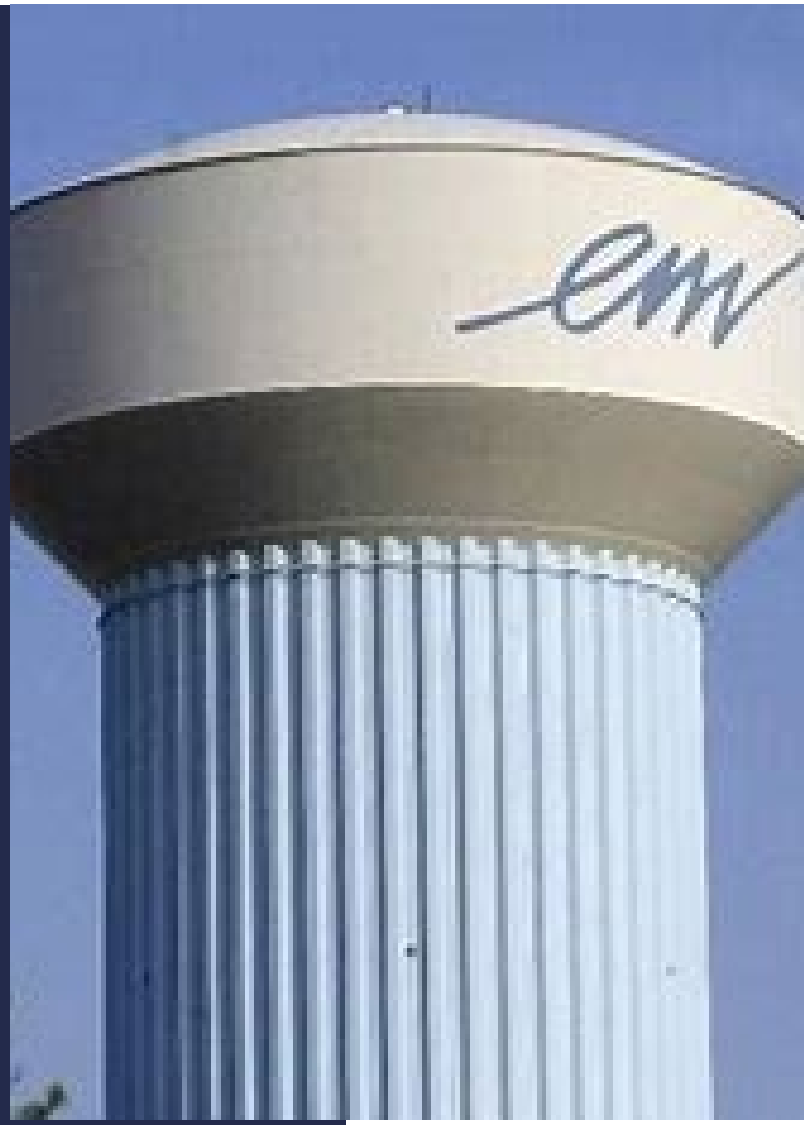
CITY OF EAST MOLINE

Water, Sewer, and Storm Rate Study

November 18, 2024

Purpose of the Presentation

- Receive Council feedback and input:
  - Preliminary rate transition plans
  - Level of annual capital projects
  - Capital funding approach
- Next Steps
  - Incorporate Council feedback and input
  - Present rate study results and proposed rates



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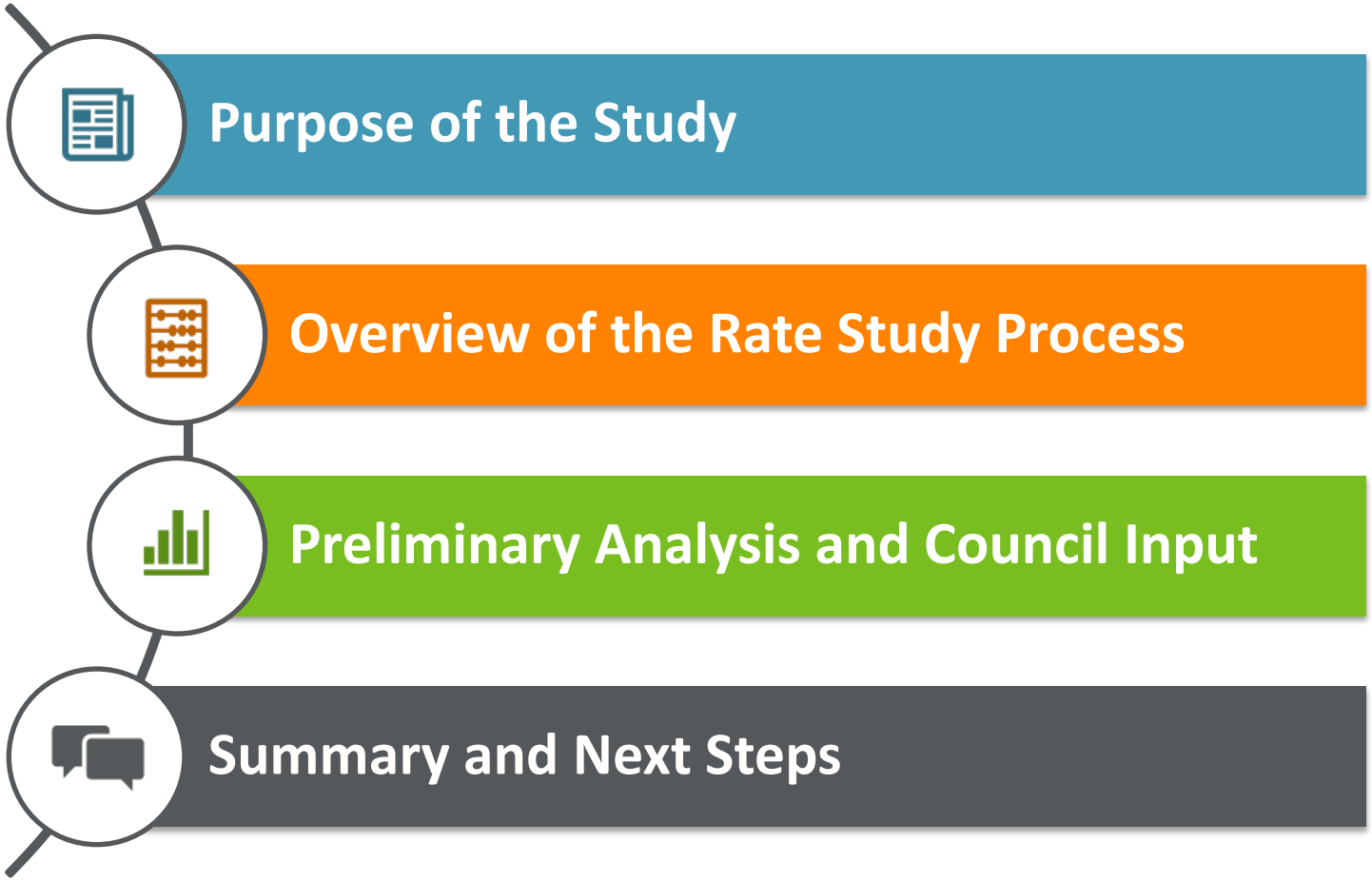
Overview of the Presentation



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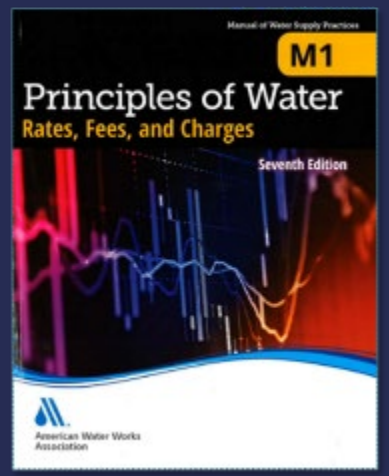

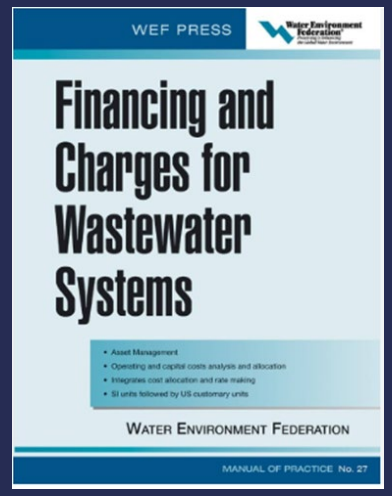

Purpose of the Rate Study

- Provide sufficient revenue to operate and maintain the City's water, sewer, and storm infrastructure
- Develop proportional and cost-based rates to reflect the City's customer and system characteristics
- Reflect prudent financial planning criteria
  - Funding capital improvement needs
  - Maintain target minimum reserve levels
  - Meet debt coverage requirements
- Develop the study using generally accepted methodologies tailored to the City's system and customer characteristics

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Developing Cost-Based Rates

Revenue Requirement

Compares the revenue of each utility to the expenses of each utility to evaluate the level of overall rates

Cost of Service

Proportionally distributes the revenue requirement between the customer classes of service of each utility

Rate Design

Design rates for each class of service to meet the revenue needs of each utility, along with identified rate design goals and objectives

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Key Rate Drivers

- Adequately fund the annual operating expenses for each utility
  - Maintain prudent reserve levels (e.g., emergency needs, cash flow requirements, capital improvements)
- Providing sufficient annual renewal and replacement funding
  - Water and wastewater pipeline replacement
  - Stormwater drainage and dredging
- System betterments and improvements
  - Regulatory projects (LSLR and WW Treatment)
  - System improvements (Clearwell, dredging)
- Cost-based and proportional rates
  - Reflect costs of operating and maintaining each utility system and infrastructure
  - Based on each customers' demands on the system
    - Avoid one class subsidizing another i.e., need to pay "fair share"
  - Costs driven by sizing of utility systems to serve customer demands

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Revenue Requirements

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Revenue Requirements Overview

Compares utility revenues to expenses	• Determines the level of rate revenue adjustment necessary
Uses prudent financial planning criteria	• Adequate funding of renewal and replacements • Maintaining sufficient ending reserve balances
Reviews a specific time period	• Typically five-to-ten-year period • Rate Setting is often 2 – 5 years
Each utility analyzed on a “stand-alone basis”	• No transfer of funds from other City funds • Rates need to support operations and capital
Utilizes the “cash basis” methodology	• Generally accepted method for municipal utilities

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Revenue Requirement Key Assumptions

- Revenues independently calculated based on customer characteristics for each utility
- Expenses based on 2024 budgets for each utility
  - Projected through 2034 based on annual inflationary factors
  - Includes additional O&M for new staffing and expenses starting in 2025
- Capital funding plan as outlined in master planning process has identified projects over the 10-year study period
- Target annual rate funding of capital at minimum of 1.5 times annual depreciation expense
  - Water 2022 Depreciation = $1,010,000
  - Sewer 2022 Depreciation = $982,000
  - Storm 2022 Depreciation = $297,000
- Assumes long-term borrowing to fund capital improvements
  - Water = $41.6M over 5-year rate period; $59.5M over 10-year rate period
  - Sewer = $62.1M over 5-year rate period; $91.7M over 10-year rate period
  - Storm = $3.1M over 5-year rate period

