



City of Wilton Manors

2021 Water, Wastewater, and Stormwater
Rate Study

April 22, 2021



Project Scope

Water and Wastewater Revenue
Sufficiency Forecast

Stormwater Revenue Sufficiency
Forecast

Water and Wastewater Rate
Design



Study Objectives

Review water, wastewater, and stormwater revenue sufficiency

- Enterprise funds
- Supported by user fees

Update 10-year Utility Financial Model

Develop Capital Funding program

Review the water and wastewater rate structures

Utility Overview

- Existing utility connections
 - › Water Service – 4,300 accounts
 - › Sewer Service – 4,140 accounts
 - › Stormwater Service – 9,200 bill units
- City purchases wholesale water/wastewater from Ft. Lauderdale
- Existing utility rates produce annual revenues of approximately \$4.4M for water, \$4.2M for wastewater, and \$540k for stormwater
- Existing wastewater debt service maturing in FY 2026 (no other debt)
- Funding required for over \$43M of capital improvements for water and wastewater over next 10-years (Master Plan)
- Funding required for \$19.5M of capital improvements for stormwater over next 10-years (Master Plan)

Key Forecast Assumptions and Notes

- Customer growth of 0.2% per year (mostly multi-family redevelopment)
- Cost Escalations
 - › Labor 3.5%/year
 - › General inflation 2.3% - 2.4%/year
- Cost of wholesale treatment purchases from Ft. Lauderdale
 - › Water 5.0% rate increase per year
 - Existing rates are \$10,168.33 fixed charge plus \$3.58 per 1,000 gallons
 - › Wastewater 5.0% rate increase per year
 - Existing rate is \$2.48 per 1,000 gallons
- Annual reductions to the interfund transfers, per plan
- Issuance of \$46.9M new debt in FY 2022 or FY 2023
 - › \$16.9M for water projects
 - › \$14.3M for wastewater projects
 - › \$15.7M for stormwater projects (alternatives identified for Stormwater)
 - › Preliminary debt service provided by Ford & Associates

Water and Wastewater Revenue Sufficiency Forecast



Existing Water Rates

Residential

Rate Component	Amount
Base Charge	
5/8" Meter	\$27.65
1" Meter	\$46.11
Usage Charges	
Block 1 (0 – 15,000 gallons)	\$4.53
Block 2 (15,000 – 30,000 gallons)	\$5.53
Block 3 (Above 30,000)	\$6.91

Multi-family/ Commercial

Rate Component	Amount
Base Charge	
5/8" Meter	\$26.25
1" Meter	\$68.25
1 1/2" Meter	\$155.32
2" Meter	\$267.73
4" Meter	\$1,076.15
6" Meter	\$2,418.31
8" Meter	\$4,299.17
Usage Charges (all usage)	\$4.78

Existing Wastewater Rates

Residential

Rate Component	Amount
Base Charge	
5/8" Meter	\$12.24
1" Meter	\$20.38
Usage Charges (up to 15,000 gallons)	\$8.45

Multi-family/ Commercial

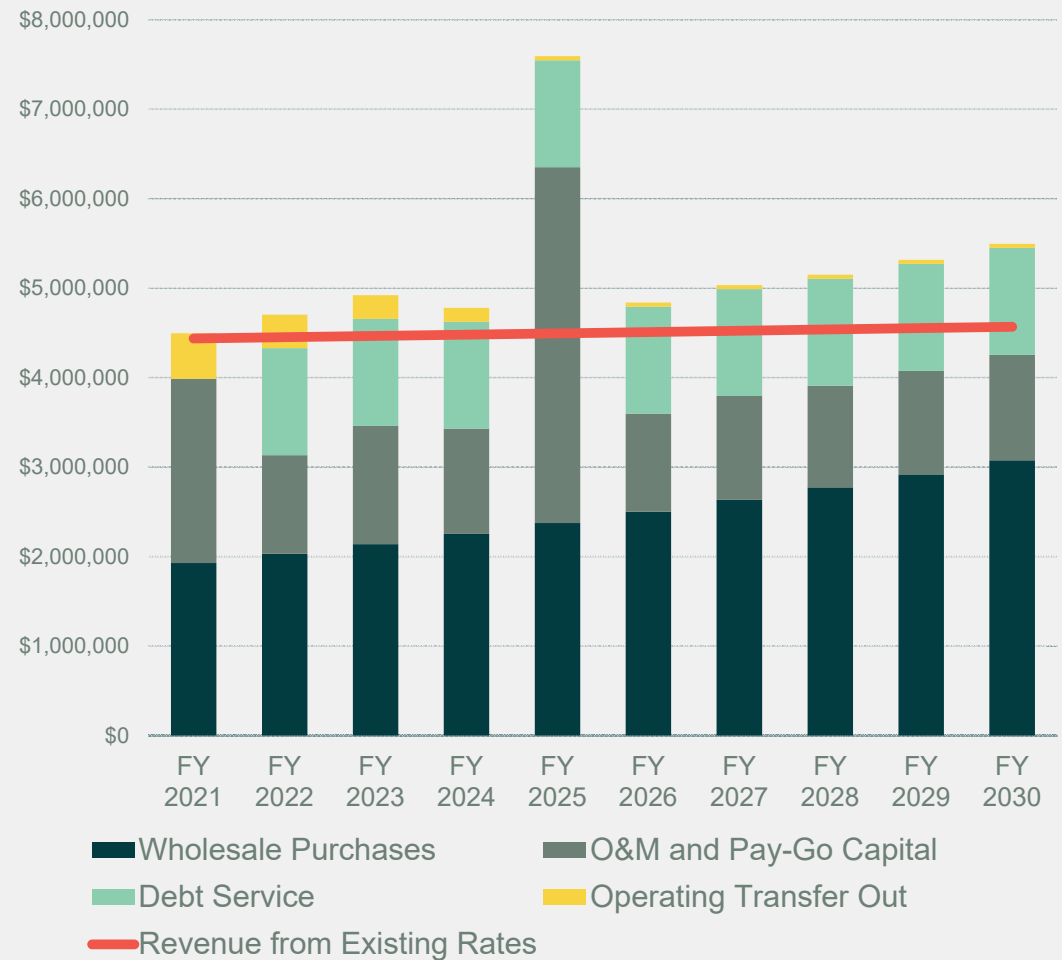
Rate Component	Amount
Base Charge	
5/8" Meter	\$11.61
1" Meter	\$30.18
1 1/2" Meter	\$67.26
2" Meter	\$118.35
4" Meter	\$475.66
6" Meter	\$1,068.56
8" Meter	\$1,899.64
Usage Charges (all usage)	\$8.45

