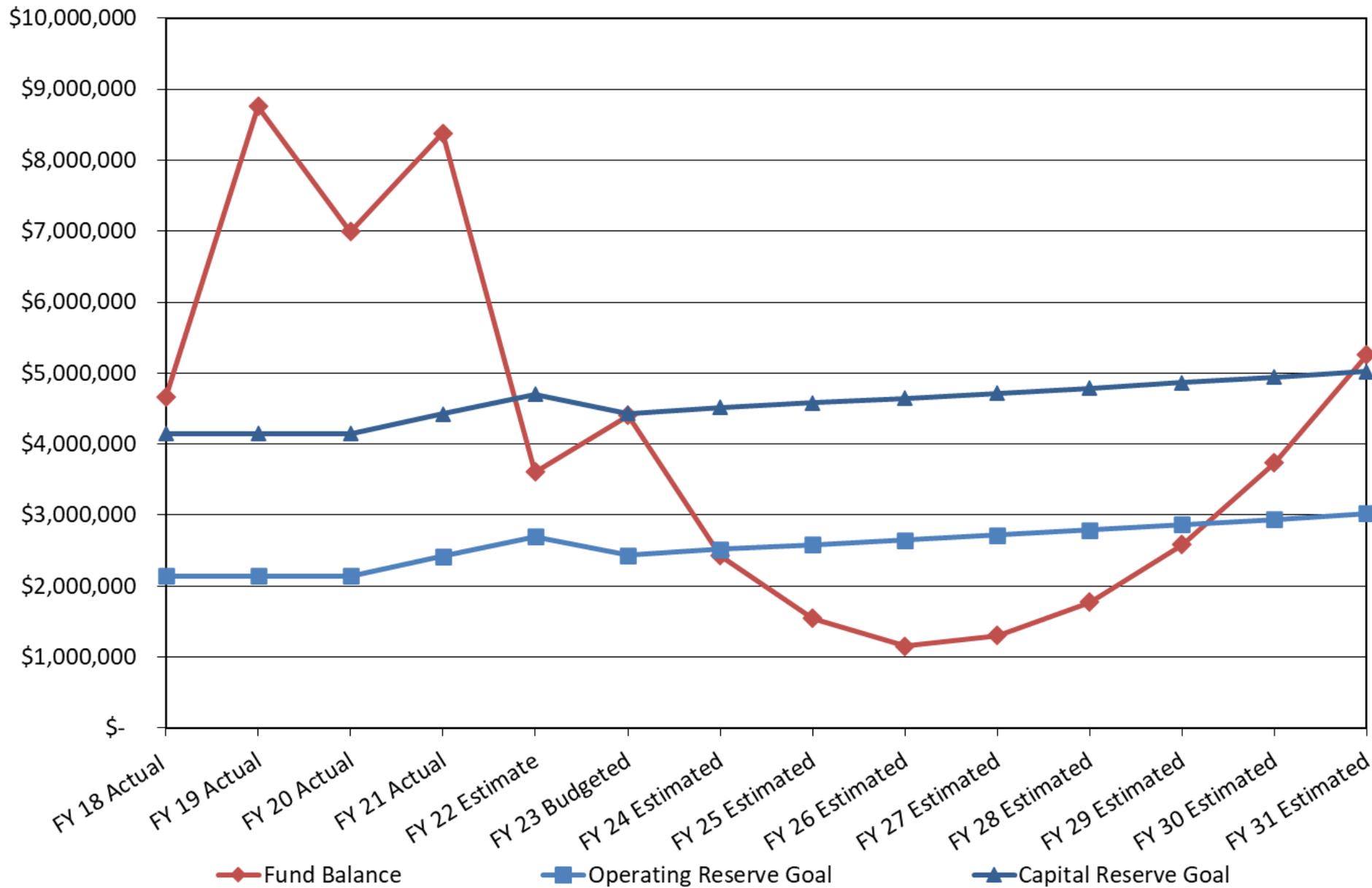
Volumetric Water Rate		2023	2024	2025	2026	2027	2028	2029	2030	2031
Up to 15 kgal	Rate Increases	0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Volumetric Rate	\$12.36	\$12.85	\$13.37	\$13.90	\$14.46	\$15.04	\$15.64	\$16.26	\$16.92
Over 15 kgal	Rate Increases	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Volumetric Rate	\$14.12	\$14.83	\$15.57	\$16.35	\$17.16	\$18.02	\$18.92	\$19.87	\$20.86

Volumetric Sewer Rate		2023	2024	2025	2026	2027	2028	2029	2030	2031
Up to 15 kgal	Rate Increases	0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Volumetric Rate	\$3.62	\$3.76	\$3.92	\$4.07	\$4.23	\$4.40	\$4.58	\$4.76	\$4.95
Over 15 kgal	Rate Increases	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Volumetric Rate	\$4.28	\$4.49	\$4.72	\$4.95	\$5.20	\$5.46	\$5.74	\$6.02	\$6.32

City of Rolling Meadows - Utility Rate Study
Utility Fund Cash Flow Projection
Scenario 2: Existing Rate Structure Increases



**City of Rolling Meadows - Utility Rate Study
Utility Fund Balance Projection
Scenario 2: Existing Rate Structure Increases**

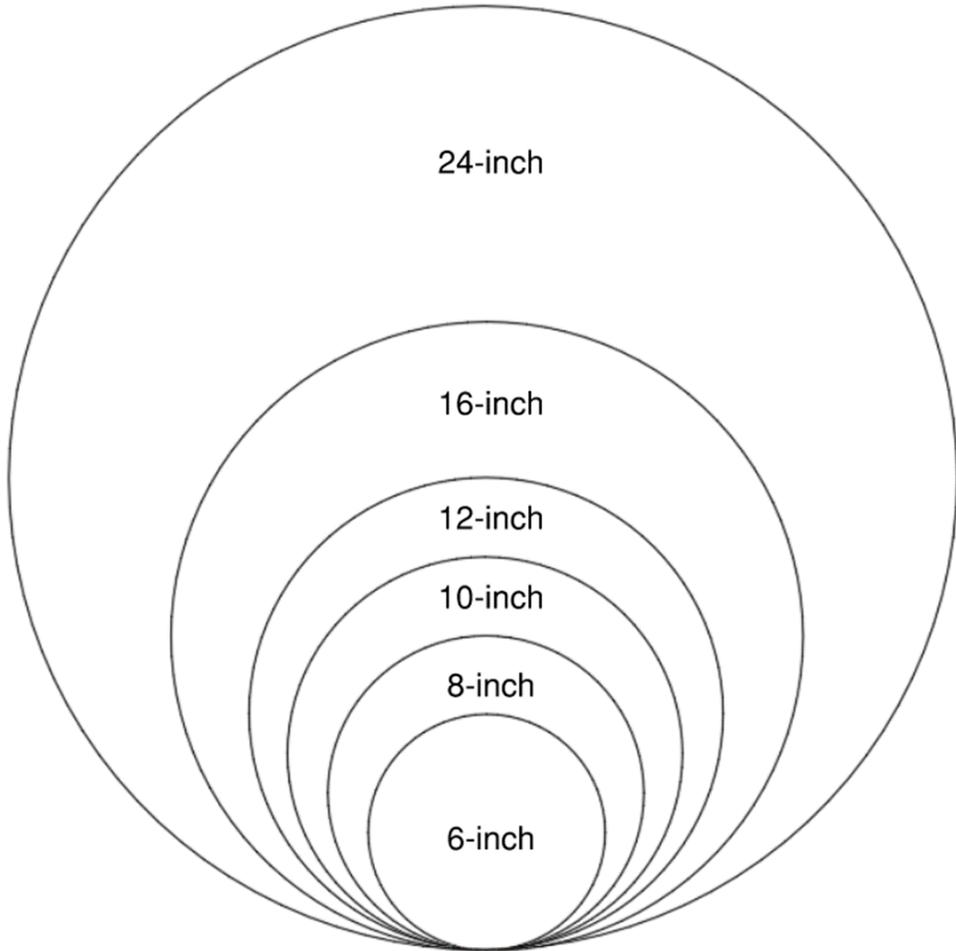


■ Existing Water and Sewer Rate Structure Analysis – Fixed Charges

- Approximately 5.5% of the City's total bills were assessed bills with 0 gallons used in FY22. This means only the Stormwater Management Fee and \$3 Water and Sewer Access Fees were gained in revenue for these bills.
- In general, larger water meters can be readily attributed to larger fixed expenses. This is readily observed in the infrastructure necessary to support their higher water usage.
- The Water and Sewer Access Fees are not currently scaled based on the customer's meter size, unlike the Stormwater Management Fee basing its cost on ERUs.