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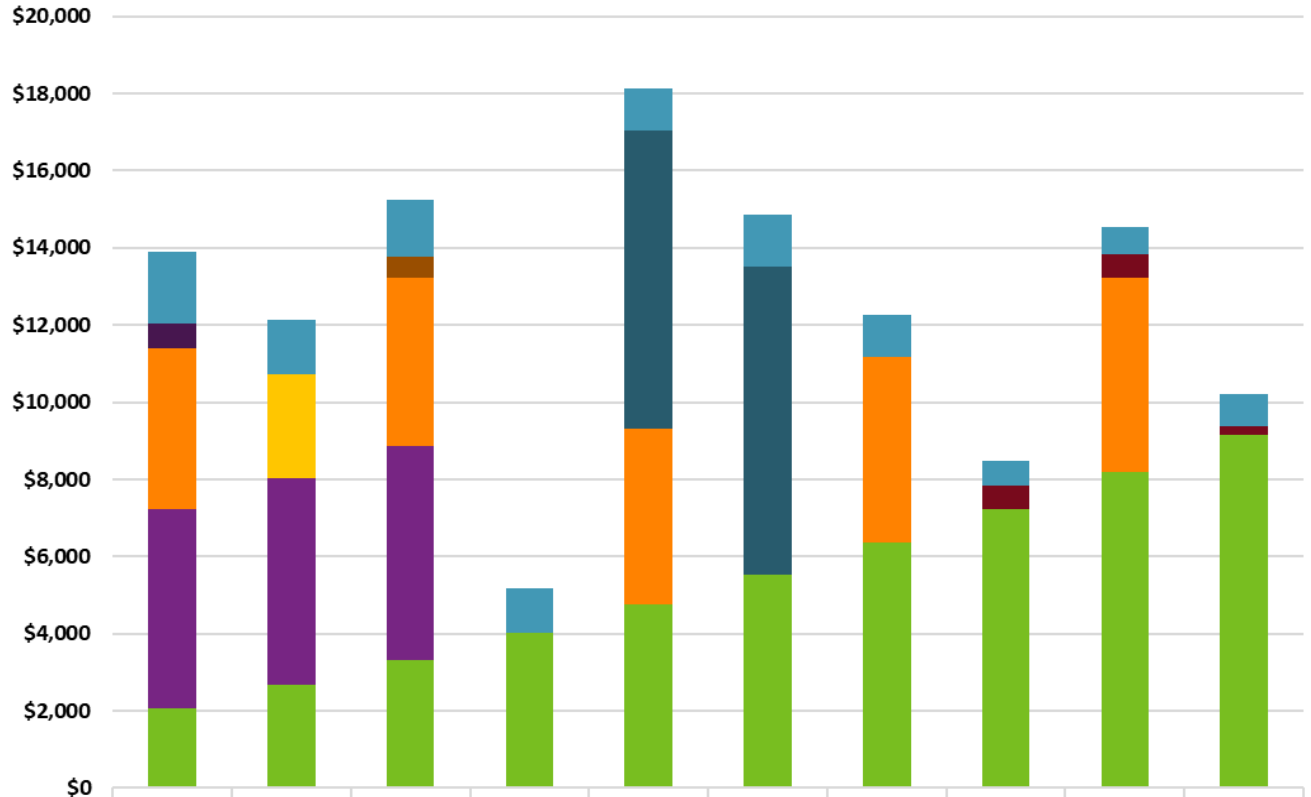
Water Capital Improvements ($000's)



	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Smaller CIP Projects	$1,857	$1,423	$1,481	$1,150	$1,098	$1,343	$1,097	$639	$694	$831
Electrical Room Addition	0	0	554	0	0	0	0	0	0	0
Replace Roof Over Main Plant	642	0	0	0	0	0	0	0	0	0
Replace Filter Media, Repair/Recoat Concrete	0	0	0	0	0	0	0	593	613	212
New Office and Maintence Building	0	0	0	0	7,720	7,990	0	0	0	0
Lead Service Line Replacements (LSLR) ~$19.2M	4,145	0	4,355	0	4,575	0	4,807	0	5,050	0
SCADA Upgrades (Based on Study)	0	2,678	0	0	0	0	0	0	0	0
Clearwell Replacement	5,175	5,356	5,544	0	0	0	0	0	0	0
Annual Water Main Replacement	$2,070	$2,678	$3,326	$4,016	$4,751	$5,532	$6,361	$7,242	$8,177	$9,169

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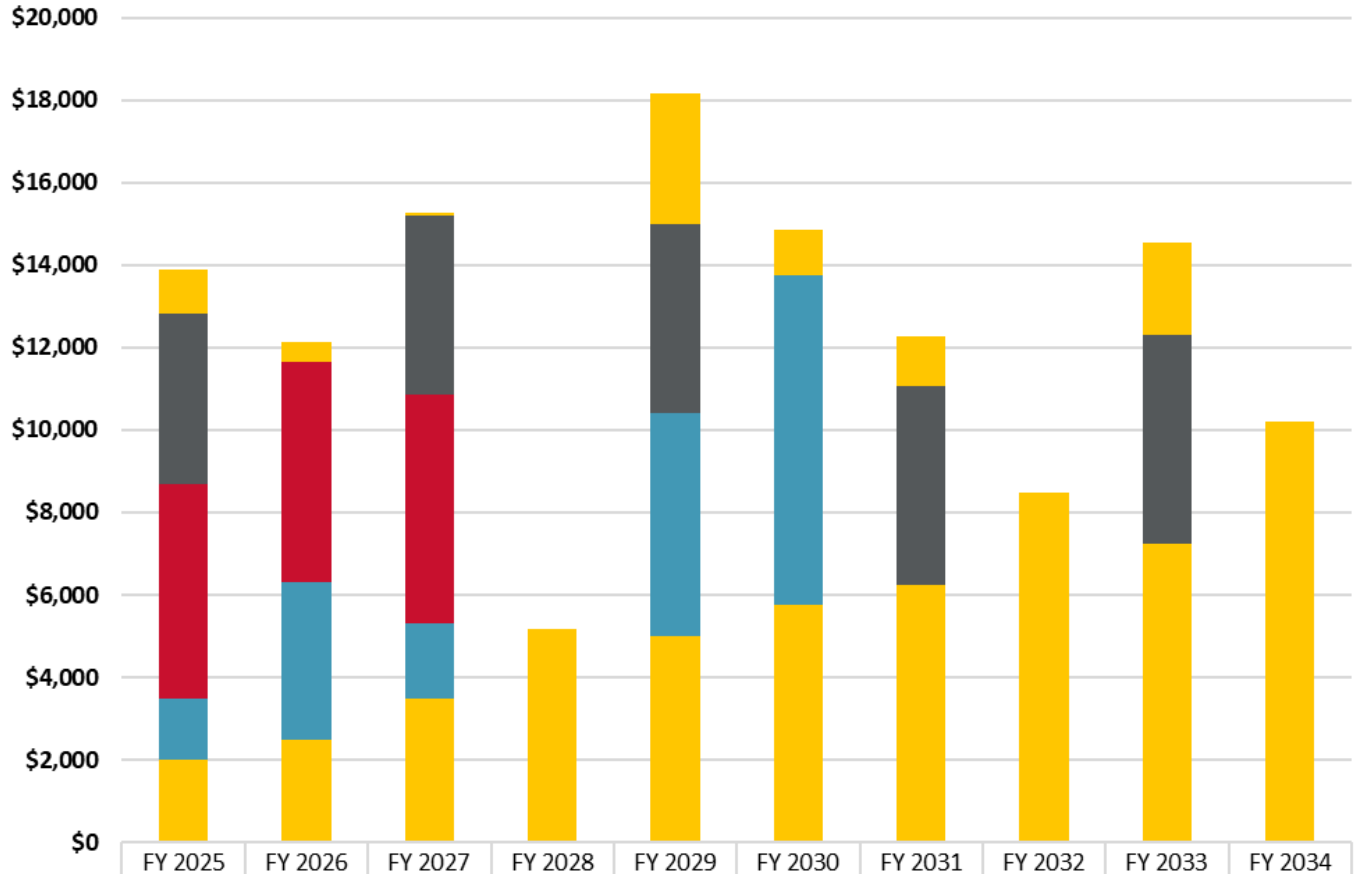
Water Capital Funding Approach ($000's)



	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Reserves	$1,074	$479	$61	$916	$3,168	$1,115	$1,208	$1,724	$2,234	$2,462
LSLR Low Interest Loan	4,145	0	4,355	0	4,575	0	4,807	0	5,050	0
SRF Low Interest Loan - Clearwell	5,175	5,356	5,544	0	0	0	0	0	0	0
Revenue Bonds	1,495	3,800	1,800	0	5,400	8,000	0	0	0	0
Rate Funded Capital	$2,000	$2,500	$3,500	$4,250	$5,000	$5,750	$6,250	$6,750	$7,250	$7,750

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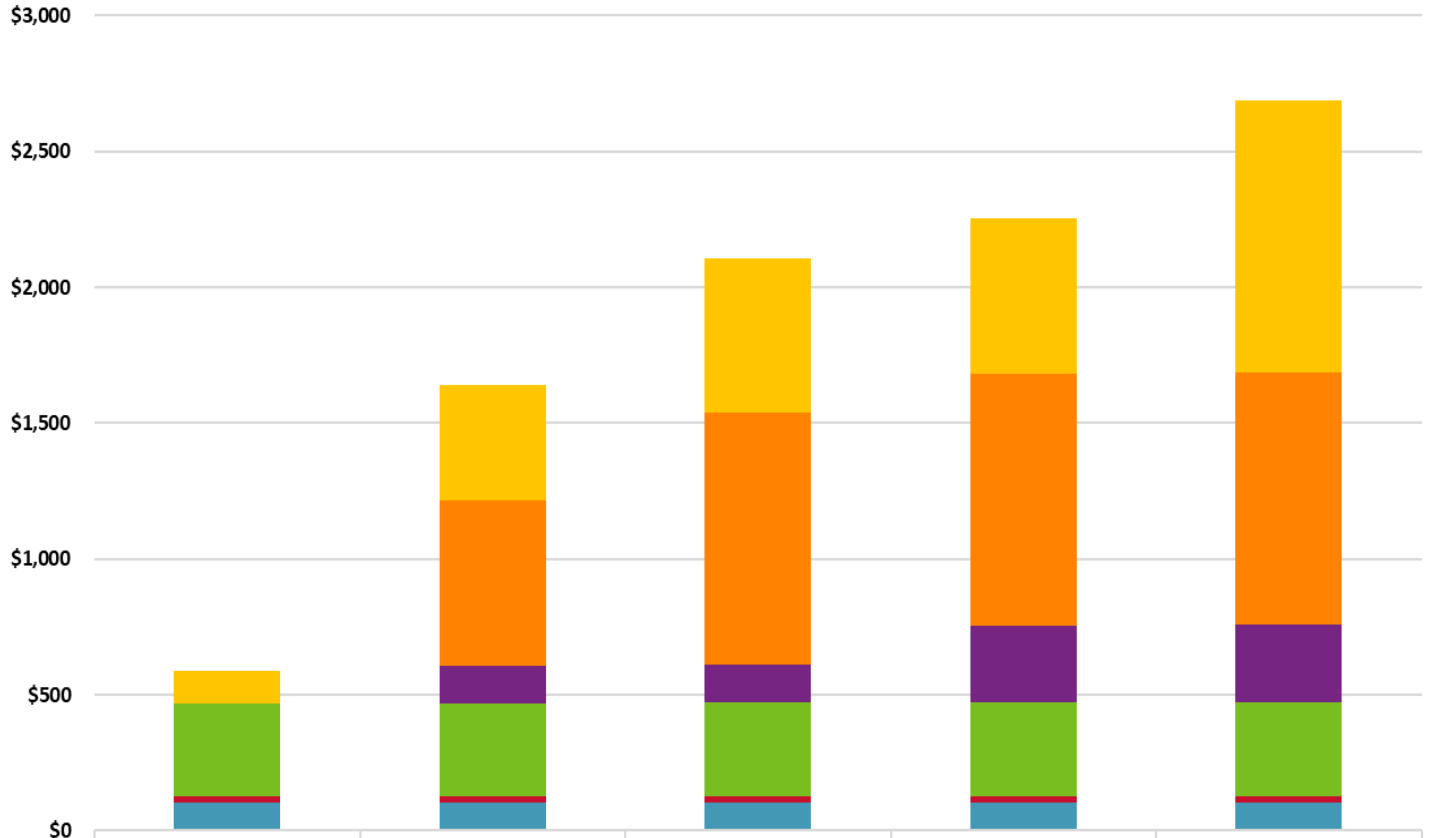
Water Projected Annual Debt Service ($000's)



	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Additional Revenue Bonds	$120	$425	$569	$569	$1,003
SRF Low Interest Loan - Clearwell	0	607	927	927	927
LSR Low Interest Loan	0	138	138	283	283
2014 GO ARS Refunding	344	345	347	347	350
2010E GO ARS Bond 3065	20	20	20	20	20
2010 EGO ARS 2830	$105	$105	$105	$105	$105