Capital Improvement Program

Description	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Water Rate Revenue	\$1,046,500	\$77,100	\$279,800	\$116,600	\$2,900,000	\$0	\$44,100	\$0	\$0
Sewer Rate Revenue	1,554,400	464,600	279,800	19,000	1,514,600	2,056,400	44,100	423,200	0
R&R Funds	26,200	121,800	303,400	8,400	506,000	120,000	73,000	62,400	87,400
Proposed 2022 Bonds	0	13,621,100	15,397,800	2,176,000	0	0	0	0	0
Total	\$2,627,100	\$14,284,600	\$16,260,800	\$2,320,000	\$4,920,600	\$2,176,400	\$161,200	\$485,600	\$87,400

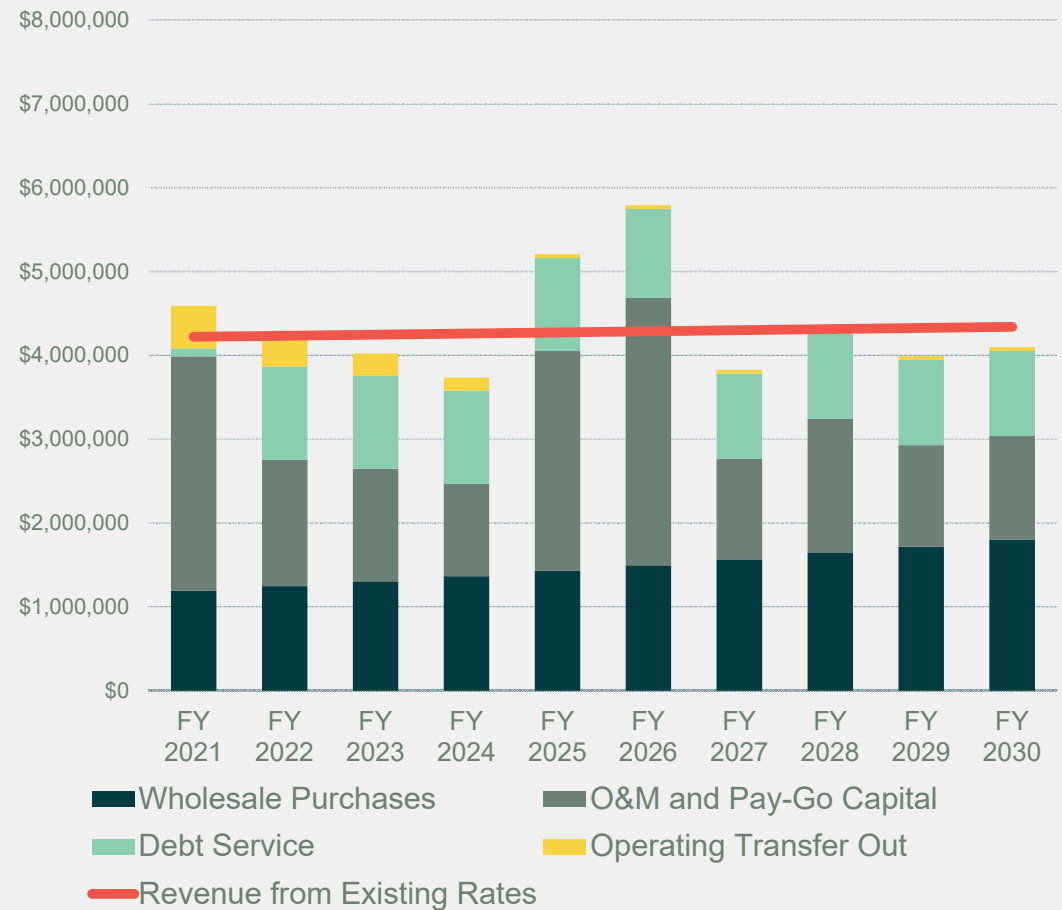
Water Revenue Sufficiency at Existing Rates

- Water revenues falling short in future years due to:
 - Increased wholesale purchase costs
 - Addition of debt service to fund CIP
 - Need to generate additional revenues to fund reserves and pay-go capital
- FY 2025 will use available reserve funds to fund the increased Pay-go capital needs



Wastewater Revenue Sufficiency at Existing Rates

- Wastewater revenues need slight adjustments to fund:
 - Addition of debt service to fund CIP
 - Need to generate additional revenues to fund reserves and pay-go capital
- FY 2025 and FY 2026 will use available reserve funds to fund the increased Pay-go capital needs



Recommended Rate Adjustments

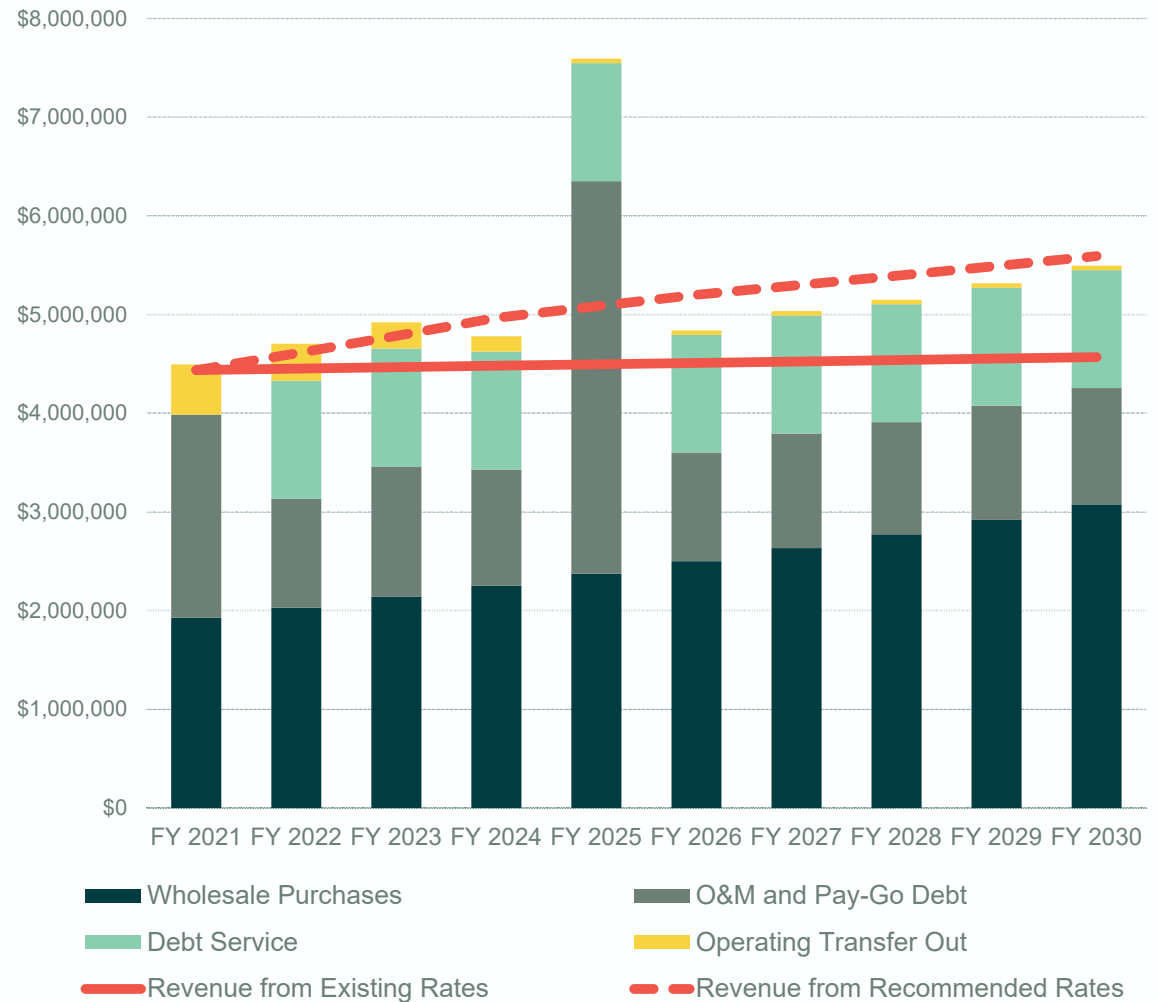
Fiscal Year	Water	Wastewater
FY 2022	3.5%	3.5%
FY 2023	3.5%	3.5%
FY 2024	3.5%	3.5%
FY 2025	2.0%	0.0%
FY 2026	2.0%	0.0%