Fixed Scaled Meter Rate Structure

Cross Sectional Area of a Pipe by Diameter



Meter Size	Meter Ratio	Water and Sewer Access Fee	
		FY23	FY24
3/4-inch meter and less	1	\$3.00	\$6.00
1-inch meter	1.78	\$3.00	\$10.68
1.5-inch meter	4	\$3.00	\$24.00
2-inch meter	7.11	\$3.00	\$42.66
3-inch meter	16	\$3.00	\$96.00
4-inch meter	28.44	\$3.00	\$170.64
6-inch meter	64	\$3.00	\$384.00

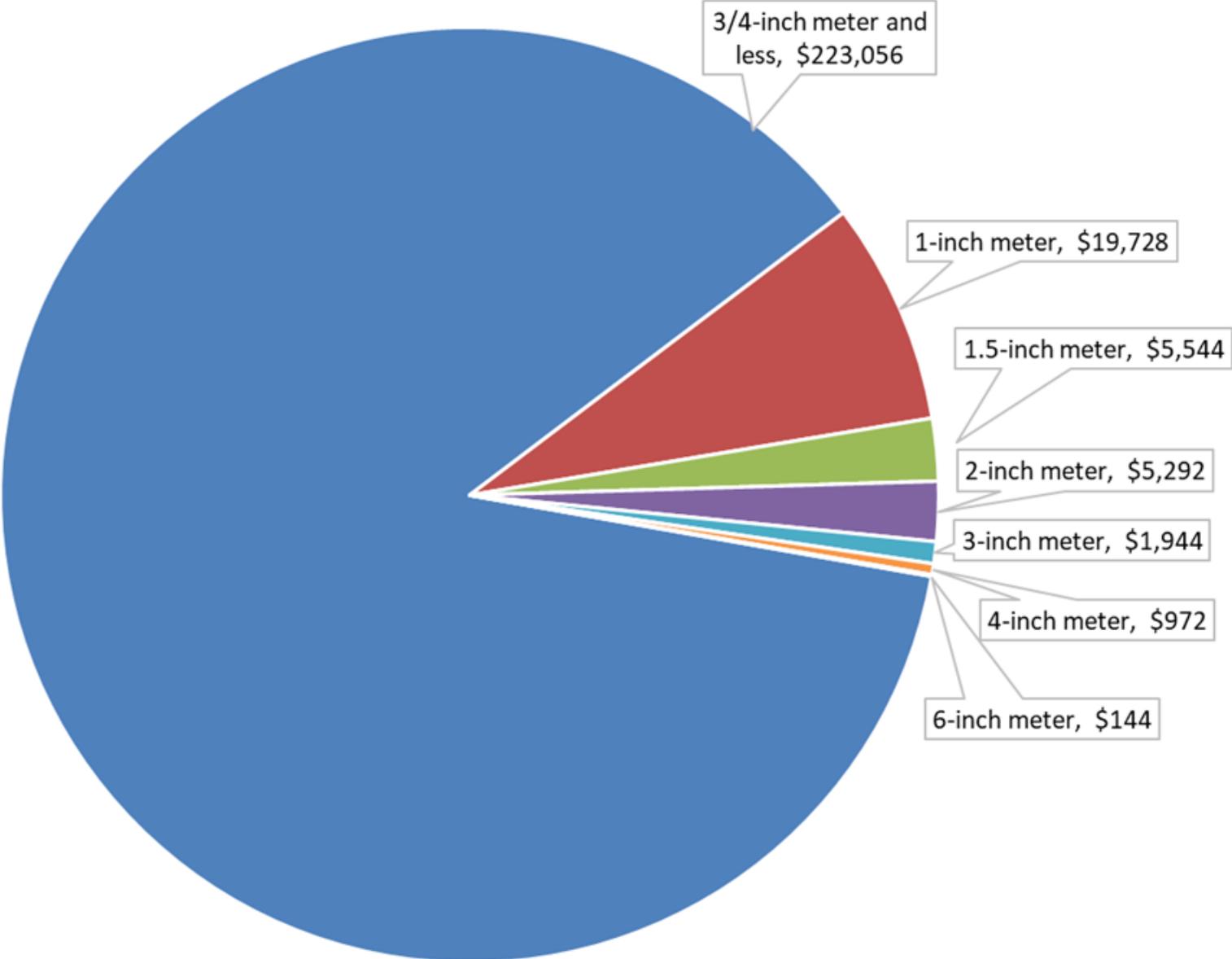
Water Access Fee Increases

Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031
3/4-inch meter and less Rate Increase (in Dollars)		\$2.00	\$2.00	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
3/4-inch meter and less	\$2.00	\$4.00	\$6.00	\$6.50	\$7.00	\$7.50	\$8.00	\$8.50	\$9.00
1-inch meter	\$2.00	\$7.12	\$10.68	\$11.57	\$12.46	\$13.35	\$14.24	\$15.13	\$16.02
1.5-inch meter	\$2.00	\$16.00	\$24.00	\$26.00	\$28.00	\$30.00	\$32.00	\$34.00	\$36.00
2-inch meter	\$2.00	\$28.44	\$42.66	\$46.22	\$49.77	\$53.33	\$56.88	\$60.44	\$63.99
3-inch meter	\$2.00	\$64.00	\$96.00	\$104.00	\$112.00	\$120.00	\$128.00	\$136.00	\$144.00
4-inch meter	\$2.00	\$113.76	\$170.64	\$184.86	\$199.08	\$213.30	\$227.52	\$241.74	\$255.96
6-inch meter	\$2.00	\$256.00	\$384.00	\$416.00	\$448.00	\$480.00	\$512.00	\$544.00	\$576.00