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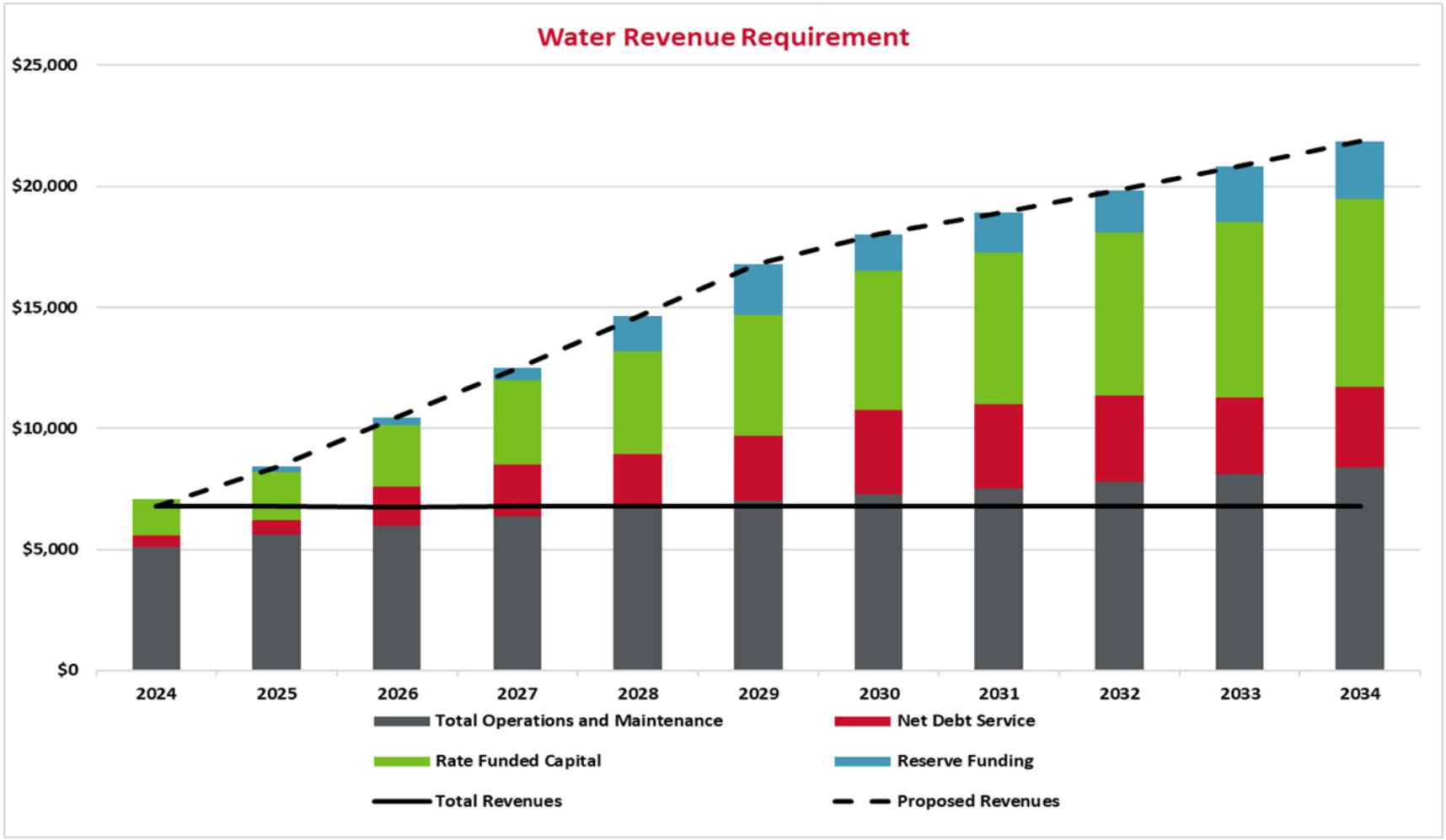
Revenue Requirement
Water Summary



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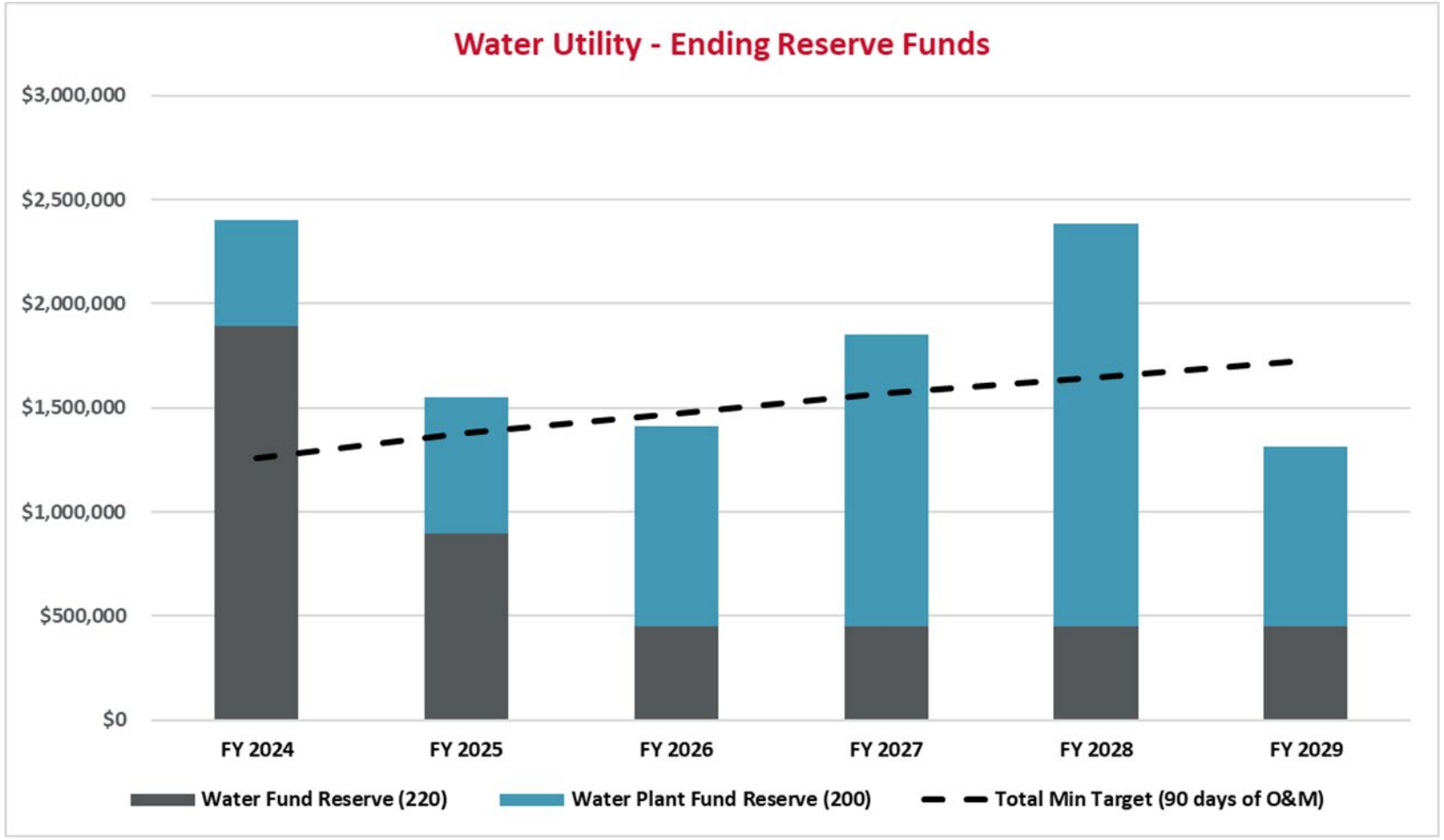
Water Reserves

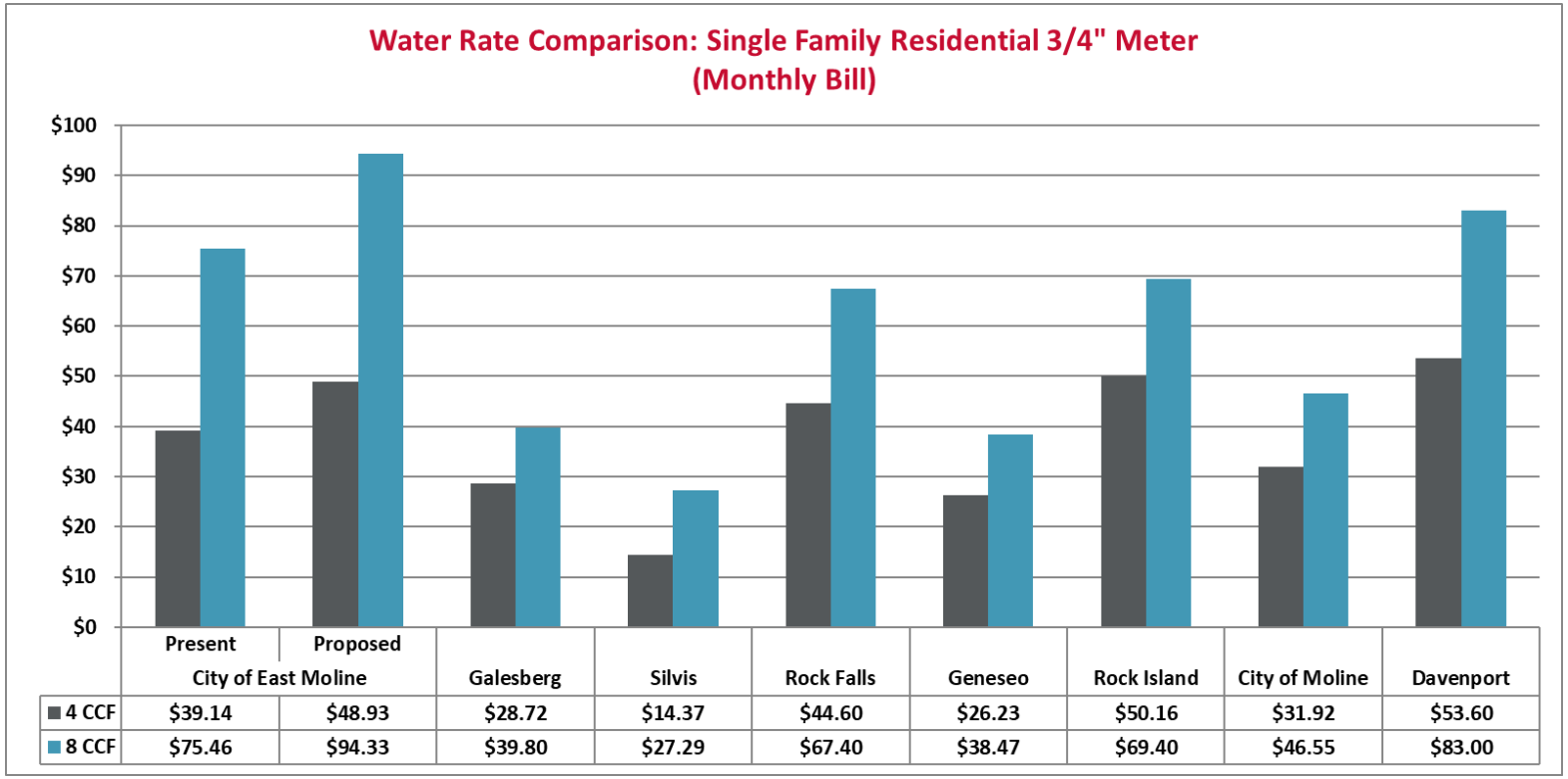


Minimum Target of 90 days of O&M

CITY OF EAST MOLINE

Revenue Requirement Water

	2024	2025	2026	2027	2028	2029
Water						
Avg Customer Bill [1]	$39.14	$48.93	$61.16	$73.39	$86.23	$99.16
Annual Monthly Change	--	$9.79	$12.23	$12.23	$12.84	$12.93



- Reflects 4 CCF per month
- Prior to cost of service and rate design
- Many Agency's have not incorporated lead service line replacements in their current rates