Wholesale Rate Pass-Through

- Since the City purchases wholesale treatment services from Ft. Lauderdale a wholesale rate pass through methodology can be implemented
 - › Gives the City the ability to increase rates automatically when wholesale rates are increased
 - › Common approach for municipalities that purchase wholesale water and wastewater – for example Oakland Park has an automatic pass-through
 - › City may not have to go through full Commission adoption process in subsequent years to increase rates from the wholesale pass-through

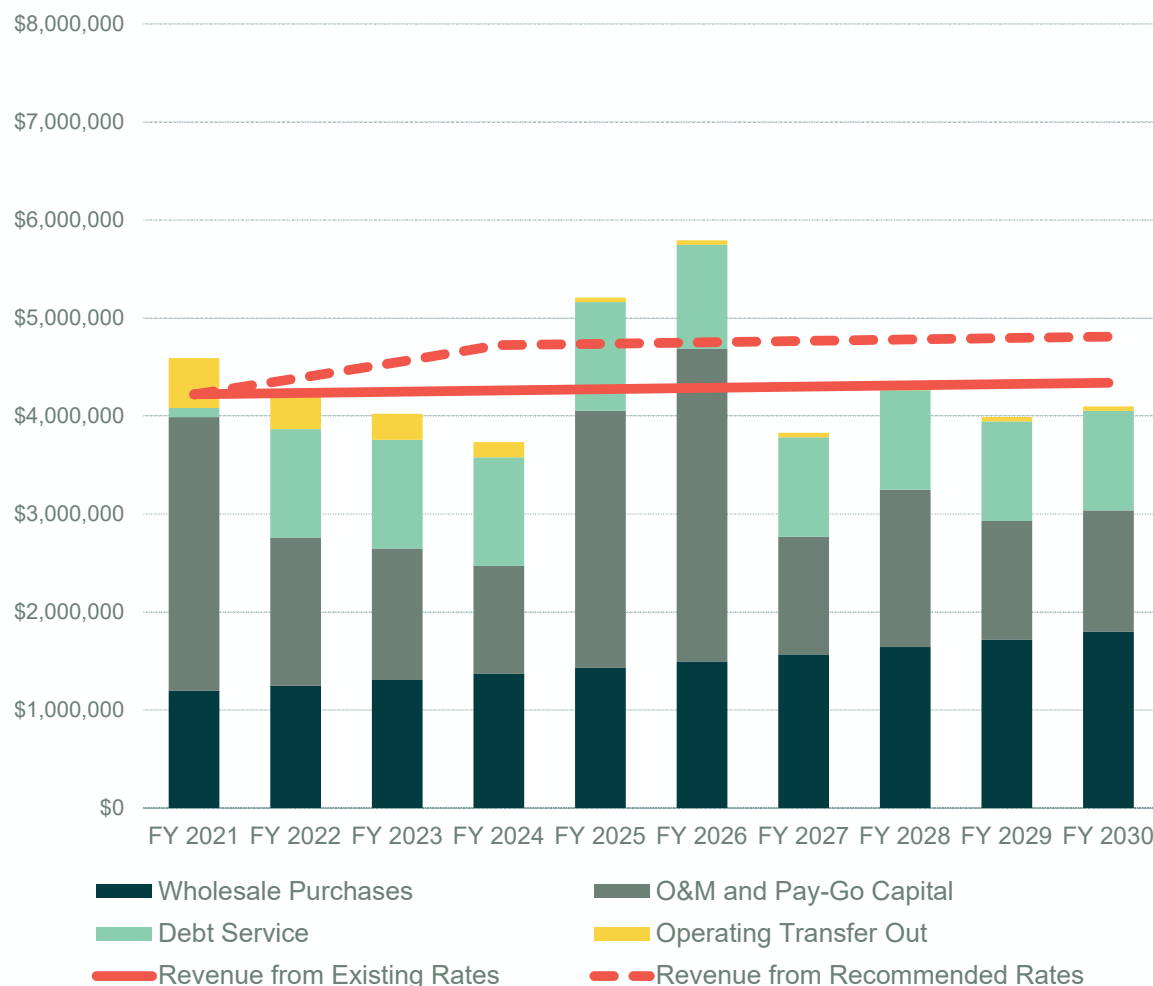
Water Revenue Sufficiency at Recommended Rates

- The proposed rate adjustments provide adequate revenues to fund all identified revenue requirements:
 - O&M
 - Pay-go Capital
 - Proposed Debt Service
 - Operating Transfer Out
- Accumulated reserves used in FY 2025 to support Pay-go Capital