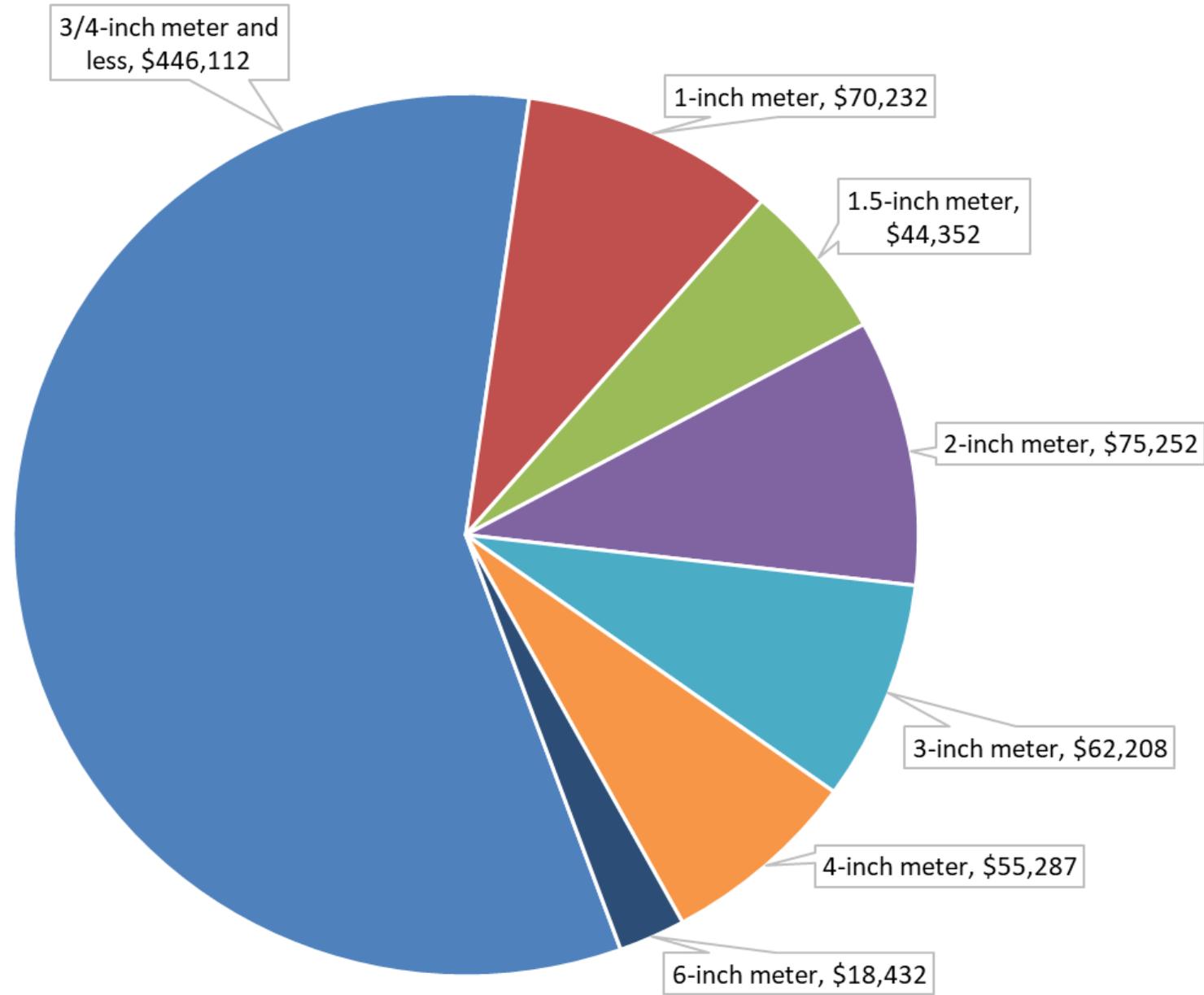
Sewer Access Fee Increases

Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031
3/4-inch meter and less Rate Increase (in Dollars)		\$1.00	\$1.00	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
3/4-inch meter and less	\$1.00	\$2.00	\$3.00	\$3.50	\$4.00	\$4.50	\$5.00	\$5.50	\$6.00
1-inch meter	\$1.00	\$3.56	\$5.34	\$6.23	\$7.12	\$8.01	\$8.90	\$9.79	\$10.68
1.5-inch meter	\$1.00	\$8.00	\$12.00	\$14.00	\$16.00	\$18.00	\$20.00	\$22.00	\$24.00
2-inch meter	\$1.00	\$14.22	\$21.33	\$24.89	\$28.44	\$32.00	\$35.55	\$39.11	\$42.66
3-inch meter	\$1.00	\$32.00	\$48.00	\$56.00	\$64.00	\$72.00	\$80.00	\$88.00	\$96.00
4-inch meter	\$1.00	\$56.88	\$85.32	\$99.54	\$113.76	\$127.98	\$142.20	\$156.42	\$170.64
6-inch meter	\$1.00	\$128.00	\$192.00	\$224.00	\$256.00	\$288.00	\$320.00	\$352.00	\$384.00

FY23 Water and Sewer Access Fees Revenue Composition



FY24 Water and Sewer Access Fees Revenue Composition with Fixed Scaled Meter



■ Existing Water and Sewer Rate Structure Analysis – Volumetric Rates

- The existing two-tier inclining block does not adequately cover the range of water users that are currently served by the City.
- The largest customers use up to 68 times more than 15,000 gallons per month currently, up to a maximum of 1,019,186 gallons in 2022.
- New tiers would be necessary to enable the City to more equitably recuperate its revenue requirements from the wide range of customer user types without disproportionately impacting the lower tiers.

Modified Inclining Block Rate Structure

Water Volumetric Inclining Block Tiers	Existing	Scenario 2
Up to 5 kgal	-	\$12.36
5 to 15 kgal	\$12.36	\$12.36
15 to 100 kgal	\$14.12	\$14.12
100 to 250 kgal	-	\$15.50
Over 250 kgal	-	\$16.25

Sewer Volumetric Inclining Block Tiers	Existing	Scenario 2
Up to 5 kgal	-	\$3.62
5 to 15 kgal	\$3.62	\$3.62
15 to 100 kgal	\$4.28	\$4.28
100 to 250 kgal	-	\$5.00
Over 250 kgal	-	\$6.00

Water Volumetric Modified Inclining Block Rate Increases

Inclining Block Tiers		2023	2024	2025	2026	2027	2028	2029	2030	2031
Up to 5 kgal	Rate Increases	0.0%	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
	Volumetric Rate	\$12.36	\$12.36	\$12.73	\$13.11	\$13.51	\$13.91	\$14.33	\$14.76	\$15.20
5 to 15 kgal	Rate Increases	0.0%	0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Volumetric Rate	\$12.36	\$12.36	\$12.85	\$13.37	\$13.90	\$14.46	\$15.04	\$15.64	\$16.26
15 to 100 kgal	Rate Increases	0.0%	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Volumetric Rate	\$14.12	\$14.12	\$14.83	\$15.57	\$16.35	\$17.16	\$18.02	\$18.92	\$19.87
100 to 250 kgal	Rate Increases	0.0%	0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Volumetric Rate	\$14.12	\$15.50	\$16.12	\$16.76	\$17.44	\$18.13	\$18.86	\$19.61	\$20.40
Over 250 kgal	Rate Increases	0.0%	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Volumetric Rate	\$14.12	\$16.25	\$17.06	\$17.92	\$18.81	\$19.75	\$20.74	\$21.78	\$22.87

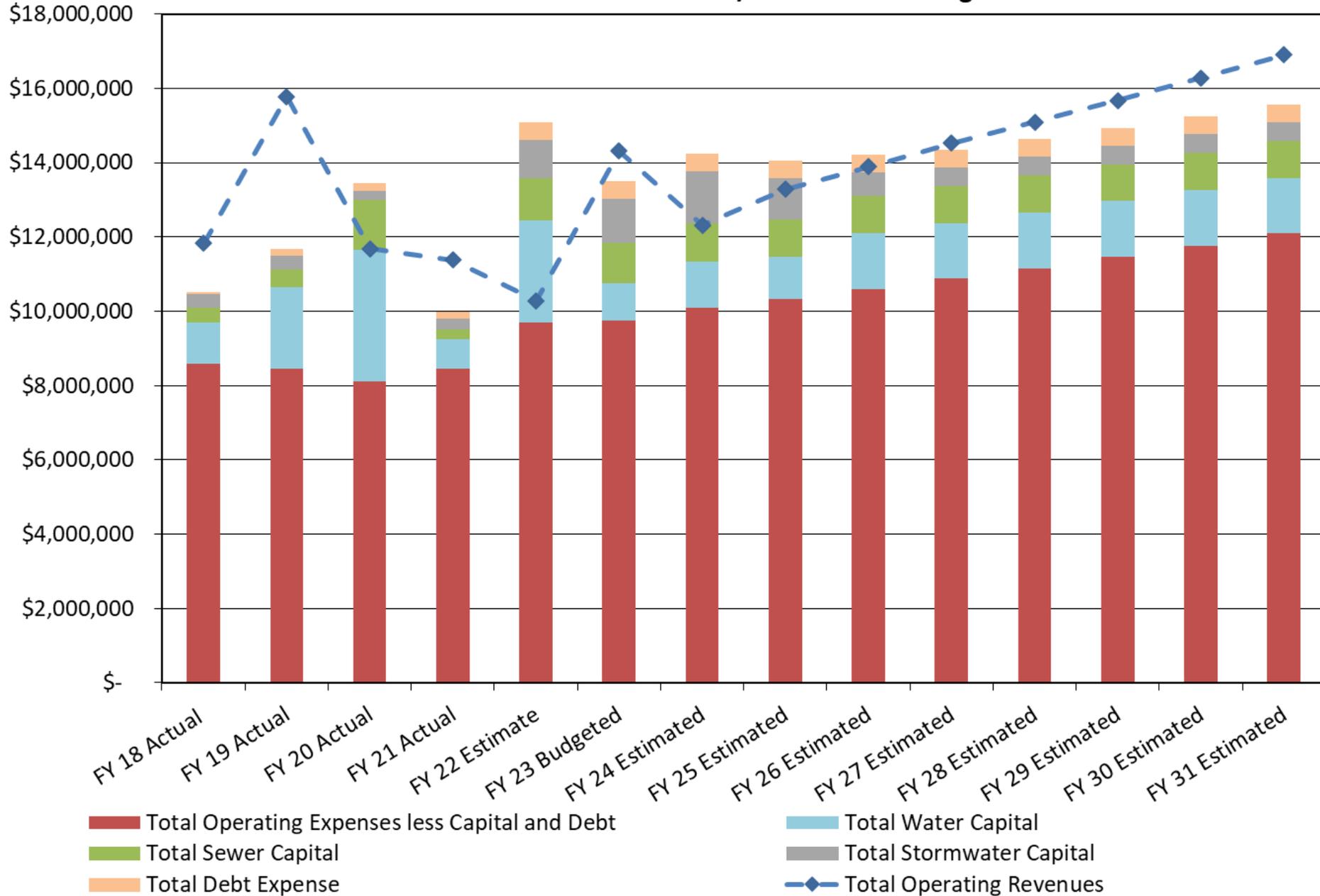
Sewer Volumetric Modified Inclining Block Rate Increases

Inclining Block Tiers		2023	2024	2025	2026	2027	2028	2029	2030	2031
Up to 5 kgal	Rate Increases	0.0%	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
	Volumetric Rate	\$3.62	\$3.62	\$3.73	\$3.84	\$3.96	\$4.07	\$4.20	\$4.32	\$4.45
5 to 15 kgal	Rate Increases	0.0%	0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Volumetric Rate	\$3.62	\$3.62	\$3.76	\$3.92	\$4.07	\$4.23	\$4.40	\$4.58	\$4.76
15 to 100 kgal	Rate Increases	0.0%	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Volumetric Rate	\$4.28	\$4.28	\$4.49	\$4.72	\$4.95	\$5.20	\$5.46	\$5.74	\$6.02
100 to 250 kgal	Rate Increases	0.0%	0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Volumetric Rate	\$4.28	\$5.00	\$5.20	\$5.41	\$5.62	\$5.85	\$6.08	\$6.33	\$6.58
Over 250 kgal	Rate Increases	0.0%	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Volumetric Rate	\$4.28	\$6.00	\$6.30	\$6.62	\$6.95	\$7.29	\$7.66	\$8.04	\$8.44