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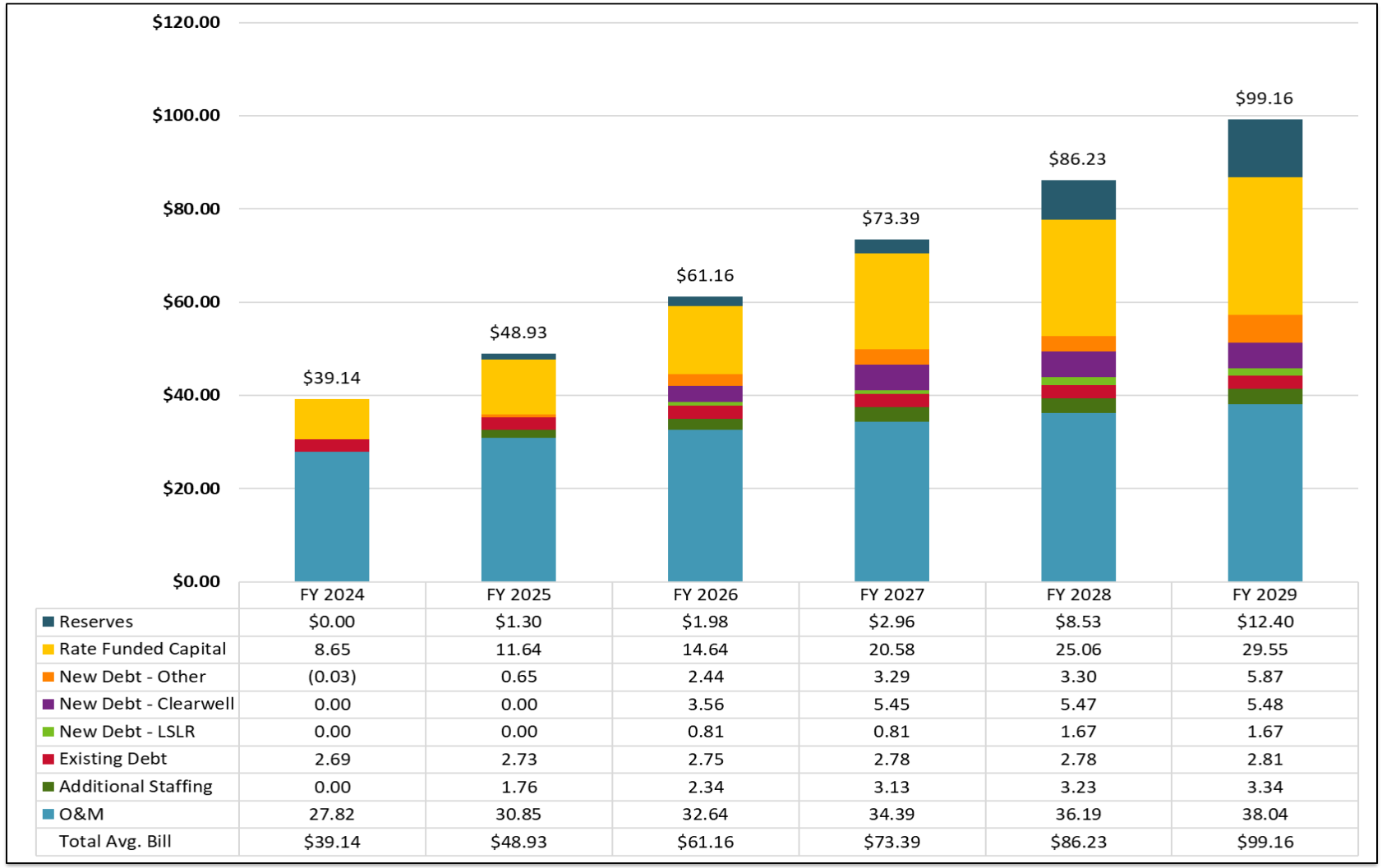
Water Rate Increase Drivers



	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Reserves	$0.00	$1.30	$1.98	$2.96	$8.53	$12.40
Rate Funded Capital	8.65	11.64	14.64	20.58	25.06	29.55
New Debt - Other	(0.03)	0.65	2.44	3.29	3.30	5.87
New Debt - Clearwell	0.00	0.00	3.56	5.45	5.47	5.48
New Debt - LSLR	0.00	0.00	0.81	0.81	1.67	1.67
Existing Debt	2.69	2.73	2.75	2.78	2.78	2.81
Additional Staffing	0.00	1.76	2.34	3.13	3.23	3.34
O&M	27.82	30.85	32.64	34.39	36.19	38.04
Total Avg. Bill	$39.14	$48.93	$61.16	$73.39	$86.23	$99.16

- Water Bill Calculation based on 4 CCF.

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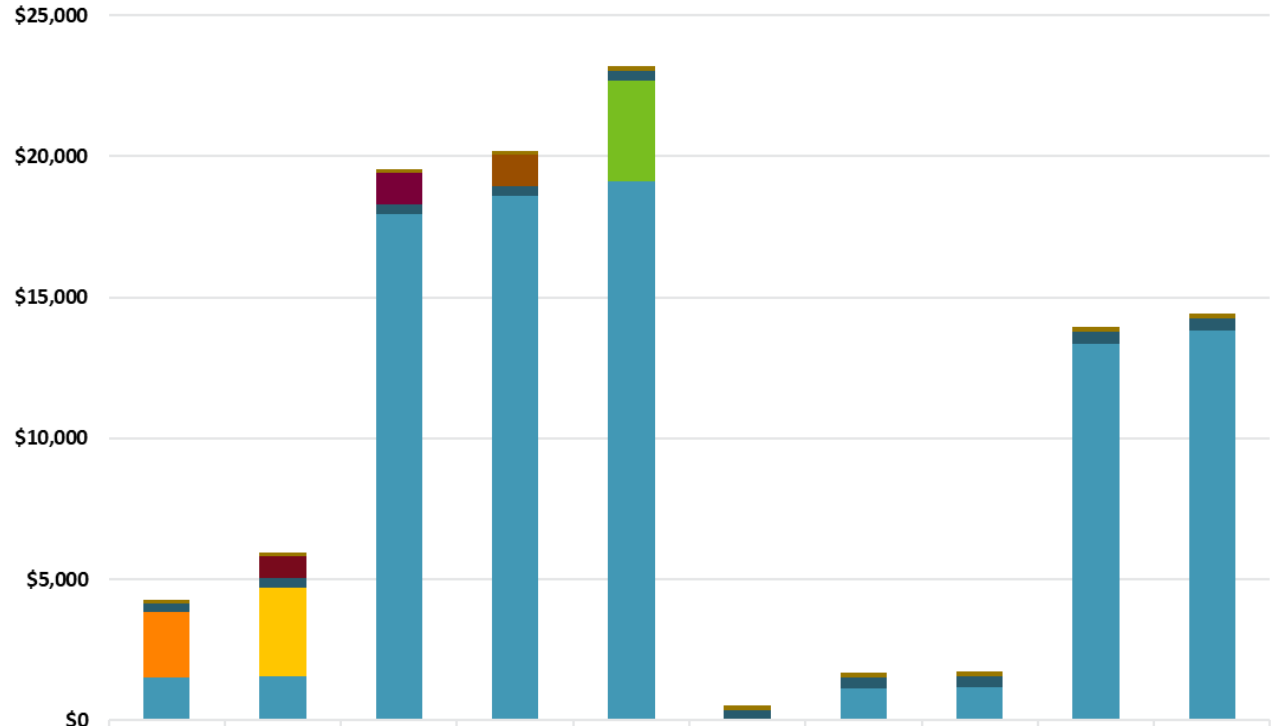
Sewer Capital Improvements ($000's)



	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Smaller CIP Projects	$129	$134	$139	$143	$148	$154	$159	$165	$170	$176
20th Avenue Repairs (50% Water/50% Sewer)	0	0	0	1,116	0	0	0	0	0	0
16th-17th Ave Sewer Repairs	0	0	1,109	0	0	0	0	0	0	0
Bend Boulevard Expansion	0	777	0	0	0	0	0	0	0	0
Sanitary Sewer Slip Lining	311	321	333	344	356	369	382	395	409	423
Collector Sewer Lining, Repairs, Replacement	0	0	0	0	3,563	0	0	0	0	0
Ravine E Access	0	3,162	0	0	0	0	0	0	0	0
Ravine B Access	2,339	0	0	0	0	0	0	0	0	0
Sewer Plant Improvements	$1,501	$1,553	$17,961	$18,590	$19,122	$0	$1,145	$1,185	$13,356	$13,824

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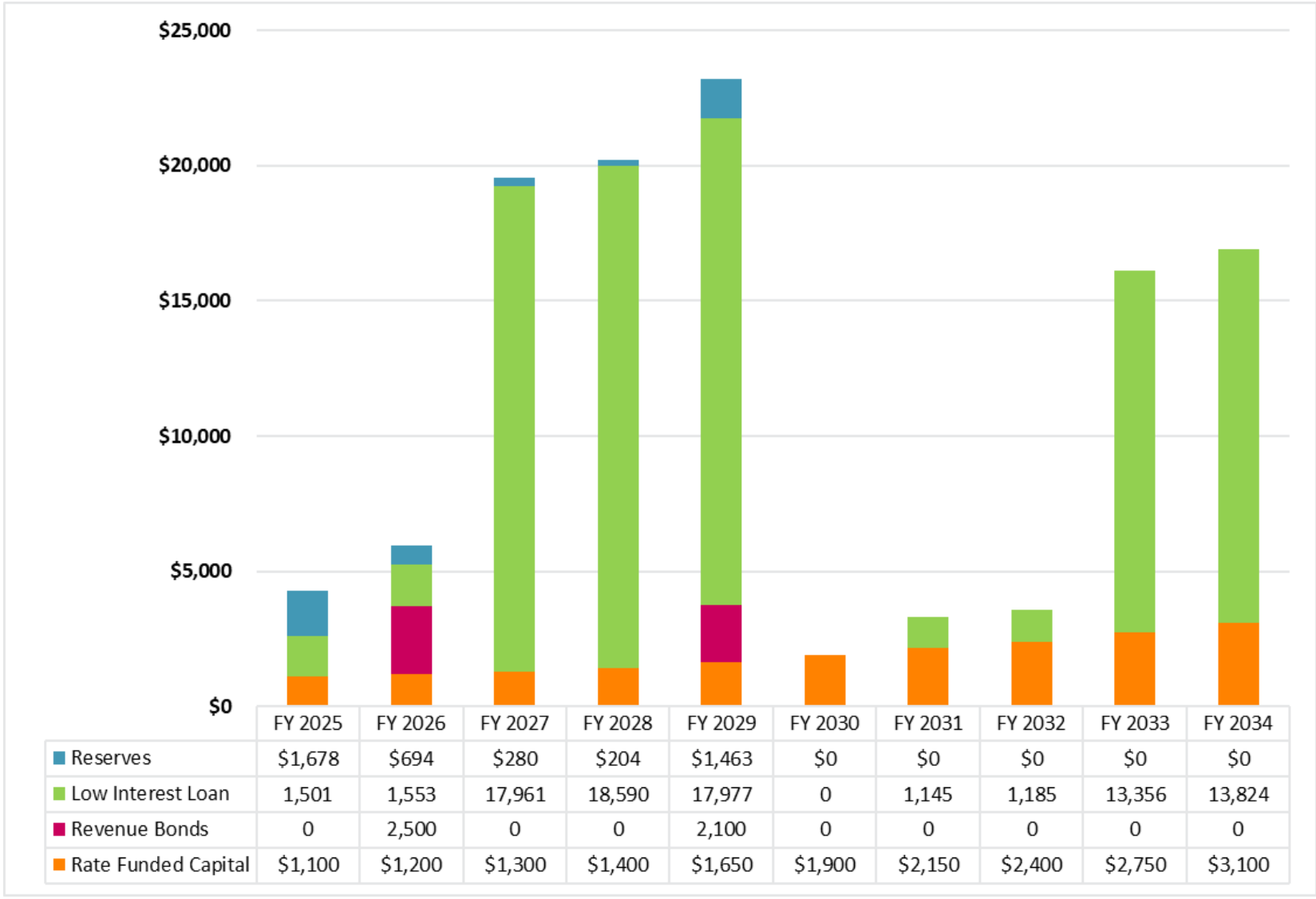
Sewer Capital Funding Approach ($000's)



	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Reserves	$1,678	$694	$280	$204	$1,463	$0	$0	$0	$0	$0
Low Interest Loan	1,501	1,553	17,961	18,590	17,977	0	1,145	1,185	13,356	13,824
Revenue Bonds	0	2,500	0	0	2,100	0	0	0	0	0
Rate Funded Capital	$1,100	$1,200	$1,300	$1,400	$1,650	$1,900	$2,150	$2,400	$2,750	$3,100

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Sewer Projected Annual Debt Service

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Additional Long-Term Debt	$0	$201	$201	$201	$369
Assumed Low Interest Loan	0	0	0	0	3,125
2011 GO ARS Bond 0329	369	369	369	369	369
2014 GO ARS Refunding	$476	$477	$480	$479	$483