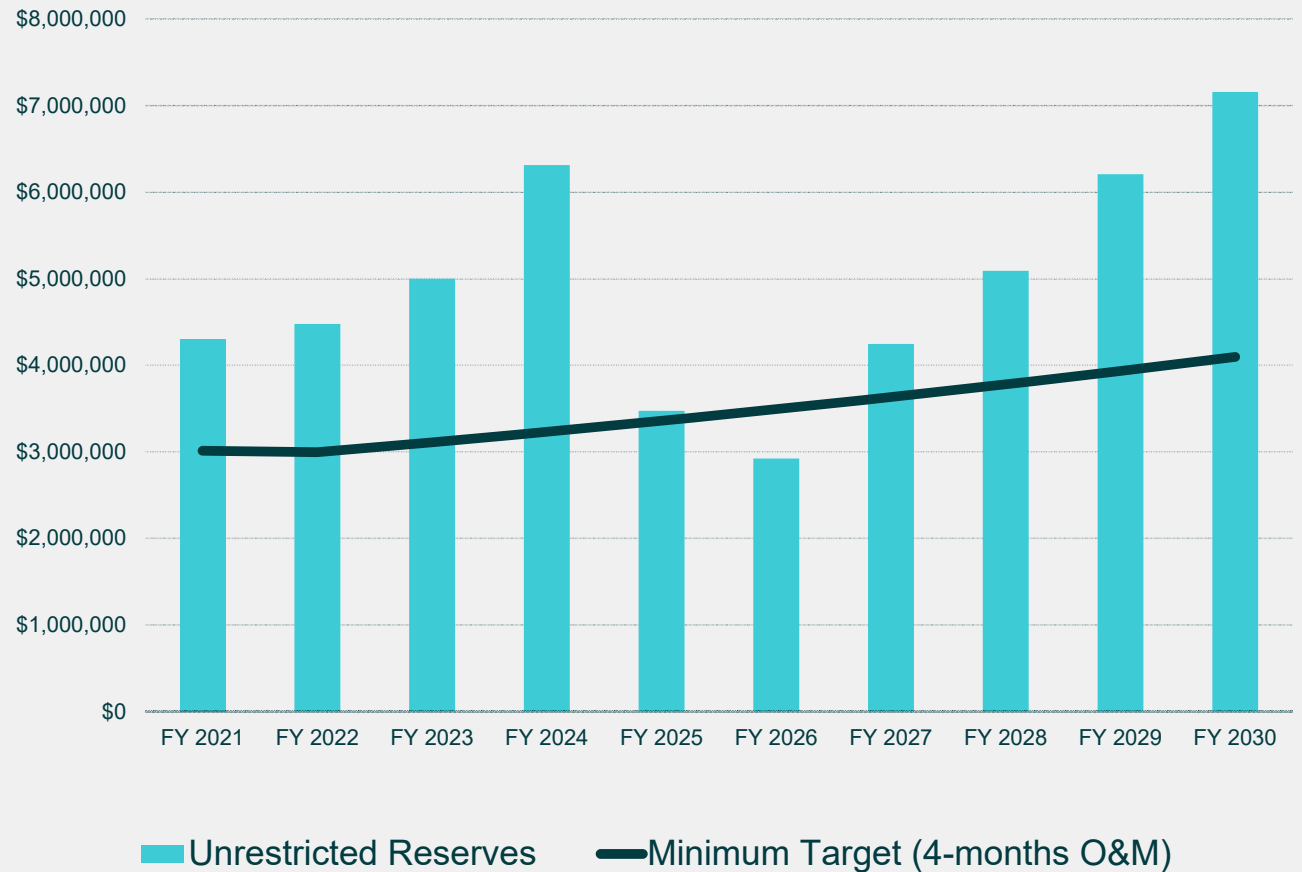
Wastewater Revenue Sufficiency at Recommended Rates

- The proposed rate adjustments provide adequate revenues to fund all identified revenue requirements:
 - O&M
 - Pay-go Capital
 - Proposed Debt Service
 - Operating Transfer Out
- Accumulated reserves used in FY 2025 and FY 2026 to support Pay-go Capital

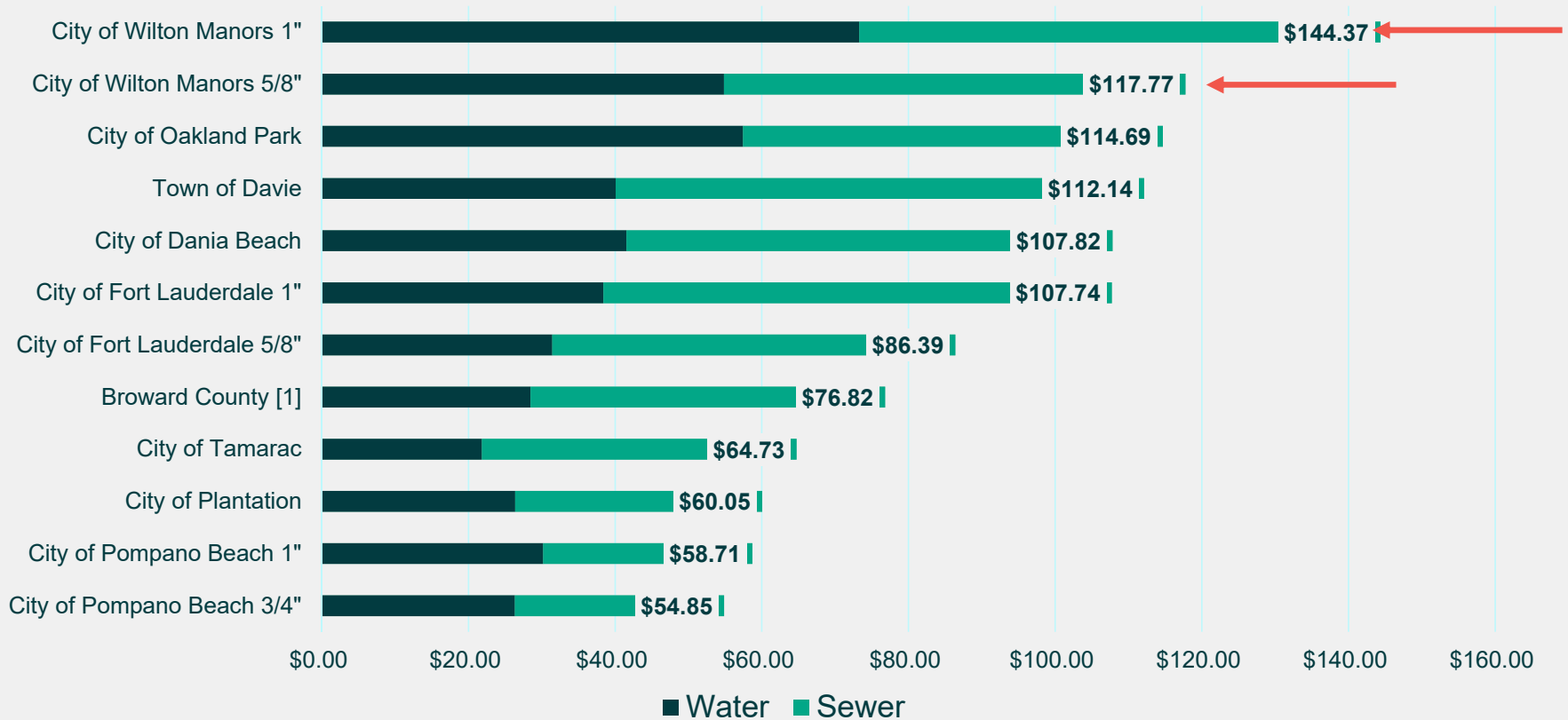


Fund Balance Forecast

- Fund balance remains strong throughout the forecast period and is being used in FY 2025 – FY 2026 to fund additional capital improvements and avoid additional debt.
- Future forecast provides contingency against project cost increases and future improvements



Local Comparison at 6,000 gallons consumption



17 [1] Broward County residential rates for 1" meters do not vary if average monthly consumption was below 20,000 gallons for the previous year. For those customers who averaged greater than 20,000 gallons per month, the residential 1" combined water and wastewater base charge is \$64.61 (\$28.14 higher than the 5/8" meter water and wastewater base charge).