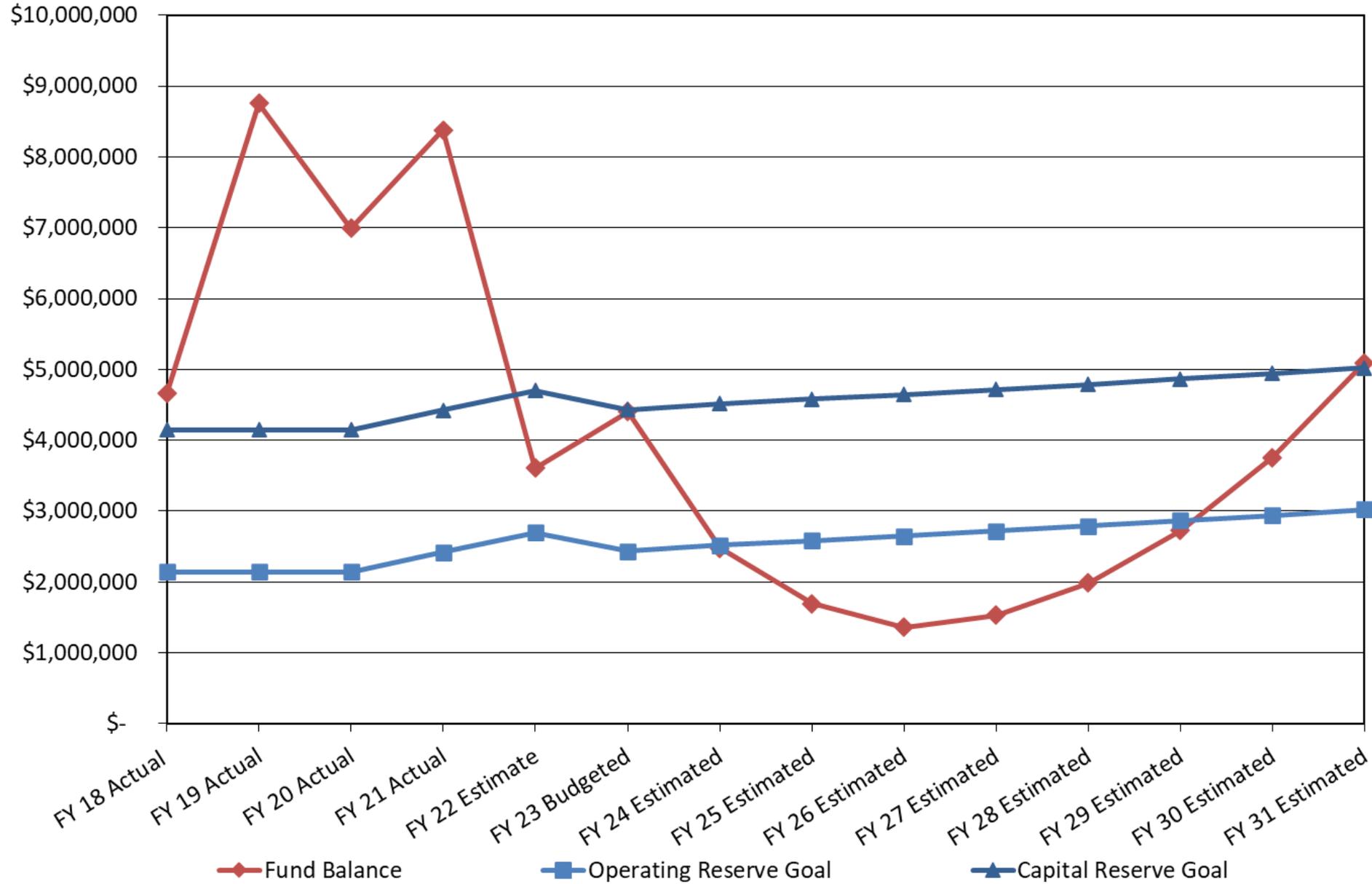
City of Rolling Meadows - Utility Rate Study

Utility Fund Cash Flow Projection

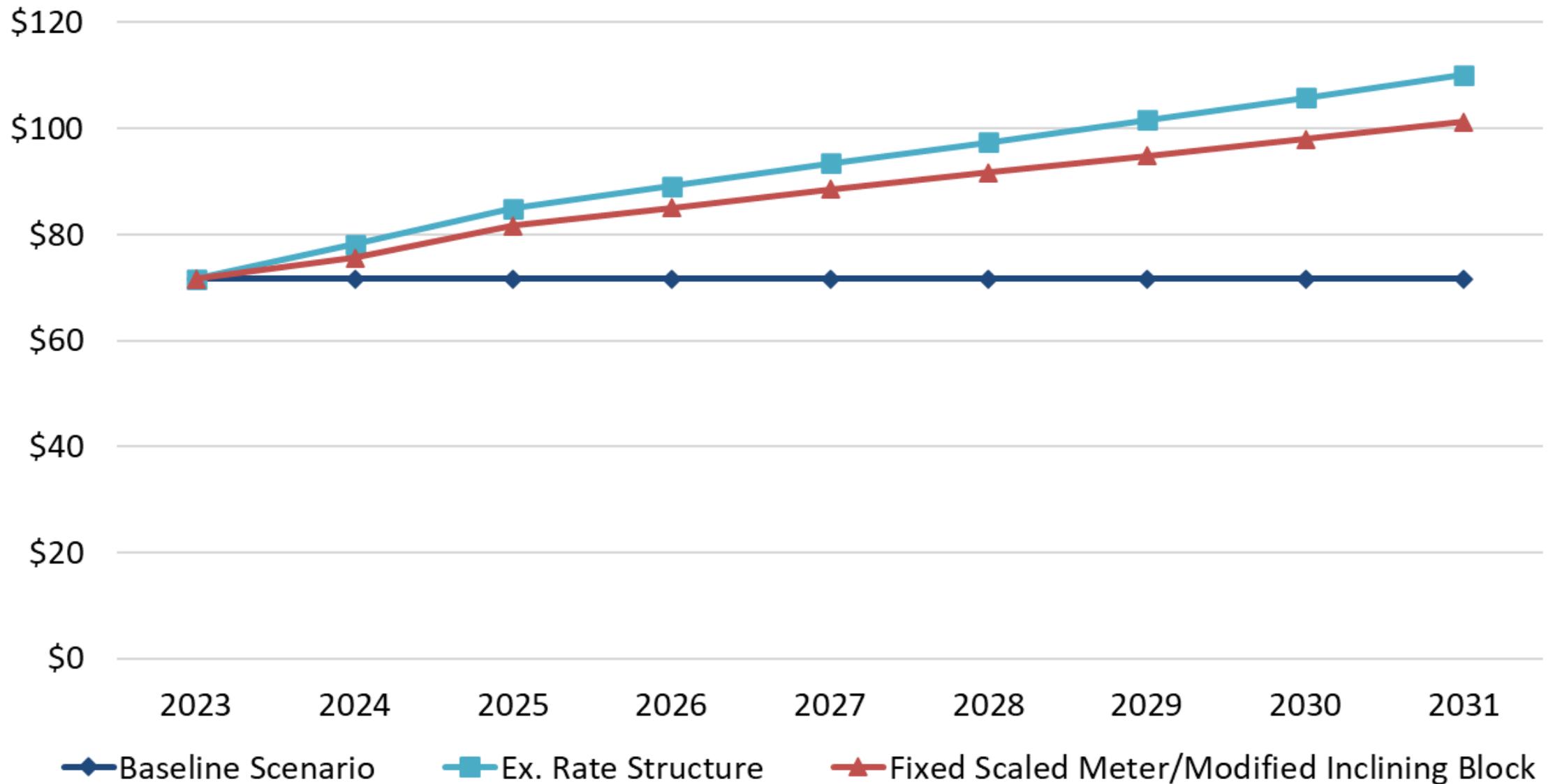
Scenario 3: Fixed Scaled Meter w/ Modified Inclining Block



**City of Rolling Meadows - Utility Rate Study
Utility Fund Balance Projection
Scenario 3: Fixed Scaled Meter w/ Modified Inclining Block**