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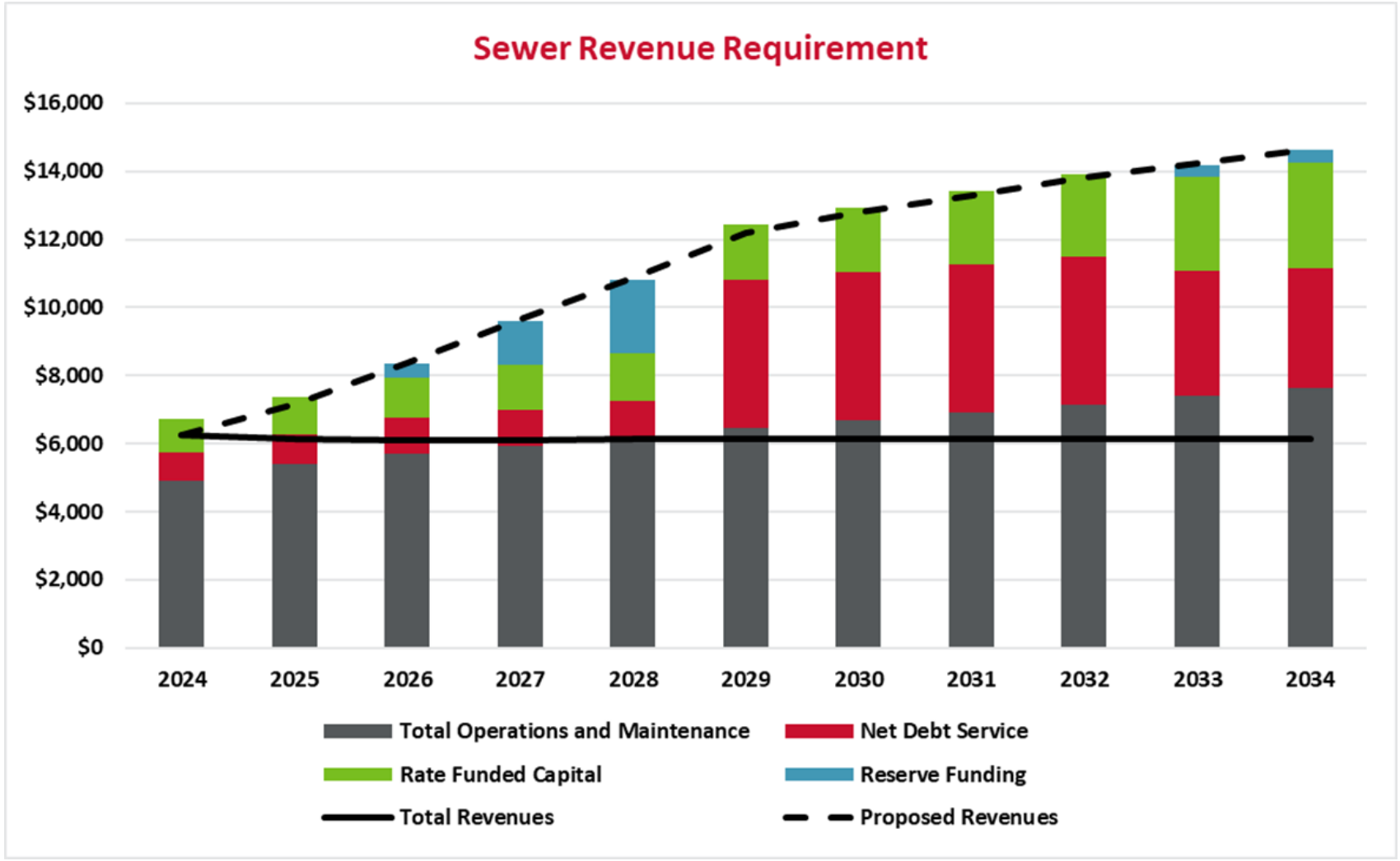
Revenue Requirement Sewer Summary



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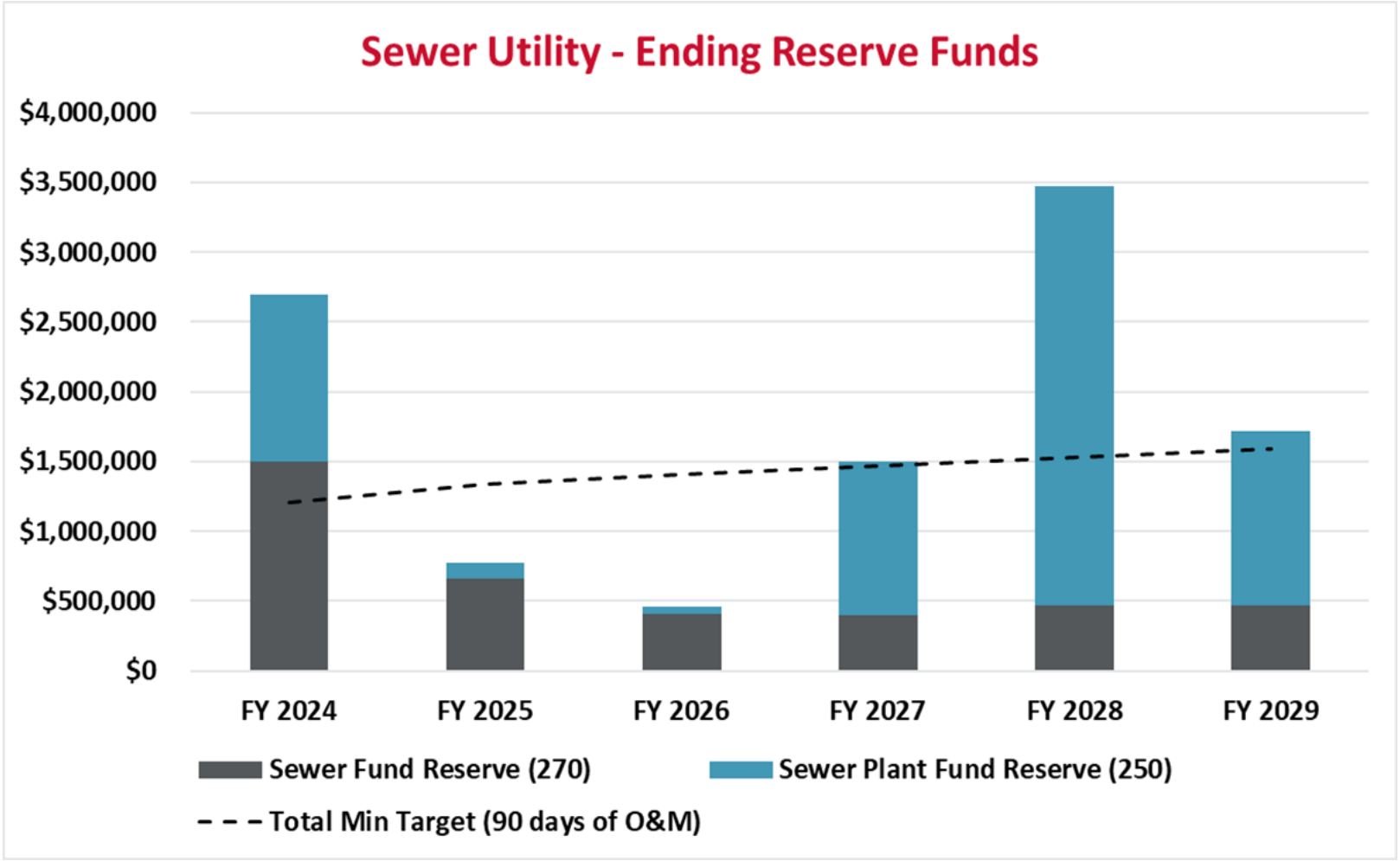
Sewer Reserves

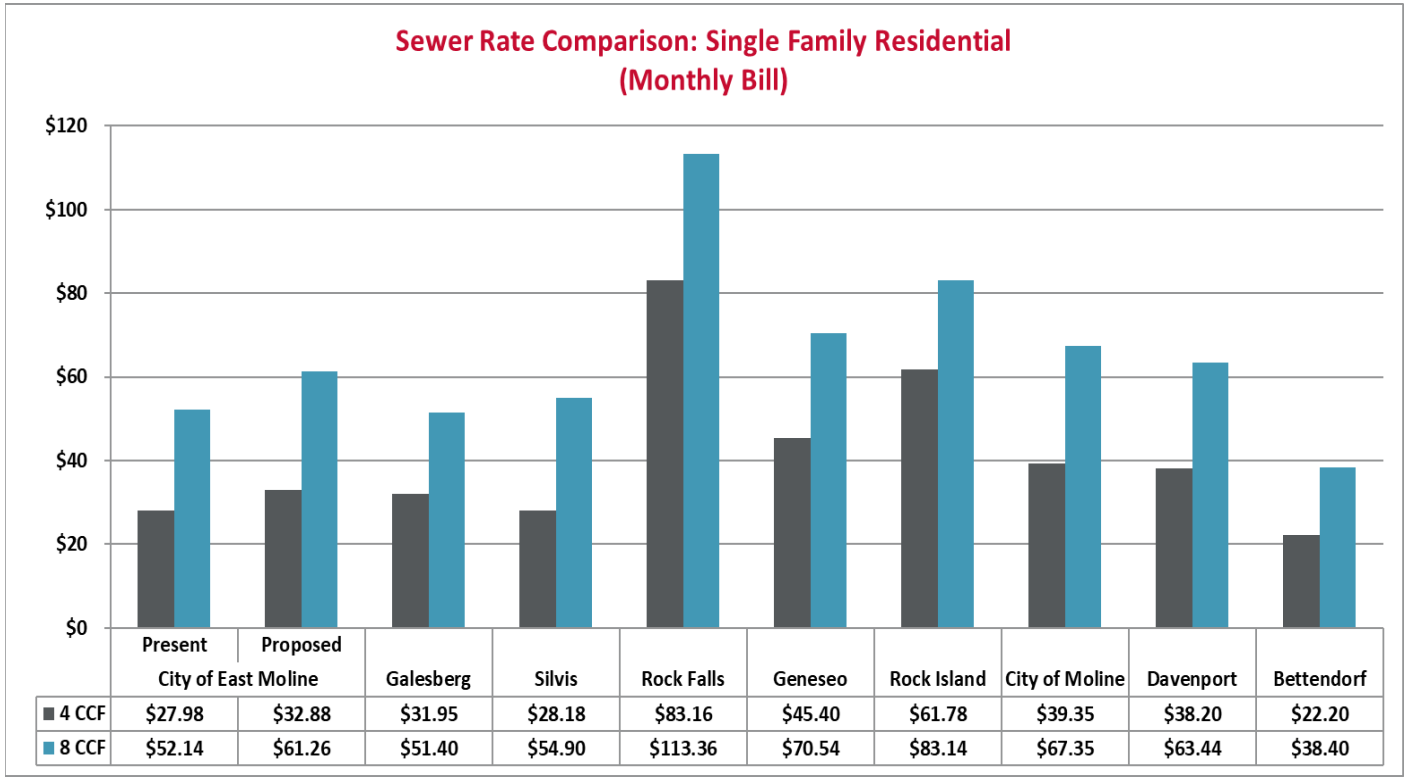


Minimum Target of 90 days of O&M

CITY OF EAST MOLINE

Revenue Requirement Sewer

	2024	2025	2026	2027	2028	2029
Sewer						
Avg Customer Bill [1]	$27.98	$32.88	$38.63	$44.62	$50.19	$56.47
Annual Monthly Change	--	$4.90	$5.75	$5.99	$5.58	$6.27



	Present	Proposed	Galesberg	Silvis	Rock Falls	Geneseo	Rock Island	City of Moline	Davenport	Bettendorf
	City of East Moline									
4 CCF	$27.98	$32.88	$31.95	$28.18	$83.16	$45.40	$61.78	$39.35	$38.20	$22.20
8 CCF	$52.14	$61.26	$51.40	$54.90	$113.36	$70.54	$83.14	$67.35	$63.44	$38.40

- 4 CCF
- Prior to cost of service and rate design

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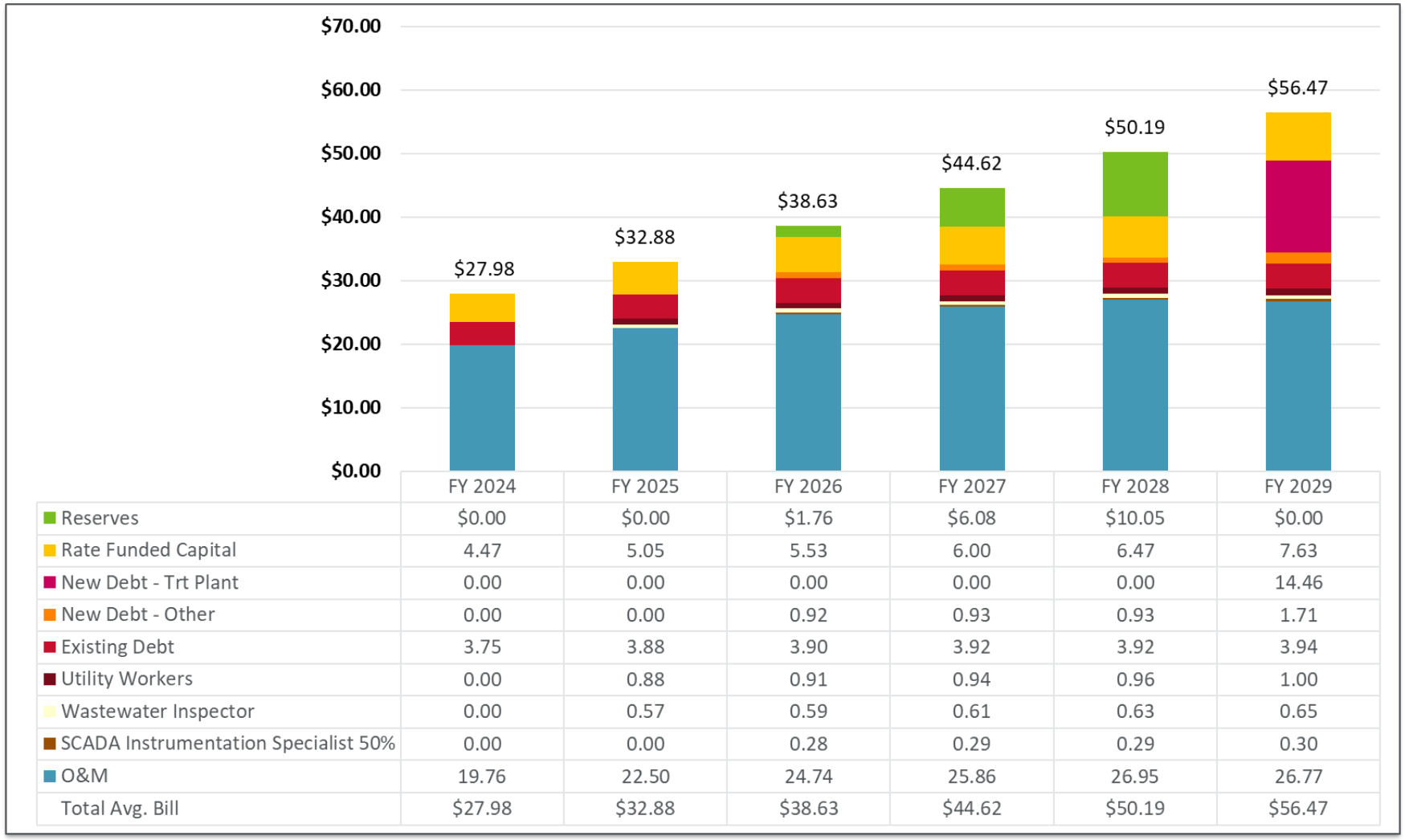
Sewer Rate Increase Drivers