Stormwater Revenue Sufficiency Forecast



Existing Stormwater Rates

Classification	Factor	Rate/Mo.	ERUs Billed	Units Billed
Res & Com per ERU	1.00	\$6.15	5,176	5,176
MF Single Story	0.70	\$4.31	704	1,005
MF Multi-Story	0.50	\$3.09	1,492	2,983

Capital Improvement Program

Description	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Stormwater Reserves	\$863,400	\$0	\$0	\$365,700	\$0	\$365,100	\$289,600	\$796,400	\$737,600
Stormwater R&R Fund	0	164,400	0	0	165,000	0	47,100	0	0
Proposed 2022 Bonds	0	7,602,100	8,103,100	0	0	0	0	0	0
Total	\$863,400	\$7,766,500	\$8,103,100	\$365,700	\$165,000	\$365,100	\$336,700	\$796,400	\$737,600

Capital Improvement Program - Alternatives

- Funding for the stormwater improvements requires significant rate adjustments, which would increase the monthly rate for a Single Family customer to around \$20/month
 - › This assumes debt funding is used to minimize the rate impacts
 - › This also assumes the stormwater revenues fully fund the improvements with no outside funding
 - › If the City can spread out the execution of the projects over a longer period of time, the rates can be phased up to the \$20 level over a longer period of time as well

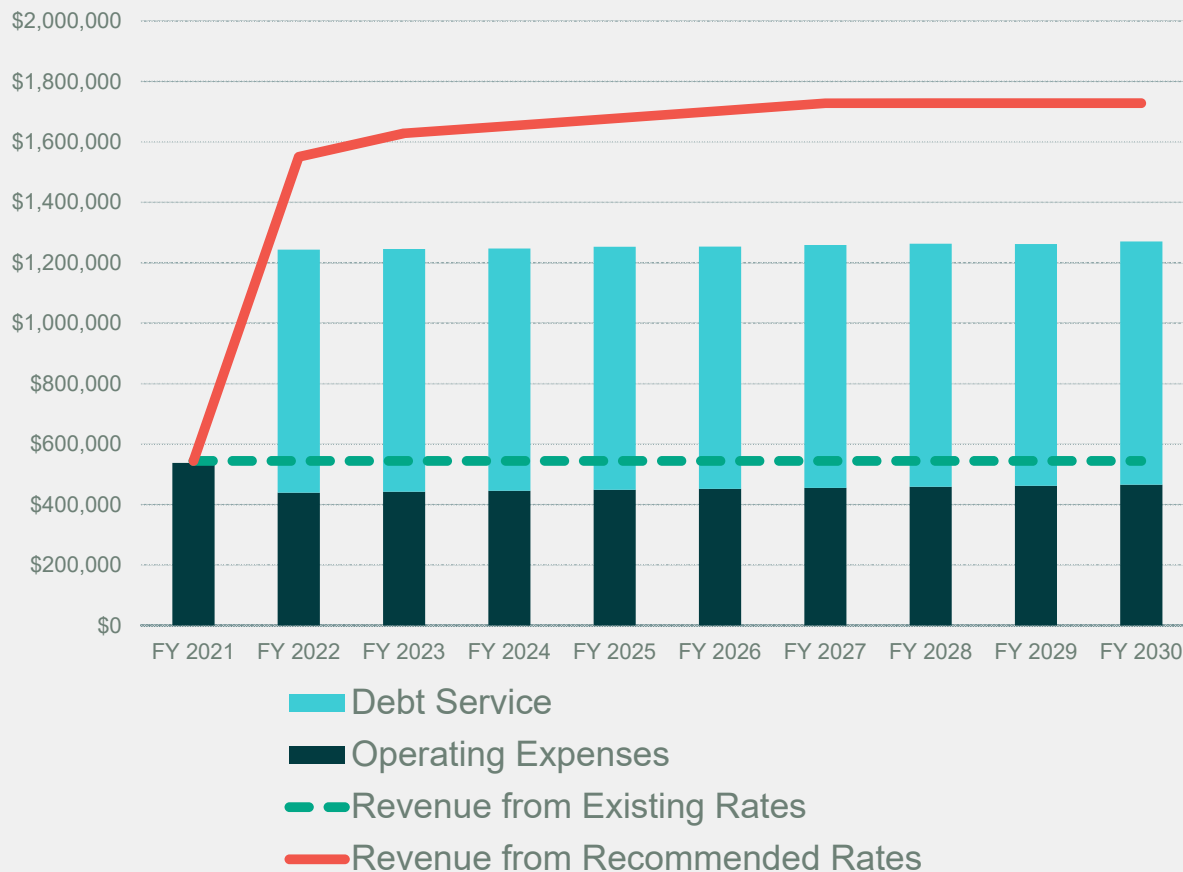
Capital Improvement Program – Faster Project Execution

Description	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Stormwater Reserves	\$863,400	\$0	\$0	\$365,700	\$0	\$365,100	\$289,600	\$796,400	\$737,600
Stormwater R&R Fund	0	164,400	0	0	165,000	0	47,100	0	0
Proposed 2022 Bonds	0	7,602,100	8,103,100	0	0	0	0	0	0
Total	\$863,400	\$7,766,500	\$8,103,100	\$365,700	\$165,000	\$365,100	\$336,700	\$796,400	\$737,600

Rate	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
SF & Com per ERU	\$6.15	\$17.52	\$18.39	\$18.66	\$18.93	\$19.21	\$19.49
MF Single Story	\$4.31	\$12.27	\$12.88	\$13.07	\$13.26	\$13.46	\$13.65
MF Multi-Story	\$3.09	\$8.80	\$9.23	\$9.37	\$9.51	\$9.65	\$9.79