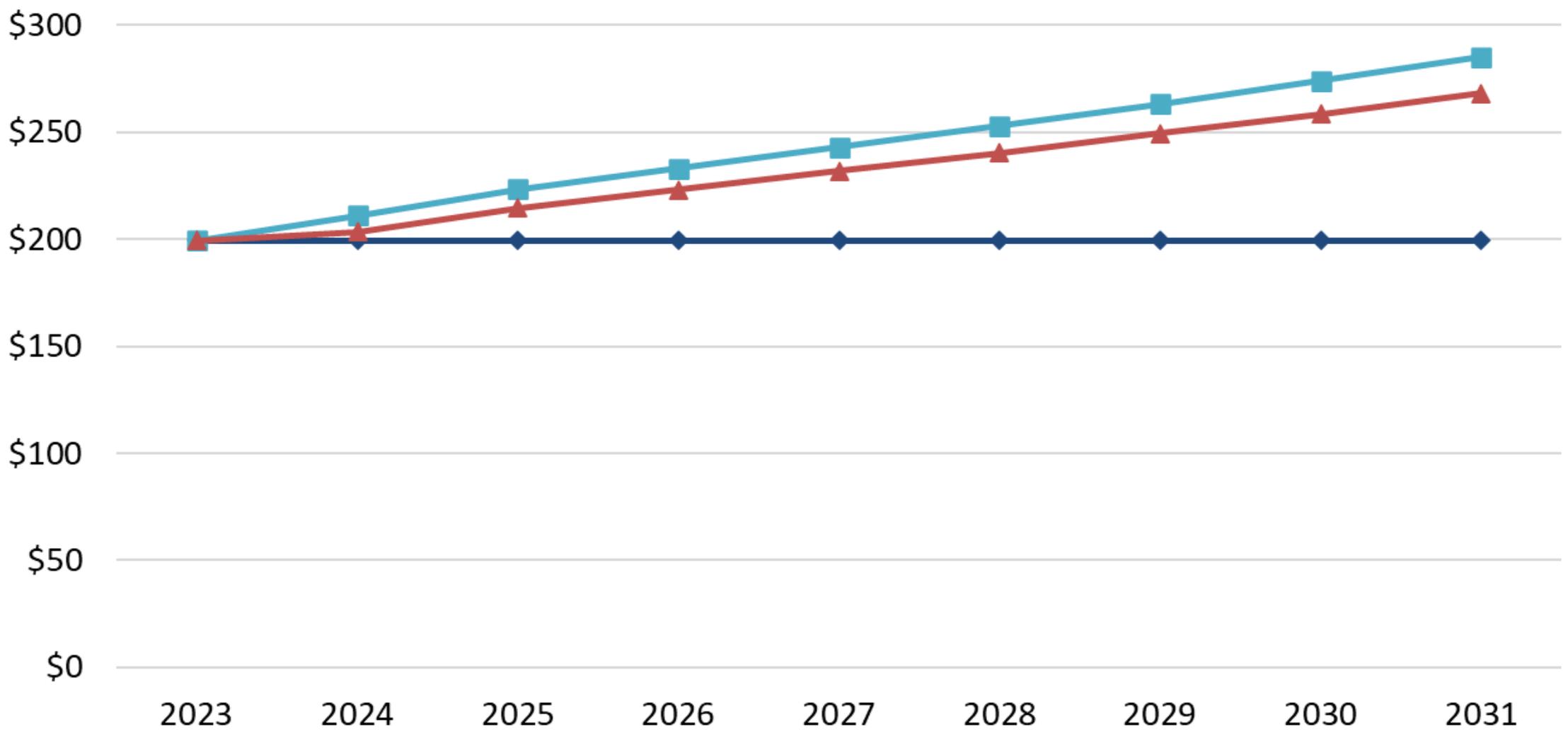
Residential Sample Monthly Bill - 4 kgal, 3/4-inch Meter, 1 ERUs



Scenario 2: Existing Rate Structure							
In City Sample User - 4 kgal Monthly, 3/4-inch meter, 1 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$63.92	\$7.76	\$71.68			\$860.16	
2024	\$66.48	\$11.71	\$78.19	\$6.51	8.3%	\$938.27	\$78.11
2025	\$69.14	\$15.85	\$84.99	\$6.80	8.0%	\$1,019.88	\$81.62
2026	\$71.90	\$17.27	\$89.17	\$4.18	4.7%	\$1,070.00	\$50.12
2027	\$74.78	\$18.70	\$93.48	\$4.31	4.6%	\$1,121.75	\$51.74
2028	\$77.77	\$19.70	\$97.47	\$3.99	4.1%	\$1,169.64	\$47.89
2029	\$80.88	\$20.70	\$101.58	\$4.11	4.0%	\$1,218.97	\$49.33
2030	\$84.11	\$21.70	\$105.82	\$4.24	4.0%	\$1,269.79	\$50.82
2031	\$87.48	\$22.70	\$110.18	\$4.36	4.0%	\$1,322.17	\$52.37

Scenario 3: Fixed Scaled Meter and Modified Inclining Block Rate Structure							
In City Sample User - 4 kgal Monthly, 3/4-inch meter, 1 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$63.92	\$7.76	\$71.68			\$860.16	
2024	\$63.92	\$11.71	\$75.63	\$3.95	5.2%	\$907.58	\$47.42
2025	\$65.84	\$15.85	\$81.69	\$6.06	7.4%	\$980.30	\$72.72
2026	\$67.81	\$17.27	\$85.08	\$3.39	4.0%	\$1,020.94	\$40.64
2027	\$69.85	\$18.70	\$88.55	\$3.47	3.9%	\$1,062.58	\$41.64
2028	\$71.94	\$19.70	\$91.64	\$3.10	3.4%	\$1,099.73	\$37.14
2029	\$74.10	\$20.70	\$94.80	\$3.16	3.3%	\$1,137.63	\$37.90
2030	\$76.32	\$21.70	\$98.03	\$3.22	3.3%	\$1,176.31	\$38.68
2031	\$78.61	\$22.70	\$101.32	\$3.29	3.2%	\$1,215.78	\$39.48

Residential Sample Monthly Bill - 12 kgal, 3/4-inch Meter, 1 ERUs

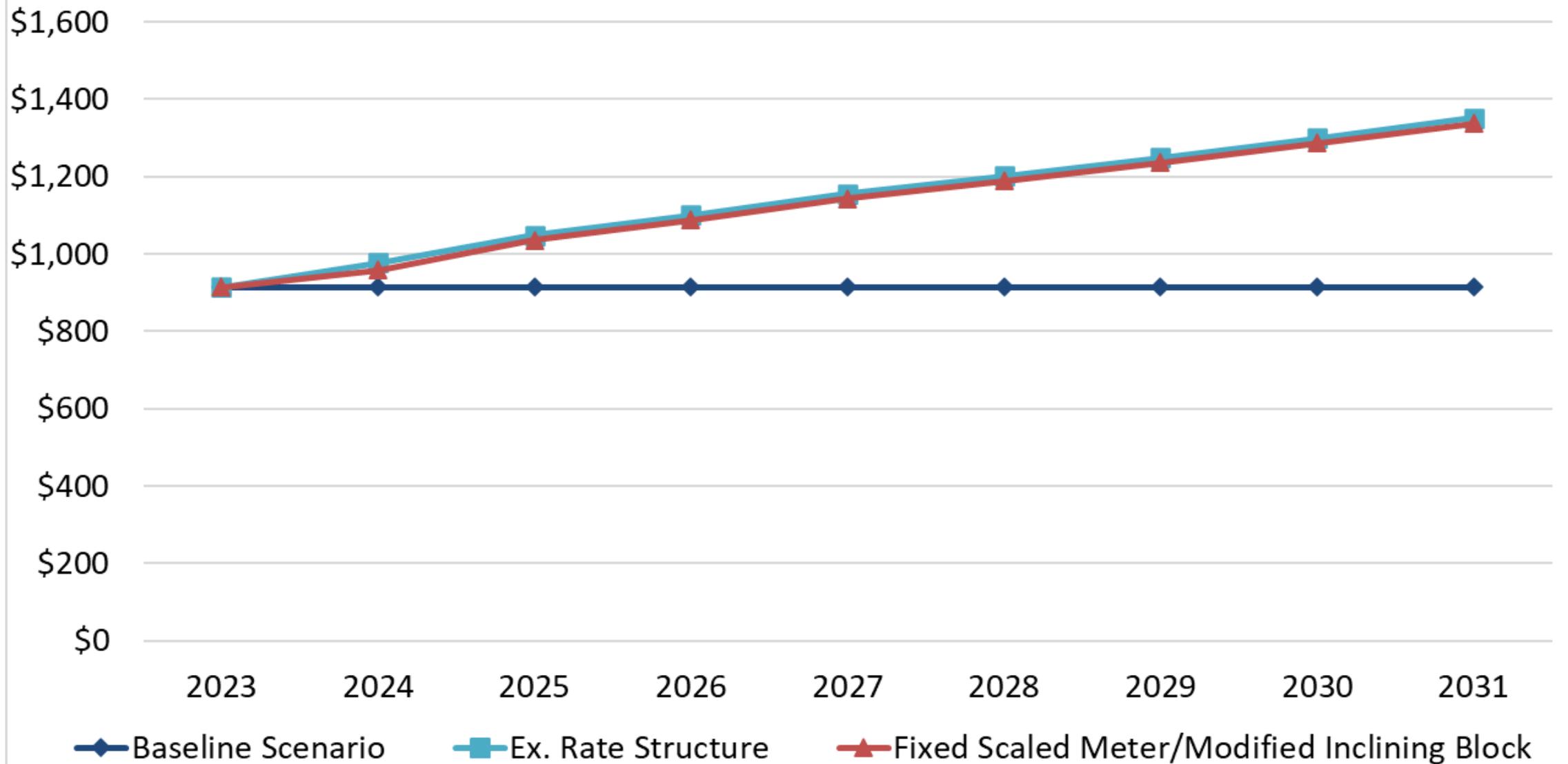


◆ Baseline Scenario ■ Ex. Rate Structure ▲ Fixed Scaled Meter/Modified Inclining Block

