

**SPECIAL CALL VERO BEACH UTILITIES COMMISSION MEETING
MONDAY, SEPTEMBER 12, 2022 - 9:30 A.M.
CITY HALL, COUNCIL CHAMBERS, VERO BEACH, FLORIDA**

A G E N D A

- 1. CALL TO ORDER**
- 2. ITEM FOR DISCUSSION**
 - A) [Review and Discussion of 2022 Utility Rate Study](#)**
- 3. PUBLIC COMMENT**
- 4. ADJOURNMENT**

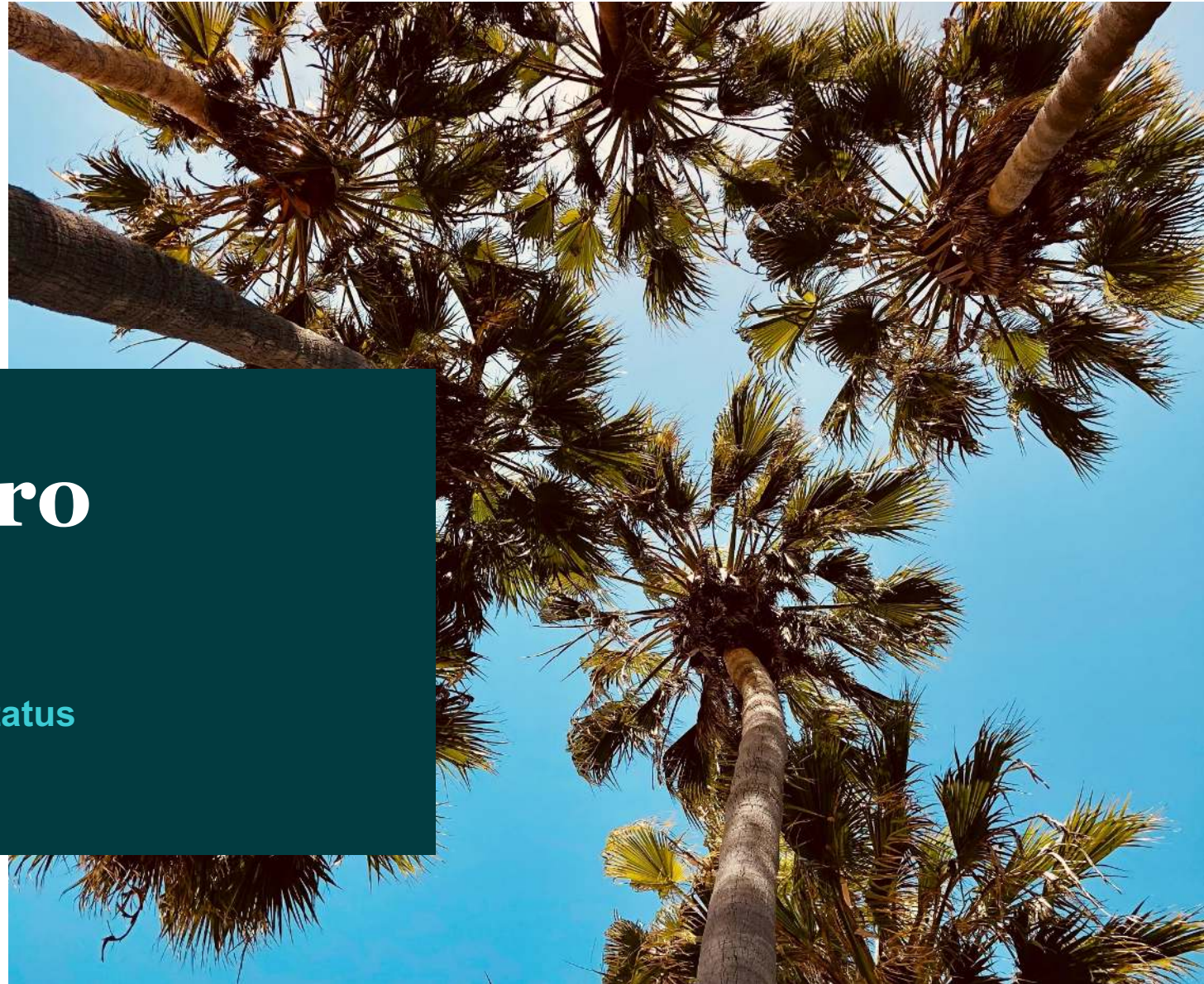
This is a Public Meeting. Should any interested party seek to appeal any decision made by the Commission with respect to any matter considered at such meeting or hearing, he will need a record of the proceedings and that, for such purpose he may need to ensure that a record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. Anyone who needs a special accommodation for this meeting may contact the City's Americans with Disabilities Act (ADA) Coordinator at 978-4920 at least 48 hours in advance of the meeting.