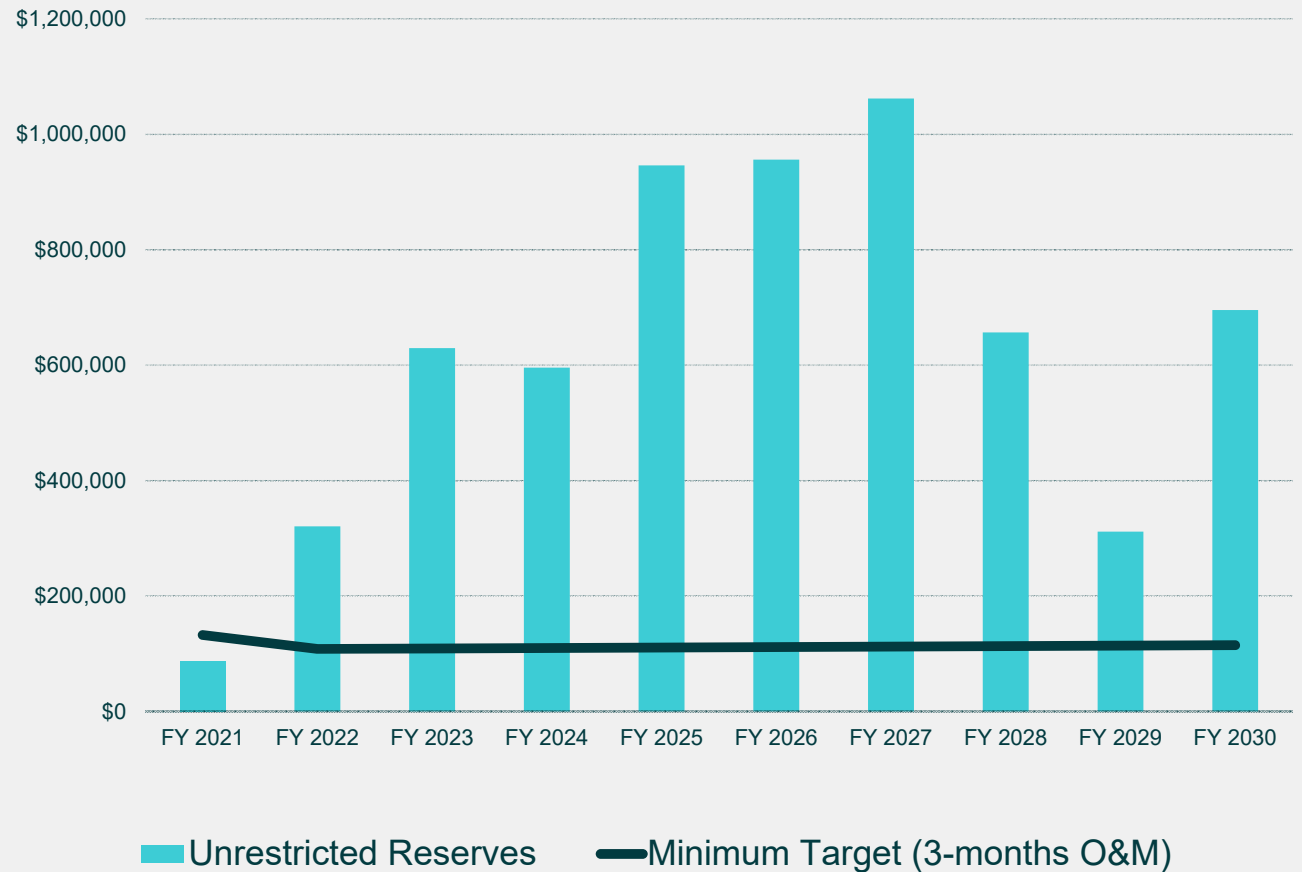
Stormwater Revenue Sufficiency – Fast CIP Execution

- Increase of rate from \$6 to \$17 in FY 2022 provides necessary funding for debt service and Pay-go Capital
- Annual surplus used to fund additional Pay-go Capital each year



Stormwater Fund Balance Forecast – Fast CIP Execution

- Fund balance remains strong throughout the forecast and is used to fund Pay-go CIP.
- Future forecast provides contingency against project cost increases and future improvements



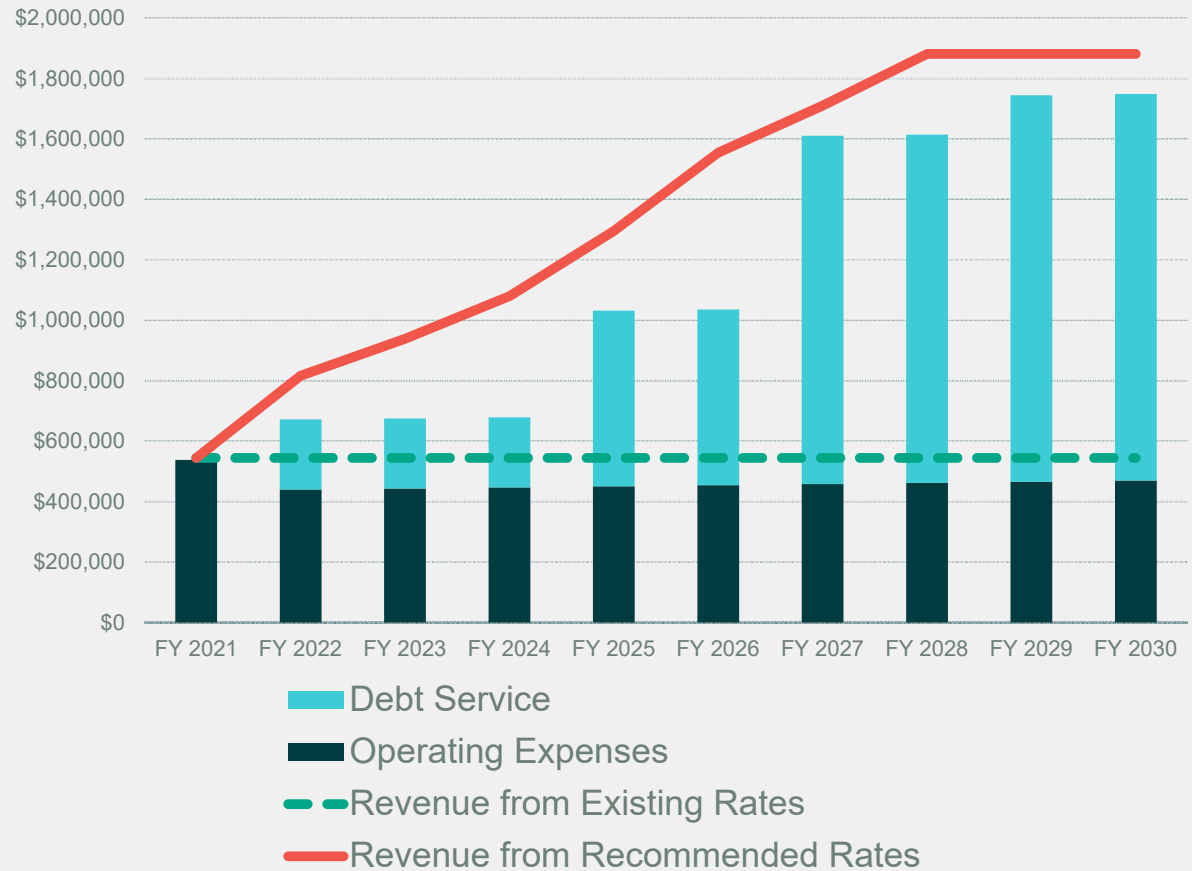
Capital Improvement Program – Slower Project Execution