Scenario 2: Existing Rate Structure							
In City Sample User - 12 kgal Monthly, 3/4-inch meter, 1 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$191.76	\$7.76	\$199.52			\$2,394.24	
2024	\$199.43	\$11.71	\$211.14	\$11.62	5.5%	\$2,533.71	\$139.47
2025	\$207.41	\$15.85	\$223.26	\$12.12	5.4%	\$2,679.14	\$145.44
2026	\$215.70	\$17.27	\$232.97	\$9.71	4.2%	\$2,795.64	\$116.49
2027	\$224.33	\$18.70	\$243.03	\$10.06	4.1%	\$2,916.40	\$120.77
2028	\$233.31	\$19.70	\$253.01	\$9.97	3.9%	\$3,036.08	\$119.68
2029	\$242.64	\$20.70	\$263.34	\$10.33	3.9%	\$3,160.07	\$123.99
2030	\$252.34	\$21.70	\$274.04	\$10.71	3.9%	\$3,288.54	\$128.47
2031	\$262.44	\$22.70	\$285.14	\$11.09	3.9%	\$3,421.66	\$133.12

Scenario 3: Fixed Scaled Meter and Modified Inclining Block Rate Structure							
In City Sample User - 12 kgal Monthly, 3/4-inch meter, 1 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$191.76	\$7.76	\$199.52			\$2,394.24	
2024	\$191.76	\$11.71	\$203.47	\$3.95	1.9%	\$2,441.66	\$47.42
2025	\$198.63	\$15.85	\$214.49	\$11.01	5.1%	\$2,573.83	\$132.17
2026	\$205.75	\$17.27	\$223.02	\$8.53	3.8%	\$2,676.23	\$102.40
2027	\$213.14	\$18.70	\$231.84	\$8.82	3.8%	\$2,782.05	\$105.82
2028	\$220.79	\$19.70	\$240.49	\$8.65	3.6%	\$2,885.88	\$103.83
2029	\$228.72	\$20.70	\$249.42	\$8.93	3.6%	\$2,993.07	\$107.19
2030	\$236.94	\$21.70	\$258.64	\$9.22	3.6%	\$3,103.74	\$110.67
2031	\$245.47	\$22.70	\$268.17	\$9.52	3.6%	\$3,218.02	\$114.28

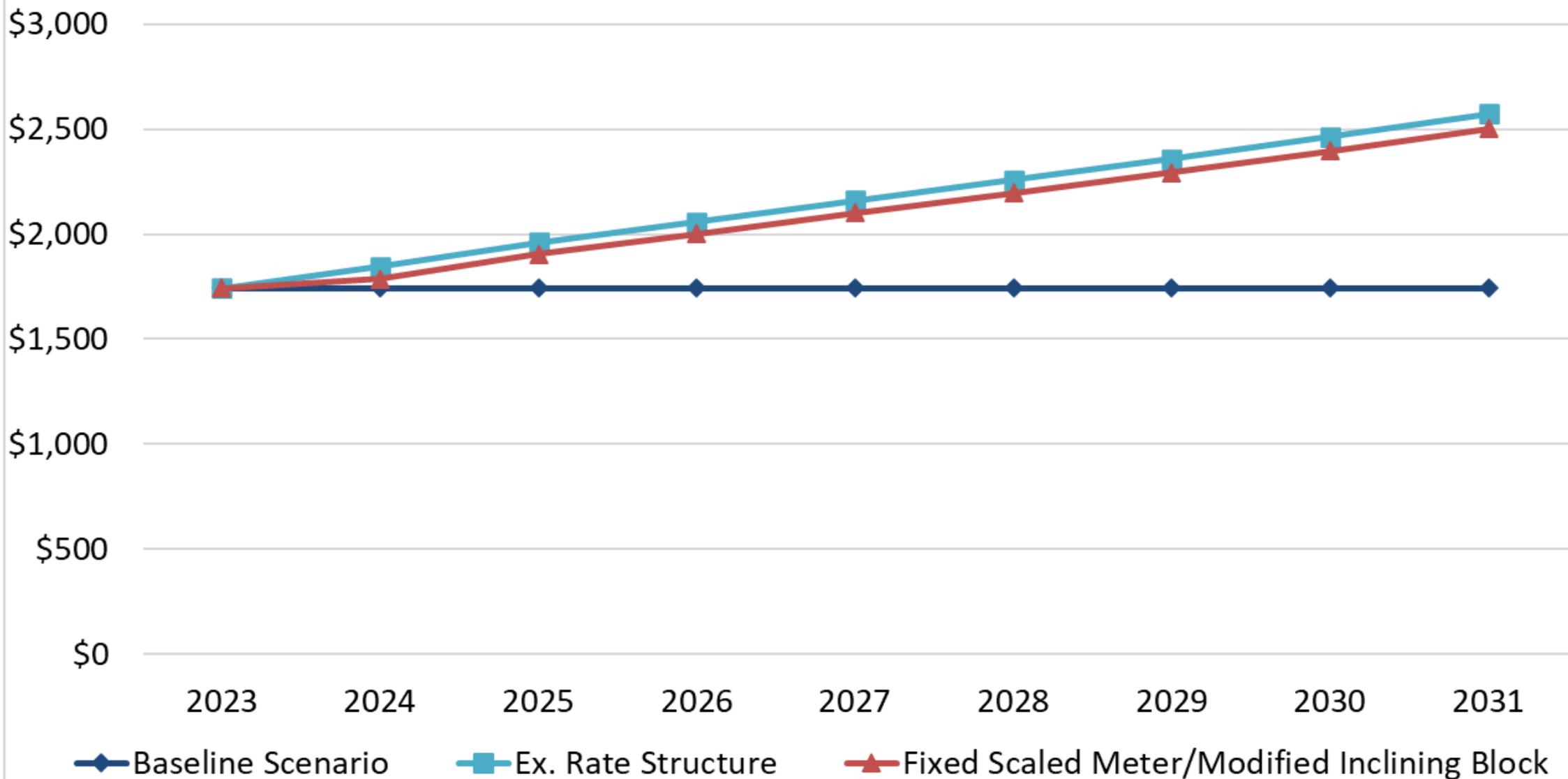
Commercial Sample Monthly Bill - 45 kgal, 1.5-inch Meter, 25 ERUs



Scenario 2: Existing Rate Structure							
In City Sample User - 45 kgal Monthly, 1.5-inch meter, 25 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$791.70	\$122.00	\$913.70			\$10,964.40	
2024	\$828.89	\$148.80	\$977.69	\$63.99	6.5%	\$11,732.26	\$767.86
2025	\$867.84	\$180.36	\$1,048.20	\$70.51	6.7%	\$12,578.39	\$846.14
2026	\$908.64	\$191.64	\$1,100.28	\$52.08	4.7%	\$13,203.37	\$624.97
2027	\$951.37	\$203.54	\$1,154.91	\$54.63	4.7%	\$13,858.98	\$655.61
2028	\$996.14	\$204.54	\$1,200.68	\$45.76	3.8%	\$14,408.15	\$549.17
2029	\$1,043.03	\$205.54	\$1,248.57	\$47.89	3.8%	\$14,982.84	\$574.69
2030	\$1,092.15	\$206.54	\$1,298.69	\$50.12	3.9%	\$15,584.26	\$601.42
2031	\$1,143.60	\$207.54	\$1,351.14	\$52.45	3.9%	\$16,213.70	\$629.44