	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Reserves	$0.00	$0.00	$1.76	$6.08	$10.05	$0.00
Rate Funded Capital	4.47	5.05	5.53	6.00	6.47	7.63
New Debt - Trt Plant	0.00	0.00	0.00	0.00	0.00	14.46
New Debt - Other	0.00	0.00	0.92	0.93	0.93	1.71
Existing Debt	3.75	3.88	3.90	3.92	3.92	3.94
Utility Workers	0.00	0.88	0.91	0.94	0.96	1.00
Wastewater Inspector	0.00	0.57	0.59	0.61	0.63	0.65
SCADA Instrumentation Specialist 50%	0.00	0.00	0.28	0.29	0.29	0.30
O&M	19.76	22.50	24.74	25.86	26.95	26.77
Total Avg. Bill	$27.98	$32.88	$38.63	$44.62	$50.19	$56.47

- Sewer Bill Calculation based on 4 CCF.

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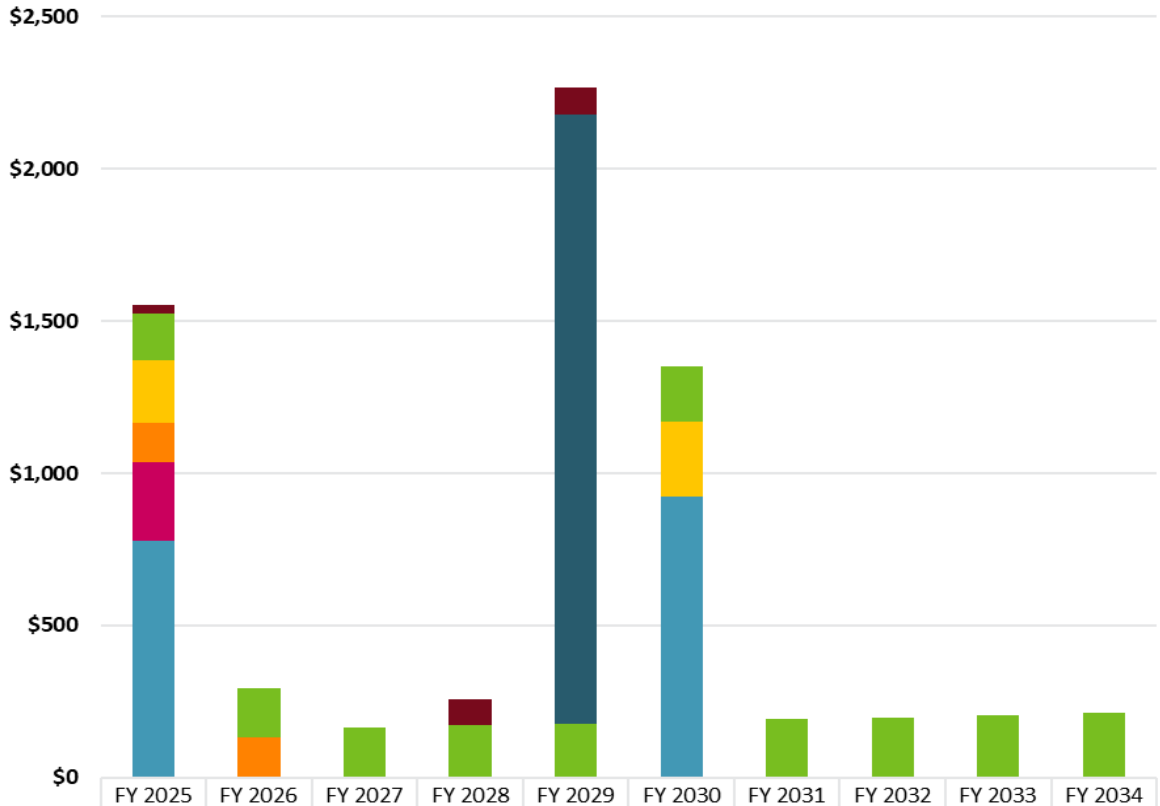
Stormwater Capital Improvements ($000's)



	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Smaller CIP Projects	$26	$0	$0	$86	$89	$0	$0	$0	$0	$0
18th Ave	0	0	0	0	2001	0	0	0	0	0
IEPA Erosion Control & Stormwater Compliance Program	155	161	166	172	178	184	191	198	204	212
Stormwater Master Plan	207	0	0	0	0	246	0	0	0	0
Levee & Flood Protection System - Reaccreditation	129	134	0	0	0	0	0	0	0	0
Butterworth Lagoon Dredging	259	0	0	0	0	0	0	0	0	0
Sugar Creek Dredging	776	0	0	0	0	922	0	0	0	0

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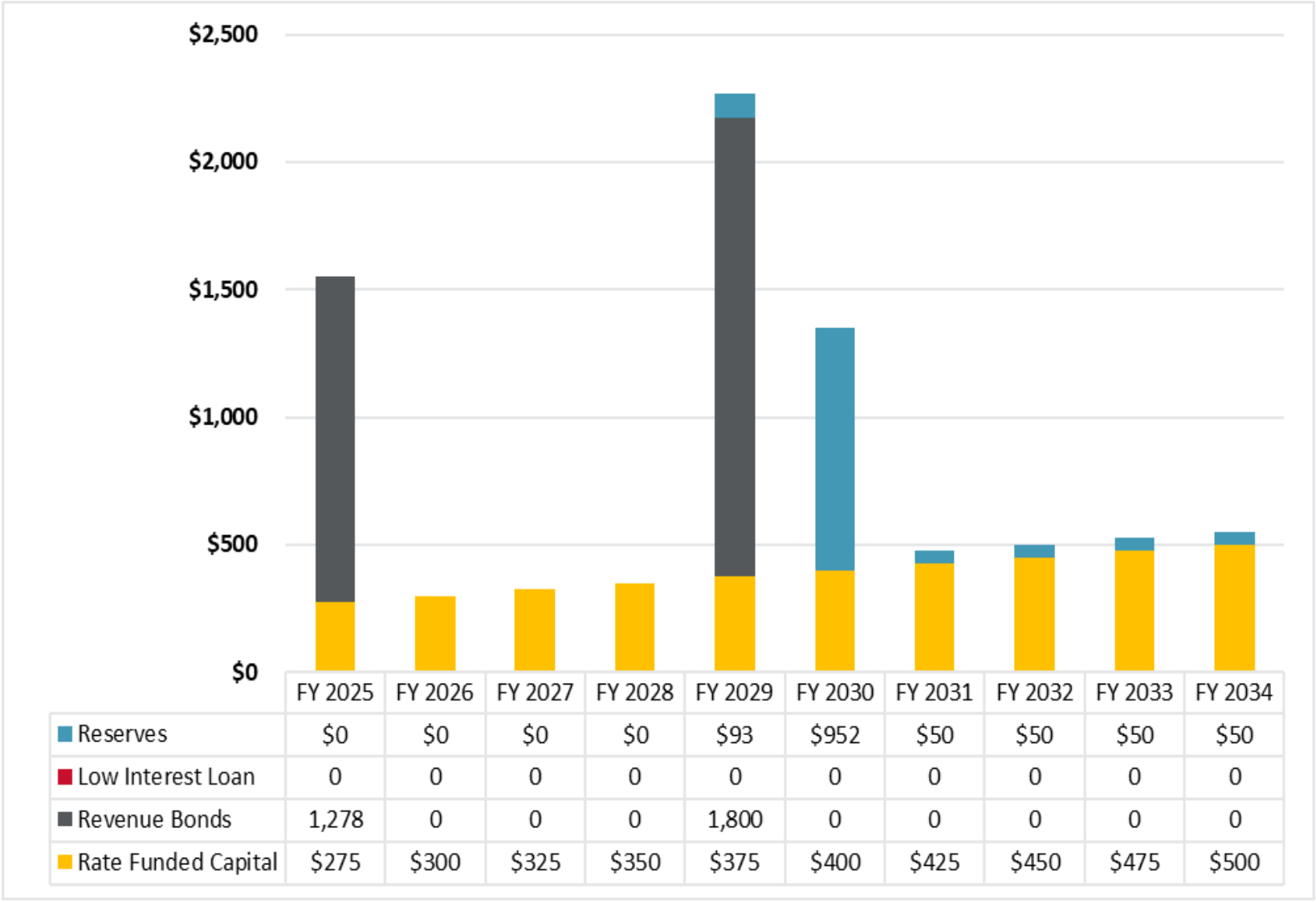
Stormwater Capital Funding Approach ($000's)



	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Reserves	$0	$0	$0	$0	$93	$952	$50	$50	$50	$50
Low Interest Loan	0	0	0	0	0	0	0	0	0	0
Revenue Bonds	1,278	0	0	0	1,800	0	0	0	0	0
Rate Funded Capital	$275	$300	$325	$350	$375	$400	$425	$450	$475	$500

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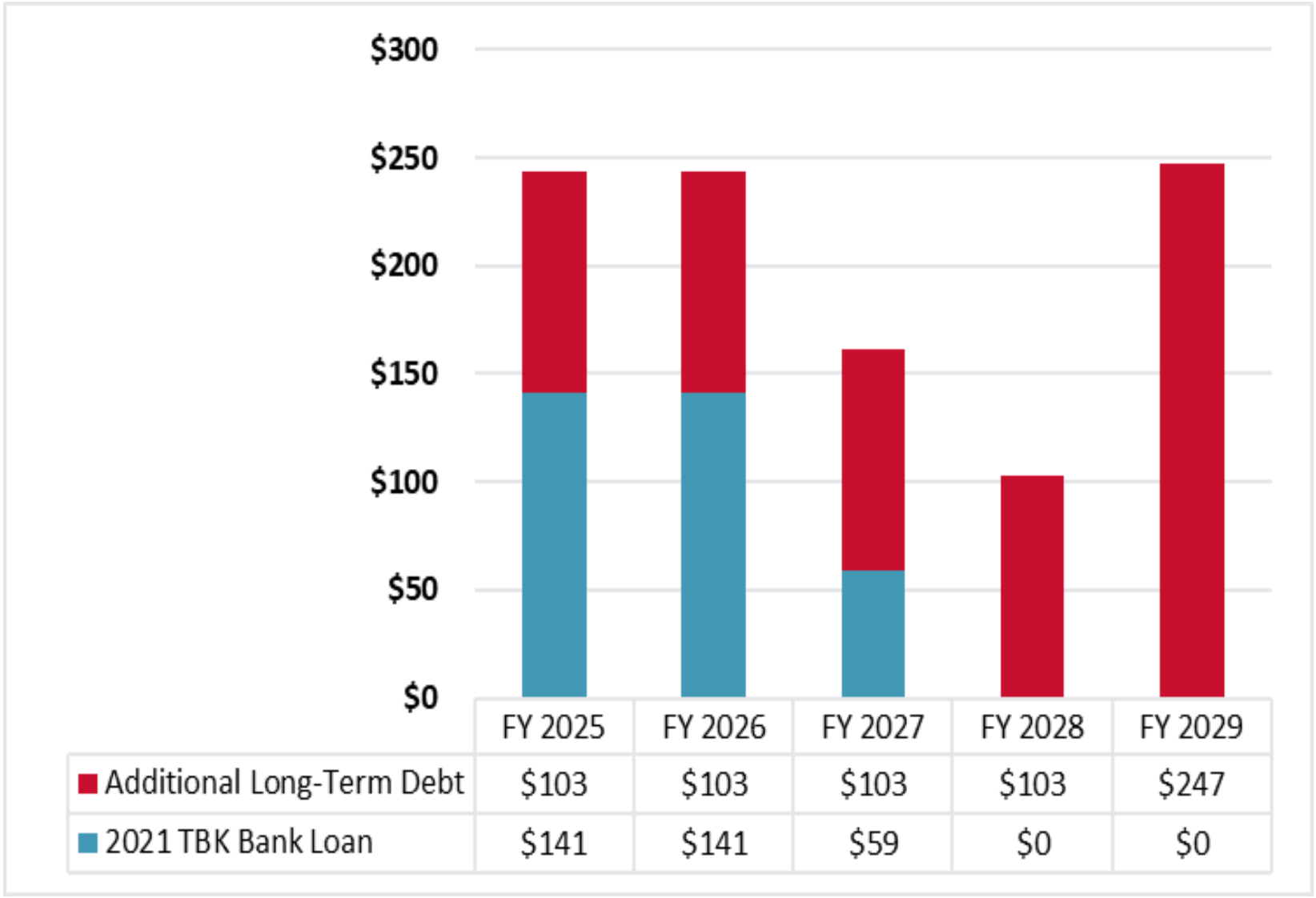
Stormwater Projected Annual Debt Service