Description	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Stormwater Reserves	\$863,400	\$0	\$0	\$365,700	\$0	\$365,100	\$289,600	\$0	\$0
Stormwater R&R Funds	0	164,400	0	0	165,000	0	47,100	0	0
Proposed 2022 Bonds	0	2,742,200	525,300	0	0	0	0	0	0
Proposed 2025 Bonds	0	0	0	0	4,859,900	0	0	0	0
Proposed 2027 Bonds	0	0	0	0	0	0	7,577,800	0	0
Proposed 2029 Bonds	0	0	0	0	0	0	0	796,400	737,600
Total	\$863,400	\$2,906,600	\$525,300	\$365,700	\$5,024,900	\$365,100	\$7,914,500	\$796,400	\$737,600

Rate	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
SF & Com per ERU	\$6.15	\$9.22	\$10.60	\$12.19	\$14.62	\$17.54	\$19.29
MF Single Story	\$4.31	\$6.46	\$7.42	\$8.54	\$10.24	\$12.29	\$13.51
MF Multi-Story	\$3.09	\$4.63	\$5.32	\$6.12	\$7.34	\$8.81	\$9.69

Stormwater Revenue Sufficiency – Slow CIP Execution

- Slower capital execution leads to slower phase-in of debt service requirements
- Projects being delayed to future years have additional cost and debt funding contingency
- Annual surplus used to fund additional Pay-go Capital each year



Stormwater – Final Thoughts

- City is considering moving from monthly utility bill to non-ad valorem assessments on property tax bill
 - › Consider Florida Statutes and language towards direct benefits to properties
- As City's stormwater fees increase there is likely to be a higher level of scrutiny. City may want to review:
 - › 3,460 square feet impervious area basis for commercial properties
 - › Fee application methodology for multi-family accounts
 - › Establishment of a stormwater mitigation credit policy

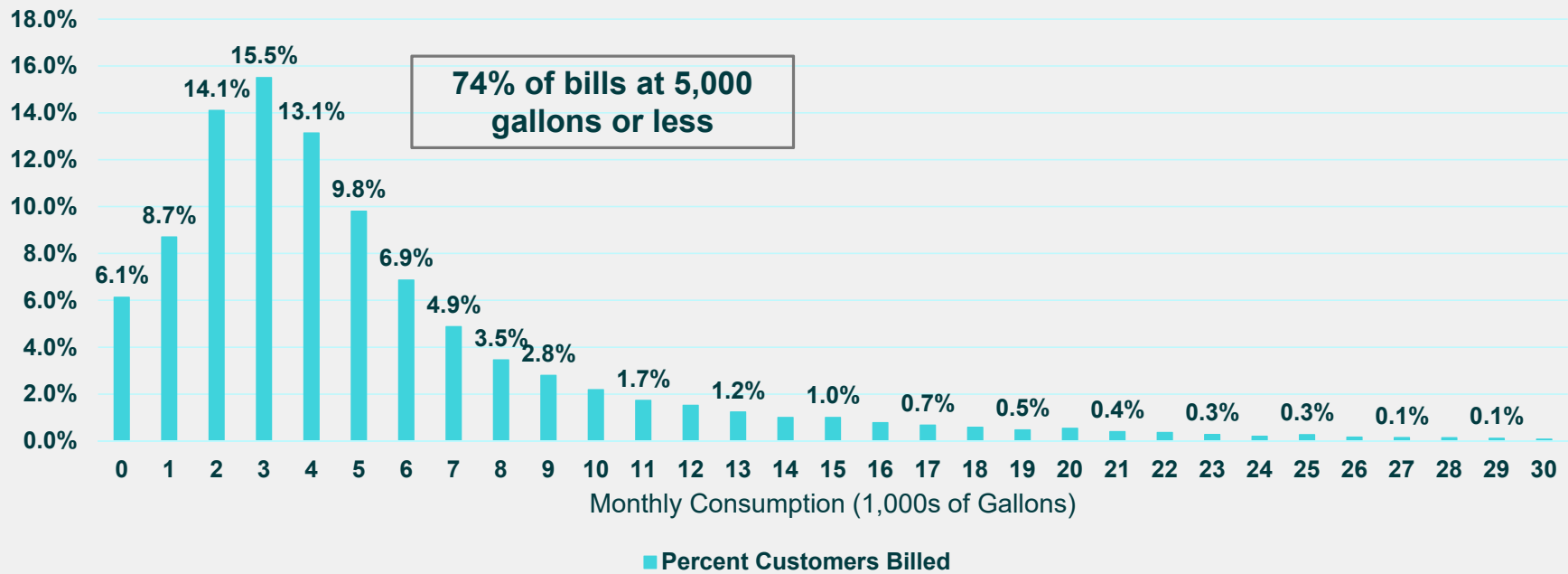
Water and Wastewater Rate Design Alternatives



Rate Structure Discussion and Approach

- Unify base charges between classes
- Unify base charges for all single family connections
- Re-align usage tiers to promote conservation
- Adjust larger meter size factors to align with industry standards
- Rate adjustments identified are more for clean up and consistency

Single-Family Residential Water Bill Frequency Chart



Rate Structure Option 1 Introduction

- Residential usage charges existing blocks from (0 – 15k, 15k – 30k, above 30k)
 - › Not very effective in promoting conservation (most bills at 5k gallons or less)
- Proposed usage charge blocks from (0 – 4k, 4k – 8k, 8k – 12k, above 12k)
 - › First block provides incentive for low users to sustain usage levels
 - › Rates designed to promote conservation
- Slight decrease on water base charges (commercial to AWWA factors)
- Slight increase on wastewater base charges (commercial to AWWA factors)
- Slight decrease on wastewater usage charges

Rate Structure Option 1 – Water

Residential

Rate Component	FY 2021	Rate Design
Base Charge		
5/8" Meter	\$27.65	\$24.95
1" Meter	\$46.11	\$24.95
Usage Charges		
Block 1	\$4.53	\$4.24
Block 2	\$5.53	\$6.24
Block 3	\$6.91	\$6.99
Block 4	N/A	\$8.73
Consumption Blocks (in 1,000s)		
Block 1	0 - 15	0 – 4
Block 2	15 - 30	4 – 8
Block 3	Above 30	8 – 12
Block 4	N/A	Above 12

Commercial

Rate Component	FY 2021	Rate Design
Base Charge		
5/8" Meter	\$26.25	\$24.95
1" Meter	\$68.25	\$62.38
1 ½" Meter	\$155.32	\$124.75
2" Meter	\$267.73	\$199.60
4" Meter	\$1,076.15	\$623.75
6" Meter	\$2,418.31	\$1,247.50
8" Meter	\$4,299.17	\$1,996.00
Usage Charges (all usage)	\$4.78	\$5.49