Scenario 3: Fixed Scaled Meter and Modified Inclining Block Rate Structure							
In City Sample User - 45 kgal Monthly, 1.5-inch meter, 25 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$791.70	\$122.00	\$913.70			\$10,964.40	
2024	\$791.70	\$166.80	\$958.50	\$44.80	4.7%	\$11,502.00	\$537.60
2025	\$828.09	\$207.36	\$1,035.45	\$76.95	7.4%	\$12,425.39	\$923.39
2026	\$866.19	\$221.64	\$1,087.83	\$52.38	4.8%	\$13,053.93	\$628.54
2027	\$906.07	\$236.54	\$1,142.61	\$54.78	4.8%	\$13,711.34	\$657.41
2028	\$947.83	\$240.54	\$1,188.37	\$45.76	3.9%	\$14,260.45	\$549.12
2029	\$991.55	\$244.54	\$1,236.09	\$47.72	3.9%	\$14,833.14	\$572.68
2030	\$1,037.34	\$248.54	\$1,285.88	\$49.78	3.9%	\$15,430.51	\$597.37
2031	\$1,085.27	\$252.54	\$1,337.81	\$51.94	3.9%	\$16,053.75	\$623.24

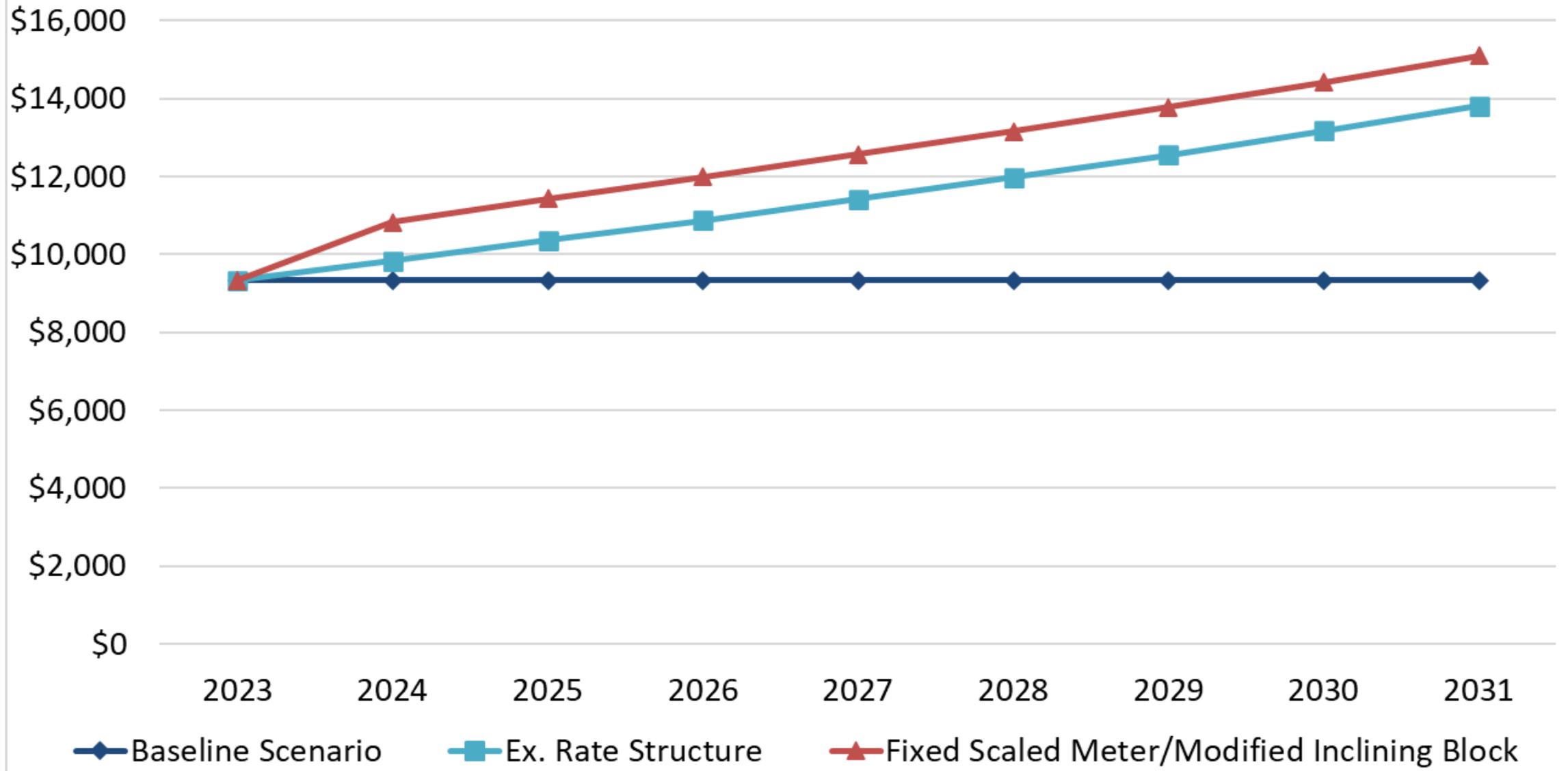
Commercial Sample Monthly Bill - 90 kgal, 1.5-inch Meter, 25 ERUs



Scenario 2: Existing Rate Structure							
In City Sample User - 90 kgal Monthly, 1.5-inch meter, 25 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$1,619.70	\$122.00	\$1,741.70			\$20,900.40	
2024	\$1,698.29	\$148.80	\$1,847.09	\$105.39	5.7%	\$22,165.06	\$1,264.66
2025	\$1,780.71	\$180.36	\$1,961.07	\$113.98	5.8%	\$23,532.83	\$1,367.78
2026	\$1,867.15	\$191.64	\$2,058.79	\$97.72	4.7%	\$24,705.53	\$1,172.69
2027	\$1,957.81	\$203.54	\$2,161.35	\$102.56	4.7%	\$25,936.25	\$1,230.72
2028	\$2,052.90	\$204.54	\$2,257.44	\$96.09	4.3%	\$27,089.28	\$1,153.04
2029	\$2,152.63	\$205.54	\$2,358.17	\$100.73	4.3%	\$28,298.03	\$1,208.74
2030	\$2,257.23	\$206.54	\$2,463.77	\$105.60	4.3%	\$29,565.21	\$1,267.18
2031	\$2,366.93	\$207.54	\$2,574.47	\$110.71	4.3%	\$30,893.70	\$1,328.48

Scenario 3: Fixed Scaled Meter and Modified Inclining Block Rate Structure							
In City Sample User - 90 kgal Monthly, 1.5-inch meter, 25 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$1,619.70	\$122.00	\$1,741.70			\$20,900.40	
2024	\$1,619.70	\$166.80	\$1,786.50	\$44.80	2.5%	\$21,438.00	\$537.60
2025	\$1,697.49	\$207.36	\$1,904.85	\$118.35	6.2%	\$22,858.19	\$1,420.19
2026	\$1,779.06	\$221.64	\$2,000.70	\$95.85	4.8%	\$24,008.37	\$1,150.18
2027	\$1,864.58	\$236.54	\$2,101.12	\$100.43	4.8%	\$25,213.50	\$1,205.13
2028	\$1,954.27	\$240.54	\$2,194.81	\$93.69	4.3%	\$26,337.72	\$1,124.23
2029	\$2,048.32	\$244.54	\$2,292.86	\$98.05	4.3%	\$27,514.27	\$1,176.55
2030	\$2,146.93	\$248.54	\$2,395.47	\$102.62	4.3%	\$28,745.70	\$1,231.43
2031	\$2,250.35	\$252.54	\$2,502.89	\$107.42	4.3%	\$30,034.70	\$1,289.00