City of Vero Beach

2022 Utility Rate Study Status

September 12-13, 2022



Agenda

- Utility Fund Financial Forecast Update
 - › Review and update of May 2021 Utility Fund financial / rate presentation
 - › Overall system-wide rate increase recommendations
- Rate Structure
 - › Rate design
 - › Proposed rate schedules
 - › Comparisons and bill impacts
- Next Steps

Project Objectives

1. Identify user rates to fund long-term sustainable utility infrastructure
 - Water, wastewater, and reuse rates
 - Previous cost of service study performed in 2009
 - No City rate adjustments since 2010
 - Featured capital project is new water reclamation facility at existing airport property
2. Simplify rate design

New Water Reclamation Facility Costs

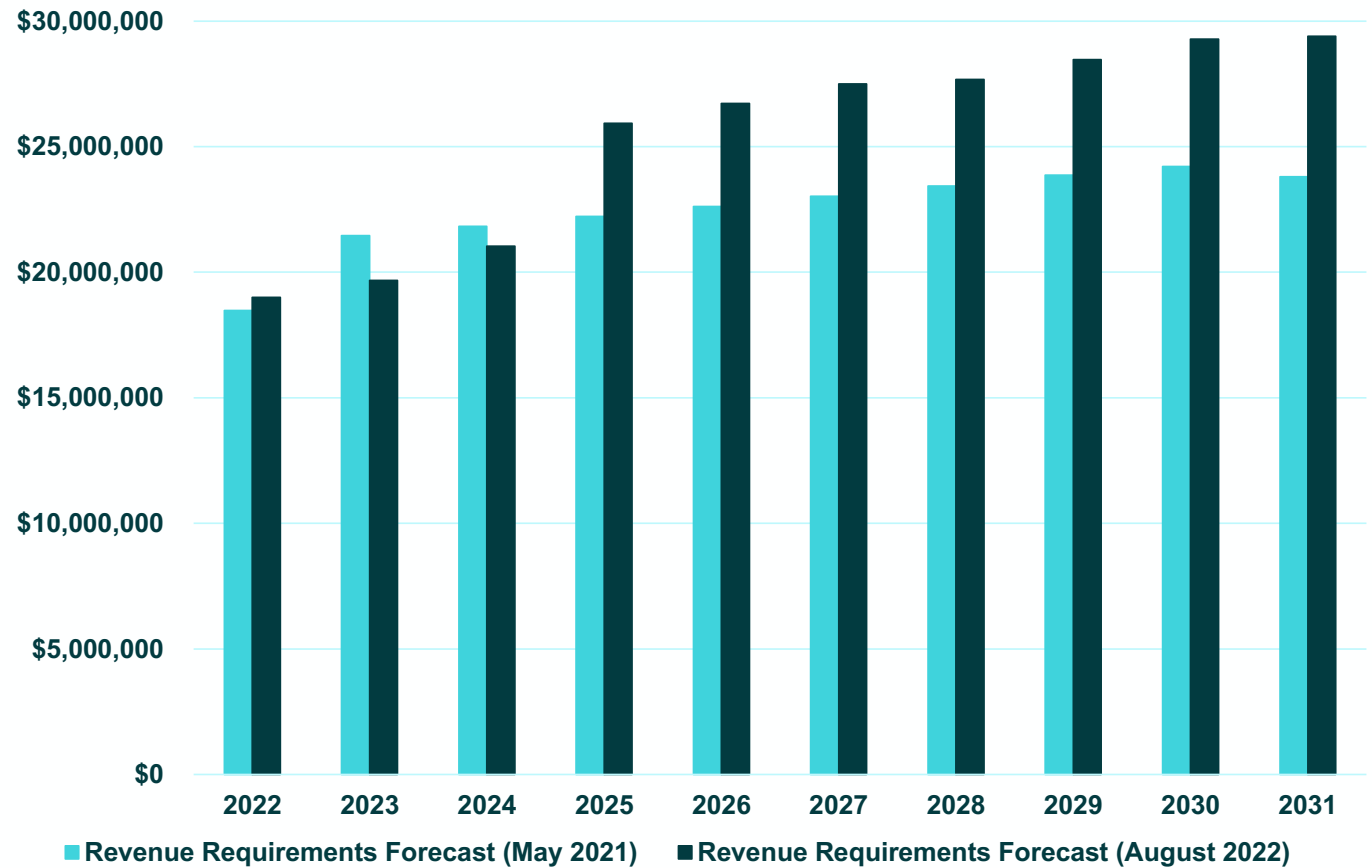
Description	City Council approval of design contract award – March 1, 2022		Estimated construction start – October 1, 2023		Total
	FY 2022	FY 2023	FY 2024	FY 2025	
<u>Engineering:</u>					
Design and Permitting – WRF	\$809,435	\$2,869,813	\$0	\$0	\$3,679,248
Construction Engineering & Inspection – WRF	0	0	1,601,399	1,601,399	3,202,798
Design and Permitting – RW Ground Storage Tank & Pump Station	210,940	0	0	0	210,940
Construction Engineering & Inspection – RW Ground Storage Tank & Pump Station	0	0	183,624	0	183,624
Subtotal Engineering	\$1,020,375	\$2,869,813	\$1,785,023	\$1,601,399	\$7,276,610
<u>Construction:</u>					
Construction – WRF	\$0	\$0	\$40,903,566	\$29,802,685	\$70,706,251
Construction – RW Ground Storage Tank & Pump Station	0	0	4,053,750	0	4,053,750
Subtotal Construction	\$0	\$0	\$44,957,316	\$29,802,685	\$74,760,001
Total Project Costs	\$1,020,375	\$2,869,813	\$46,742,339	\$31,404,084	\$82,036,611