Rate Structure Option 1 – Wastewater

Residential

Rate Component	FY 2021	Rate Design
Base Charge		
5/8" Meter	\$12.24	\$15.00
1" Meter	\$20.38	\$15.00
Usage Charges (up to 15,000 gallons)	\$8.45	\$8.13

Commercial

Rate Component	FY 2021	Rate Design
Base Charge		
5/8" Meter	\$11.61	\$15.00
1" Meter	\$30.18	\$37.50
1 ½" Meter	\$67.26	\$75.00
2" Meter	\$118.35	\$120.00
4" Meter	\$475.66	\$375.00
6" Meter	\$1,068.56	\$750.00
8" Meter	\$1,899.64	\$1,200.00
Usage Charges (all usage)	\$8.45	\$8.13

Rate Structure Option 1

Residential 5/8-inch Meter

Usage (000s)	FY 2021 Existing Rates	Calculated Rates	\$ Change	% Change
0	\$39.89	\$39.95	\$0.06	0.15%
3	\$78.83	\$77.06	(\$1.77)	-2.24%
5	\$104.79	\$103.80	(\$0.99)	-0.94%
8	\$143.73	\$146.91	\$3.18	2.21%
15	\$234.59	\$257.96	\$23.37	9.96%

Residential 1-inch Meter

Usage (000s)	FY 2021 Existing Rates	Calculated Rates	\$ Change	% Change
0	\$66.49	\$39.95	(\$26.54)	-39.92%
3	\$105.43	\$77.06	(\$28.37)	-26.90%
8	\$170.33	\$146.91	(\$23.42)	-13.75%
15	\$261.19	\$257.96	(\$3.23)	-1.24%
20	\$288.84	\$301.62	\$12.78	4.42%

Multi-family/Commercial 1-inch Meter

Usage (000s)	FY 2021 Existing Rates	Calculated Rates	\$ Change	% Change
0	\$98.43	\$99.88	\$1.45	1.47%
5	\$164.58	\$167.98	\$3.39	2.06%
10	\$230.73	\$236.07	\$5.34	2.31%
15	\$296.88	\$304.17	\$7.28	2.45%
25	\$429.18	\$440.36	\$11.18	2.60%

Multi-family/Commercial 2-inch Meter

Usage (000s)	FY 2021 Existing Rates	Calculated Rates	\$ Change	% Change
0	\$386.08	\$319.60	(\$66.48)	-17.22%
25	\$716.83	\$660.08	(\$56.76)	-7.92%
50	\$1,047.58	\$1,000.55	(\$47.03)	-4.49%
100	\$1,709.08	\$1,681.50	(\$27.58)	-1.61%
125	\$2,039.83	\$2,021.98	(\$17.85)	-0.88%

Rate Structure Option 2 Introduction

- Similar overall adjustments to consumption blocks
- Maintain water base charge level (commercial to AWWA factors)
- Maintain wastewater base charge level (commercial to AWWA factors)

Rate Structure Option 2 – Water

Residential

Rate Component	FY 2021	Rate Design
Base Charge		
5/8" Meter	\$27.65	\$27.65
1" Meter	\$46.11	\$27.65
Usage Charges		
Block 1	\$4.53	\$4.28
Block 2	\$5.53	\$5.94
Block 3	\$6.91	\$6.65
Block 4	N/A	\$8.31
Consumption Blocks (in 1,000s)		
Block 1	0 - 15	0 – 4
Block 2	15 - 30	4 – 8
Block 3	Above 30	8 – 12
Block 4	N/A	Above 12

Commercial

Rate Component	FY 2021	Rate Design
Base Charge		
5/8" Meter	\$26.25	\$27.65
1" Meter	\$68.25	\$69.13
1 ½" Meter	\$155.32	\$138.25
2" Meter	\$267.73	\$221.20
4" Meter	\$1,076.15	\$691.25
6" Meter	\$2,418.31	\$1,382.50
8" Meter	\$4,299.17	\$2,212.00
Usage Charges (all usage)	\$4.78	\$5.23

Rate Structure Option 2 – Wastewater

Residential

Rate Component	FY 2021	Rate Design
Base Charge		
5/8" Meter	\$12.24	\$12.25
1" Meter	\$20.38	\$12.25
Usage Charges (up to 15,000 gallons)	\$8.45	\$8.59

Commercial

Rate Component	FY 2021	Rate Design
Base Charge		
5/8" Meter	\$11.61	\$12.25
1" Meter	\$30.18	\$30.63
1 ½" Meter	\$67.26	\$61.25
2" Meter	\$118.35	\$98.00
4" Meter	\$475.66	\$306.25
6" Meter	\$1,068.56	\$612.50
8" Meter	\$1,899.64	\$980.00
Usage Charges (all usage)	\$8.45	\$8.59

Rate Structure Option 2

Residential 5/8-inch Meter

Usage (000s)	FY 2021 Existing Rates	Calculated Rates	\$ Change	% Change
0	\$39.89	\$39.90	\$0.01	0.03%
3	\$78.83	\$78.50	(\$0.33)	-0.42%
5	\$104.79	\$105.89	\$1.10	1.05%
8	\$143.73	\$149.47	\$5.74	3.99%
15	\$234.59	\$261.14	\$26.55	11.32%

Residential 1-inch Meter

Usage (000s)	FY 2021 Existing Rates	Calculated Rates	\$ Change	% Change
0	\$66.49	\$39.90	(\$26.59)	-39.99%
3	\$105.43	\$78.50	(\$26.94)	-25.55%
8	\$170.33	\$149.47	(\$20.86)	-12.25%
15	\$261.19	\$261.14	(\$0.05)	-0.02%
20	\$288.84	\$302.70	\$13.86	4.80%

Multi-family/Commercial 1-inch Meter

Usage (000s)	FY 2021 Existing Rates	Calculated Rates	\$ Change	% Change
0	0	\$98.43	\$99.76	\$1.33
5	5	\$164.58	\$168.84	\$4.25
10	10	\$230.73	\$237.91	\$7.18
15	15	\$296.88	\$306.99	\$10.11
25	25	\$429.18	\$445.14	\$15.96

Multi-family/Commercial 2-inch Meter

Usage (000s)	FY 2021 Existing Rates	Calculated Rates	\$ Change	% Change
0	\$386.08	\$319.20	(\$66.88)	-17.32%
25	\$716.83	\$664.58	(\$52.26)	-7.29%
50	\$1,047.58	\$1,009.95	(\$37.63)	-3.59%
100	\$1,709.08	\$1,700.70	(\$8.38)	-0.49%
125	\$2,039.83	\$2,046.08	\$6.25	0.31%

Final Thoughts

- City's water and wastewater utility is in a very strong financial position
 - › Relatively minor rate adjustments required to complete significant level of capital improvements
 - › Rate alternatives identified represent clean up and simplification along with promoting conservation
- City's stormwater utility requires significant improvements, which are placing upward pressure on the rate level