	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Additional Long-Term Debt	$103	$103	$103	$103	$247
2021 TBK Bank Loan	$141	$141	$59	$0	$0

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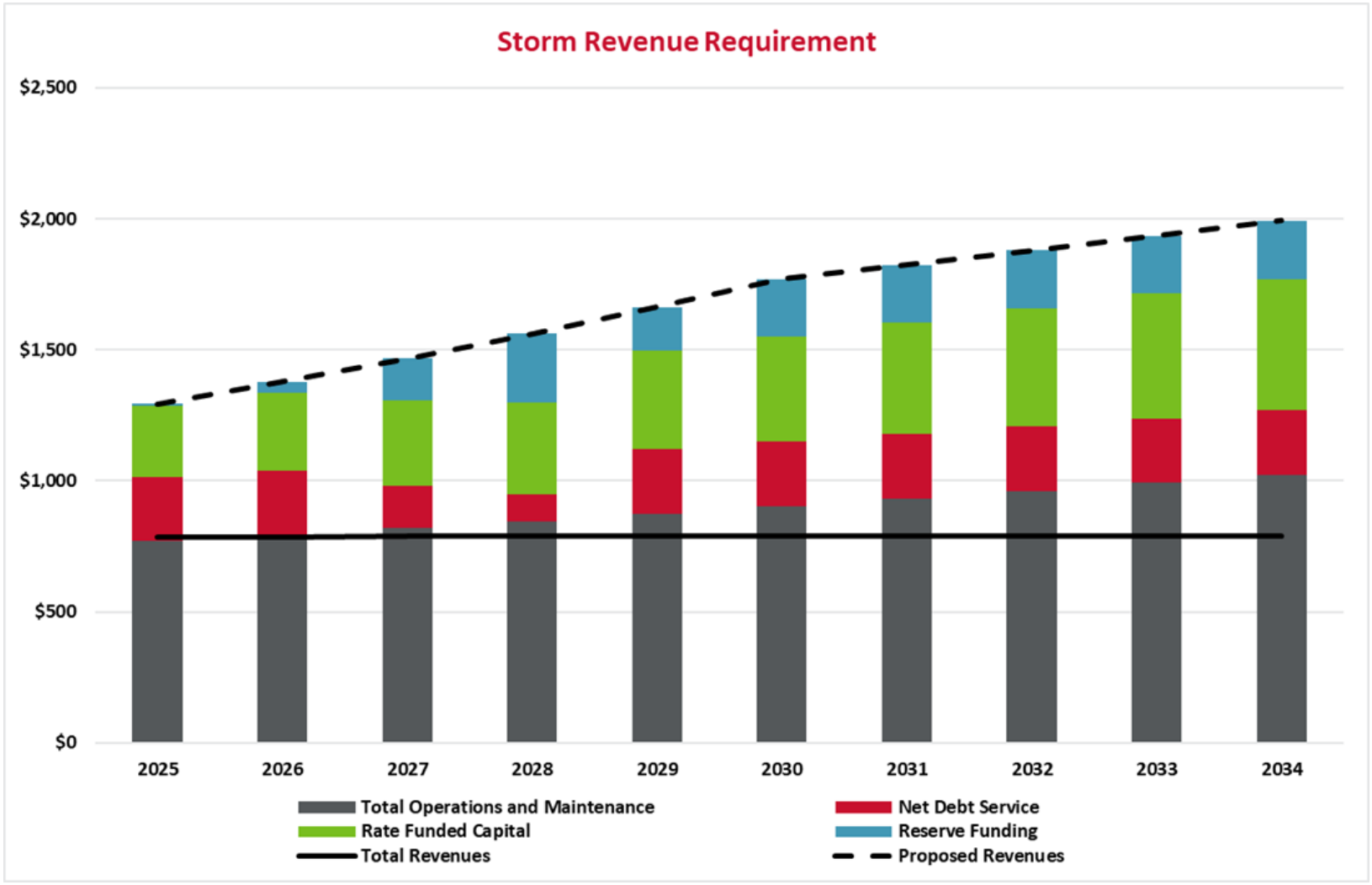
Revenue Requirement

Storm Summary



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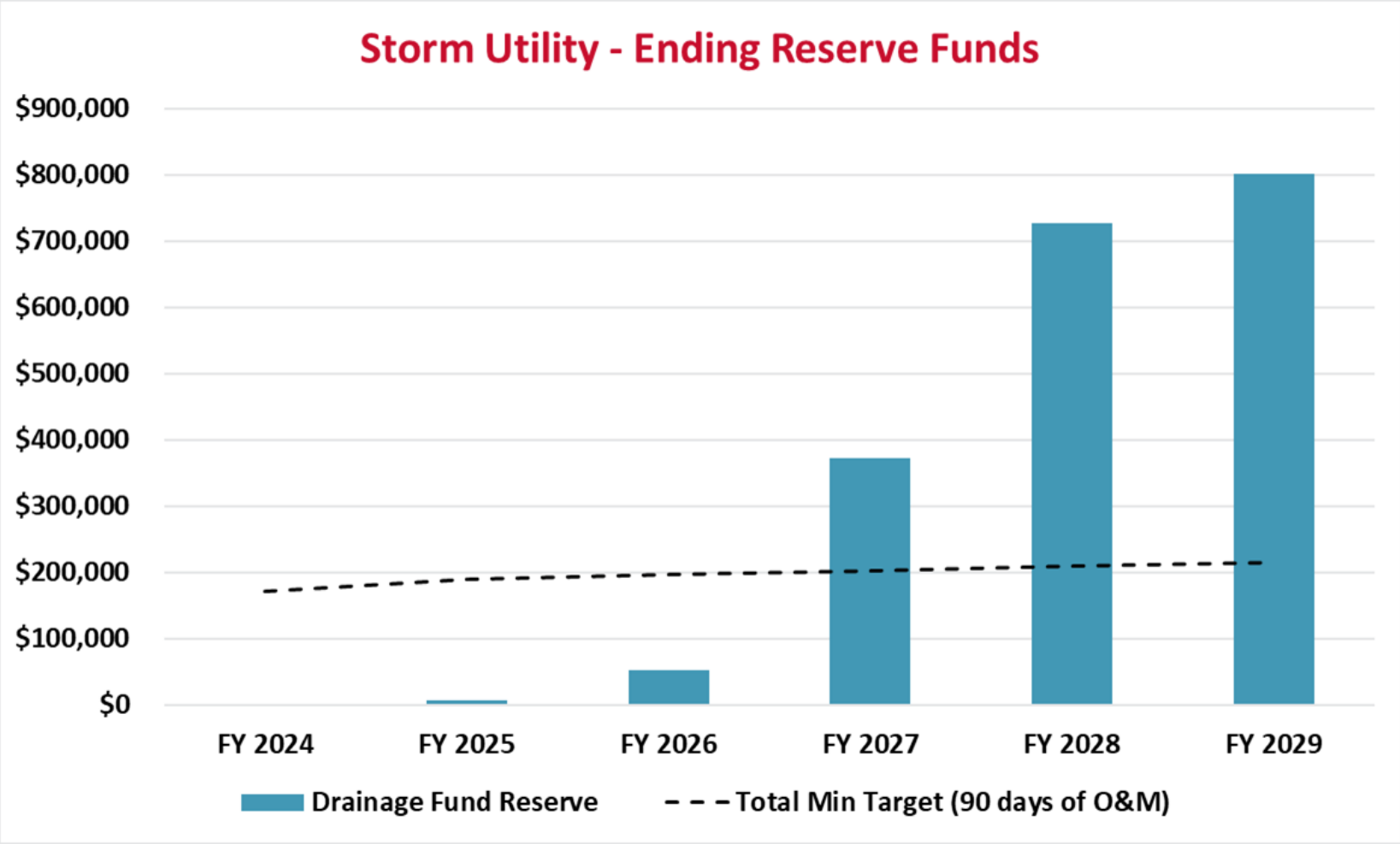
Storm Reserves



Minimum Target of 90 days of O&M

- In FY 2030 the excess reserves from FY 2029 are spent

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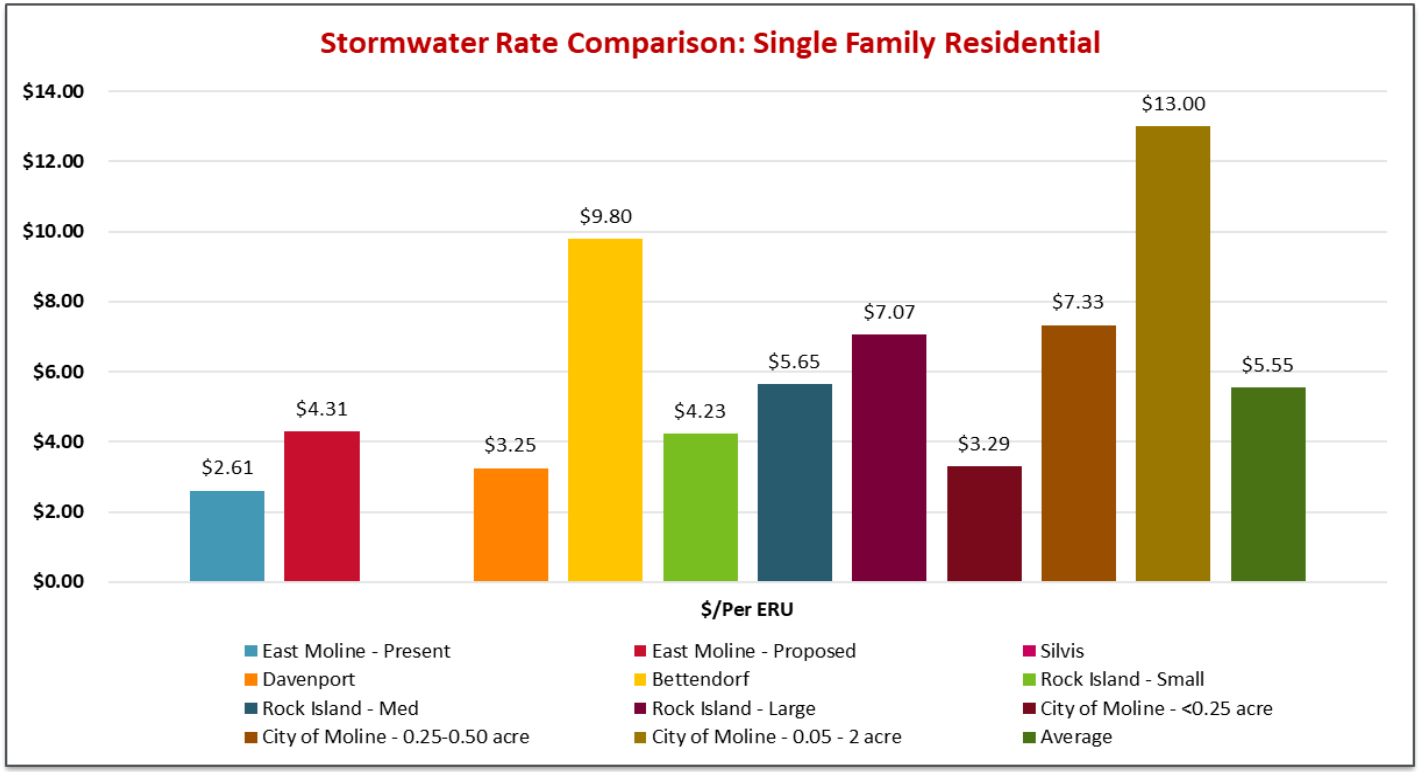
Revenue Requirement Storm