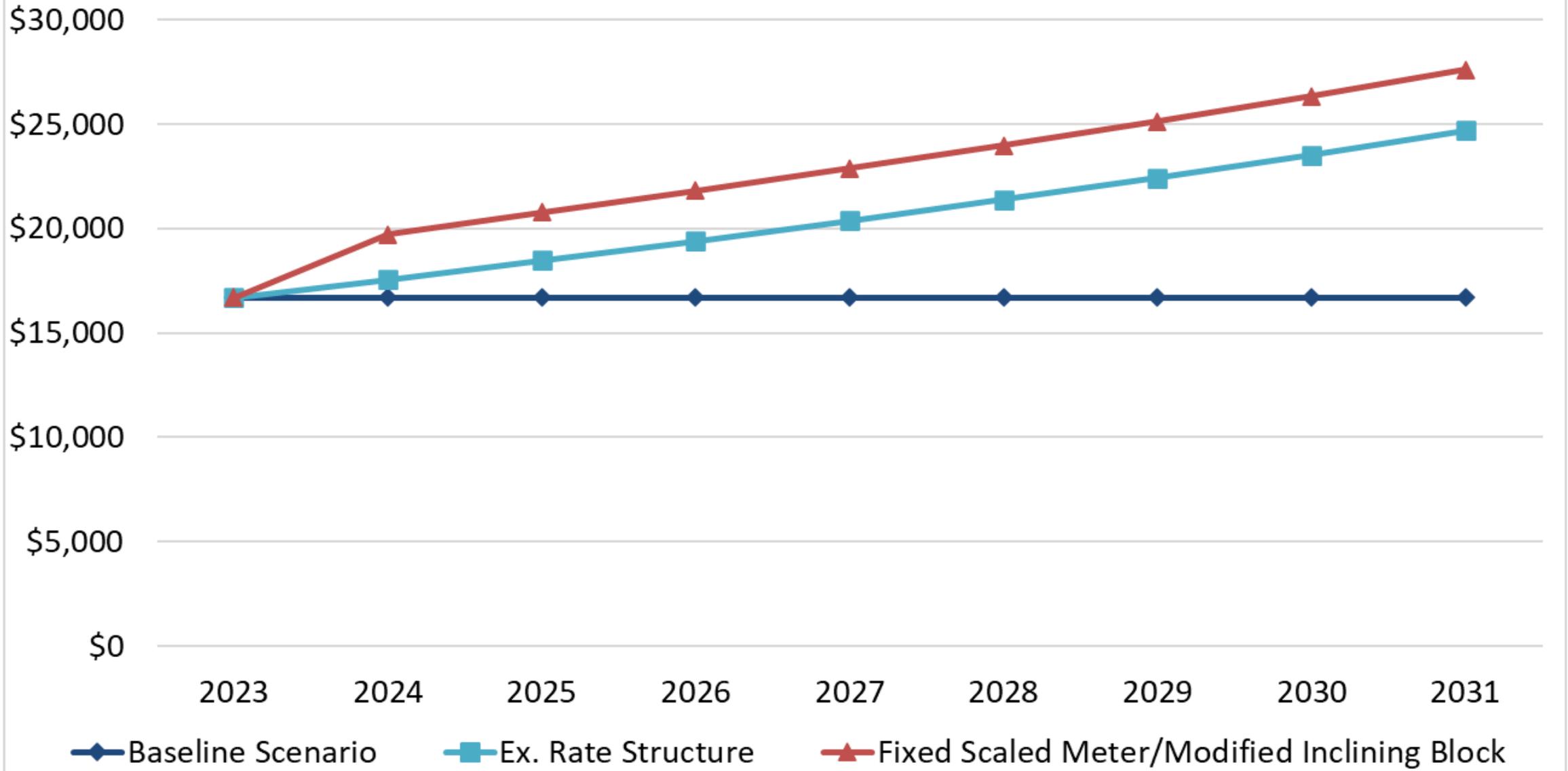
Industrial Sample Monthly Bill - 500 kgal, 4-inch Meter, 37 ERUs



Scenario 2: Existing Rate Structure							
In City Sample User - 500 kgal Monthly, 4-inch meter, 37 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$9,163.70	\$179.12	\$9,342.82			\$112,113.84	
2024	\$9,619.49	\$217.34	\$9,836.83	\$494.01	5.0%	\$118,041.98	\$5,928.14
2025	\$10,097.97	\$262.61	\$10,360.58	\$523.75	5.1%	\$124,326.99	\$6,285.00
2026	\$10,600.28	\$278.83	\$10,879.10	\$518.52	4.8%	\$130,549.26	\$6,222.27
2027	\$11,127.59	\$295.96	\$11,423.55	\$544.45	4.8%	\$137,082.63	\$6,533.37
2028	\$11,681.17	\$296.96	\$11,978.13	\$554.58	4.6%	\$143,737.53	\$6,654.91
2029	\$12,262.31	\$297.96	\$12,560.27	\$582.14	4.6%	\$150,723.24	\$6,985.71
2030	\$12,872.39	\$298.96	\$13,171.35	\$611.08	4.6%	\$158,056.23	\$7,332.99
2031	\$13,512.86	\$299.96	\$13,812.82	\$641.47	4.6%	\$165,753.81	\$7,697.58

Scenario 3: Fixed Scaled Meter and Modified Inclining Block Rate Structure							
In City Sample User - 500 kgal Monthly, 4-inch meter, 37 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$9,163.70	\$179.12	\$9,342.82			\$112,113.84	
2024	\$10,441.20	\$381.98	\$10,823.18	\$1,480.36	13.7%	\$129,878.21	\$17,764.37
2025	\$10,929.31	\$509.57	\$11,438.89	\$615.70	5.4%	\$137,266.64	\$7,388.43
2026	\$11,440.49	\$553.23	\$11,993.72	\$554.83	4.6%	\$143,924.66	\$6,658.02
2027	\$11,975.83	\$597.80	\$12,573.63	\$579.91	4.6%	\$150,883.59	\$6,958.94
2028	\$12,536.49	\$626.24	\$13,162.73	\$589.10	4.5%	\$157,952.78	\$7,069.18
2029	\$13,123.68	\$654.68	\$13,778.35	\$615.62	4.5%	\$165,340.26	\$7,387.48
2030	\$13,738.65	\$683.12	\$14,421.77	\$643.41	4.5%	\$173,061.24	\$7,720.98
2031	\$14,382.74	\$711.56	\$15,094.30	\$672.53	4.5%	\$181,131.64	\$8,070.41

Industrial Sample Monthly Bill - 900 kgal, 4-inch Meter, 37 ERUs



Scenario 2: Existing Rate Structure							
In City Sample User - 900 kgal Monthly, 4-inch meter, 37 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$16,523.70	\$179.12	\$16,702.82			\$200,433.84	
2024	\$17,347.49	\$217.34	\$17,564.83	\$862.01	4.9%	\$210,777.98	\$10,344.14
2025	\$18,212.37	\$262.61	\$18,474.98	\$910.15	4.9%	\$221,699.79	\$10,921.80
2026	\$19,120.40	\$278.83	\$19,399.22	\$924.24	4.8%	\$232,790.70	\$11,090.91
2027	\$20,073.72	\$295.96	\$20,369.68	\$970.45	4.8%	\$244,436.14	\$11,645.44
2028	\$21,074.60	\$296.96	\$21,371.56	\$1,001.88	4.7%	\$256,458.72	\$12,022.58
2029	\$22,125.41	\$297.96	\$22,423.37	\$1,051.81	4.7%	\$269,080.48	\$12,621.76
2030	\$23,228.65	\$298.96	\$23,527.61	\$1,104.24	4.7%	\$282,331.34	\$13,250.85
2031	\$24,386.93	\$299.96	\$24,686.89	\$1,159.28	4.7%	\$296,242.68	\$13,911.34

Scenario 3: Fixed Scaled Meter and Modified Inclining Block Rate Structure							
In City Sample User - 900 kgal Monthly, 4-inch meter, 37 ERUs							
Fiscal Year	Volumetric Charge	Fixed Charge	Monthly Bill	Monthly Increase	Percent Increase	Annual Bill	Annual Increase
2023	\$16,523.70	\$179.12	\$16,702.82			\$200,433.84	
2024	\$19,341.20	\$381.98	\$19,723.18	\$3,020.36	15.3%	\$236,678.21	\$36,244.37
2025	\$20,274.31	\$509.57	\$20,783.89	\$1,060.70	5.1%	\$249,406.64	\$12,728.43
2026	\$21,252.74	\$553.23	\$21,805.97	\$1,022.08	4.7%	\$261,671.66	\$12,265.02
2027	\$22,278.70	\$597.80	\$22,876.50	\$1,070.52	4.7%	\$274,517.94	\$12,846.29
2028	\$23,354.50	\$626.24	\$23,980.74	\$1,104.24	4.6%	\$287,768.84	\$13,250.90
2029	\$24,482.58	\$654.68	\$25,137.26	\$1,156.52	4.6%	\$301,647.13	\$13,878.28
2030	\$25,665.50	\$683.12	\$26,348.62	\$1,211.36	4.6%	\$316,183.45	\$14,536.32
2031	\$26,905.94	\$711.56	\$27,617.50	\$1,268.88	4.6%	\$331,409.97	\$15,226.52

■ Observations on the City's Rates and Charges

- In general, the base cost of water, sewer, and stormwater infrastructure is fairly expensive. Although this cost can be spread across a larger number of customers served, Rolling Meadows is unique in serving a relatively small number of total customers at ~24,000 compared to most utilities in the surrounding area.
- Supporting extremely large individual users can cause significant expenditures in the form of the infrastructure necessary to support them.
- A utility must charge appropriate rates and charges necessary to support its specific needs.

■ Conclusion & Recommendations

- Rate increases will be necessary in order to maintain a more proactive stance in addressing the City's aging infrastructure.
- Implementing both the Fixed Scaled Meter and Modified Inclining Block Rate Structure provides the City with more versatility to prorate its expenses across its unique customer base.
- Annual updates to the financial model is recommended to account for changes in actual expenditures and planned capital.