	2024	2025	2026	2027	2028	2029
Storm						
Avg Customer Bill [1]	$2.61	$4.31	$4.59	$4.88	$5.20	$5.54
Annual Monthly Change	--	$1.70	$0.28	$0.30	$0.32	$0.34



- Prior to cost of service and rate design
- 1 - ERU Charge

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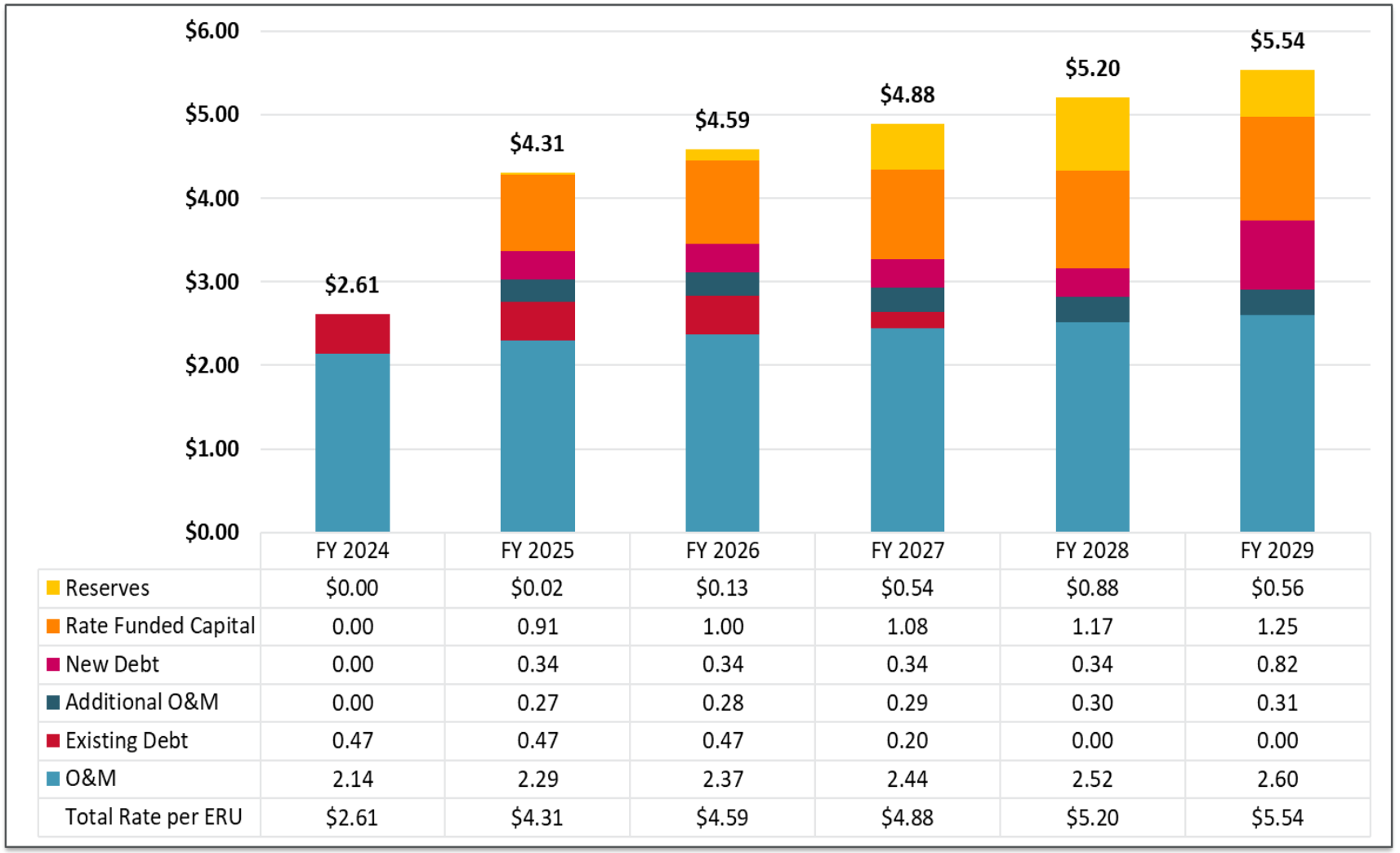
Stormwater Rate Increase Drivers



	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Reserves	$0.00	$0.02	$0.13	$0.54	$0.88	$0.56
Rate Funded Capital	0.00	0.91	1.00	1.08	1.17	1.25
New Debt	0.00	0.34	0.34	0.34	0.34	0.82
Additional O&M	0.00	0.27	0.28	0.29	0.30	0.31
Existing Debt	0.47	0.47	0.47	0.20	0.00	0.00
O&M	2.14	2.29	2.37	2.44	2.52	2.60
Total Rate per ERU	$2.61	$4.31	$4.59	$4.88	$5.20	$5.54

- Stormwater Bill Calculation based on 1 ERU.

CITY OF EAST MOLINE

Summary of the Revenue Requirements

- Annual rate adjustments are necessary to fund water, sewer, and storm utilities
  - Increase of funding for annual renewal, replacement and needed improvements and annual debt service
  - Maintain adequate reserves to support cash flow, emergencies, and credit ratings
  - Maintain adequate financial metrics needed to issue long-term debt

	2024	2025	2026	2027	2028	2029
Water						
Avg Customer Bill 1	$39.14	$48.93	$61.16	$73.39	$86.23	$99.16
Annual Monthly Change	--	$9.79	$12.23	$12.23	$12.84	$12.93
Sewer						
Avg Customer Bill [1]	$27.98	$32.88	$38.63	$44.62	$50.19	$56.47
Annual Monthly Change	--	$4.90	$5.75	$5.99	$5.58	$6.27
Storm						
Avg Customer Bill [1]	$2.61	$4.31	$4.59	$4.88	$5.20	$5.54
Annual Monthly Change	--	$1.70	$0.28	$0.30	$0.32	$0.34

- Prior to cost of service and rate design
- 1 - Billing Charge + 4 CCF water and sewer, 1 ERU stormwater

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Revenue Requirement Discussion

- Revenue requirement key assumptions discussion
  - Level of capital improvements for each utility
    - Necessary to meet regulatory requirements and maintain existing system infrastructure
  - Capital Funding Approach
    - Increase in annual rate funding, use of long-term debt
  - Long Term Debt
    - Impacts of annual debt service on rates
  - Rate Transition Plans
    - Impact on average customer bills to prudently fund necessary system improvements
  - Reserves
    - Maintain adequate reserve levels for emergencies and issuance of long-term debt

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Next Steps

- Receive Council feedback and input
  - Update the study to reflect Council direction
- Review study results with City staff
- Develop cost of service and proposed rates
- Develop draft written report
- Present study results, findings, and recommendations

Thank you for your input!

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Cost of Service

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Cost of Service Overview

What is cost of service?

- Analysis to proportionally distribute the revenue requirement to the customer classes of service of each utility

Why cost of service

- Generally accepted as “fair and equitable”
- Avoids subsidies
- Revenues reflect costs

Objectives of Cost of Service

- Determine if subsidies exist
- Develop average unit costs

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Cost of Service Summary

- Analysis reflects facility and service requirements of each customer class
- Results in equitable rates for each customer class of service
- Provides the City with information for rate structure policy decisions
- Should be reviewed periodically to reflect changes in customer and system characteristics
- Snapshot in time based on current costs and system usage
- Preliminary study results show that cost of difference exist
  - Continuation of adjustments as outlined in the prior study recommendations

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Rate Design

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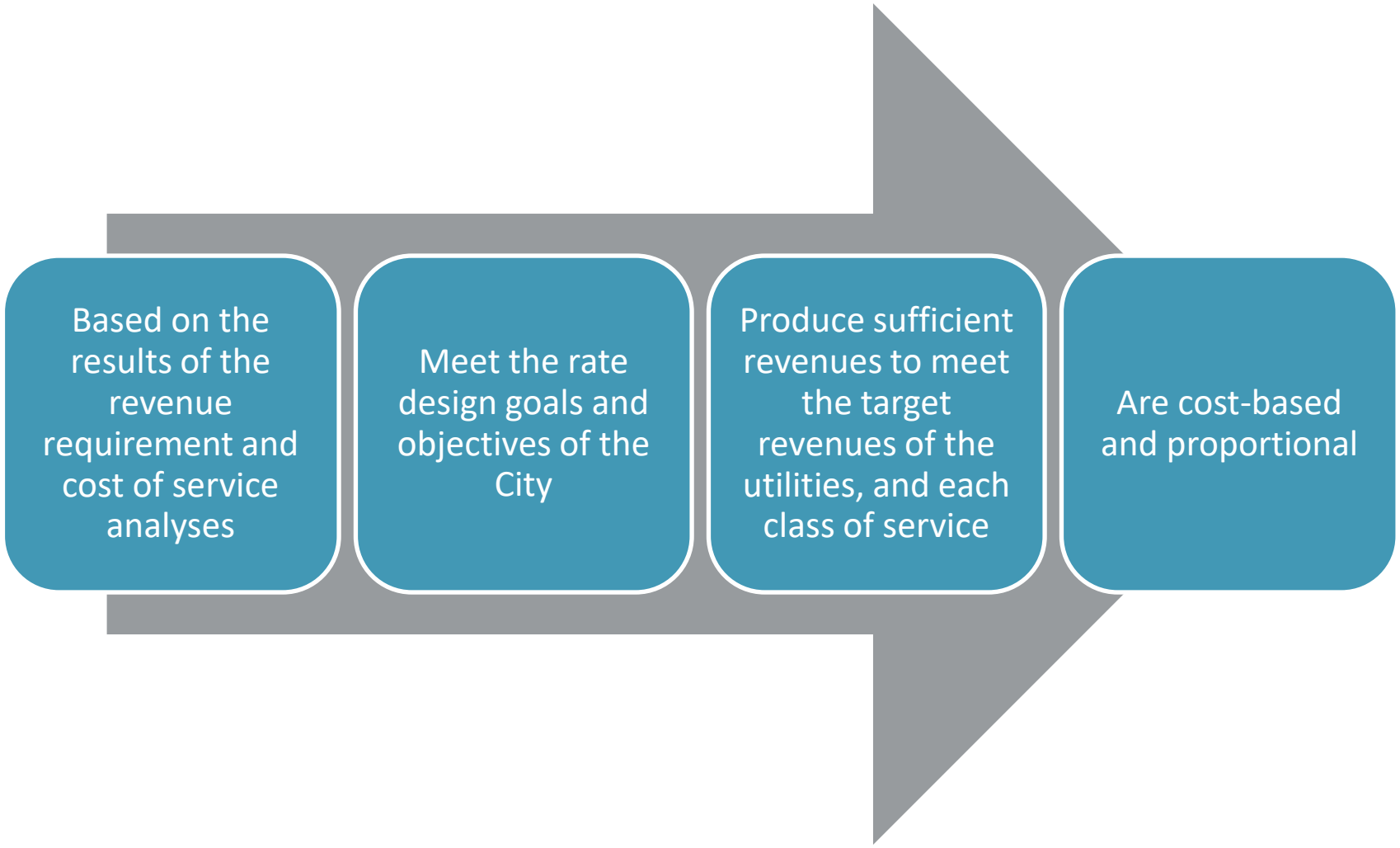
Overview of Rate Designs



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Rate Design Water, Sewer, & Storm Present Rates

Water	Present Rates
Billing Charge	$ / Mo
5/8"	$2.82
3/4"	2.82
1"	2.82
1 1/2"	2.82
2"	2.82
3"	2.82
4"	2.82
6"	2.82
8"	2.82
10"	2.82
Unknown	2.82
Consumption Charge - Water & Water Plant	$ / CCF
0 - 80	$9.08
80 - 200	6.03
200 - 700	5.88
700 - 1,137	4.22
1,337 - 8,022	1.52
8,022 - 33,423	1.15
33,423 - 66,845	1.06
66,845 +	0.84

	Present Rates
Sewer	
Residential	Rate
Billing Fee	$3.82
Sewer Usage & Plant	6.04
Commercial	Rate
Billing Fee	$3.82
Sewer Usage & Plant	6.04
Industrial	Rate
Billing Fee	$3.82
Sewer Usage & Plant	6.04
Municipal	Rate
Billing Fee	$3.82
Sewer Usage & Plant	3.59
Storm	$ / ERU
Rate Per Equivalent Unit	$2.61

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Receive Council Feedback & Input

- Preliminary rate transition plans
- Level of annual capital projects
- Capital funding approach