• *Based on City's cost estimate as of May 10, 2022*

Financial Analysis Summary – Utility Fund with New WRF & Clean Waterways Act

Changes since May 2021:

- Higher borrowing costs
 - Now \$80.8 million (was \$60 million)
 - Projected Oct. 2023 issuance with 4.8% true interest cost (was 3.5% in May 2021)
- Higher O&M expenses
 - \$2.1 million higher in FY 2025 (Personnel, electricity, and chemicals)



Financial Analysis Summary – Utility Fund with New WRF

Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
O&M Expenses	\$13,993,082	\$15,447,292	\$16,168,300	\$16,602,750	\$17,108,300	\$17,628,400	\$17,554,598	\$18,106,898	\$18,676,198	\$19,262,398
Debt Service	1,920,950	791,542	791,542	4,711,792	4,861,792	5,004,292	5,139,292	5,266,792	5,386,792	4,799,021
<u>Other Expenditures:</u>										
Transfer to GF	1,031,000	1,151,200	1,363,900	1,543,700	1,591,400	1,628,400	1,666,300	1,705,000	1,744,600	1,785,100
R&R (12.0%)	2,059,500	2,283,600	2,709,100	3,068,700	3,164,300	3,238,100	3,313,800	3,391,200	3,470,300	3,551,300
Total Other Expenditures	\$3,090,500	\$3,434,800	\$4,073,000	\$4,612,400	\$4,755,700	\$4,866,500	\$4,980,100	\$5,096,200	\$5,214,900	\$5,336,400
Total Revenue Requirements	\$19,004,532	\$19,673,634	\$21,032,842	\$25,926,942	\$26,725,792	\$27,499,192	\$27,673,990	\$28,469,890	\$29,277,890	\$29,397,819
Less: Other Revenue	447,100	325,850	325,900	325,900	325,900	325,900	325,900	325,900	325,900	325,900
Net Revenue Requirements	\$18,557,432	\$19,347,784	\$20,706,942	\$25,601,042	\$26,399,892	\$27,173,292	\$27,348,090	\$28,143,990	\$28,951,990	\$29,071,919
Revenue from Projected Rates	\$17,162,900	\$19,029,800	\$22,575,900	\$25,572,800	\$26,368,800	\$26,984,400	\$27,615,500	\$28,260,400	\$28,919,700	\$29,594,600
Surplus/(Deficit)	(\$1,394,532)	(\$317,984)	\$1,868,958	(\$28,242)	(\$31,092)	(\$188,892)	\$267,410	\$116,410	(\$32,290)	\$522,681
Projects to be Reimbursed from Bond Proceeds	(1,020,375)	(2,869,813)	3,890,188	0	0	0	0	0	0	0
Additional R&R Fund Transfers	(3,800,000)	(1,800,000)	0	(550,000)	0	(860,000)	0	0	0	0
Ending Fund Balance	\$9,872,743	\$4,884,946	\$10,644,092	\$10,065,850	\$10,034,758	\$8,985,866	\$9,253,276	\$9,369,686	\$9,337,395	\$9,860,076
Senior DSC	3.20	N/A	N/A	2.37	2.36	2.30	2.39	2.34	2.30	2.23

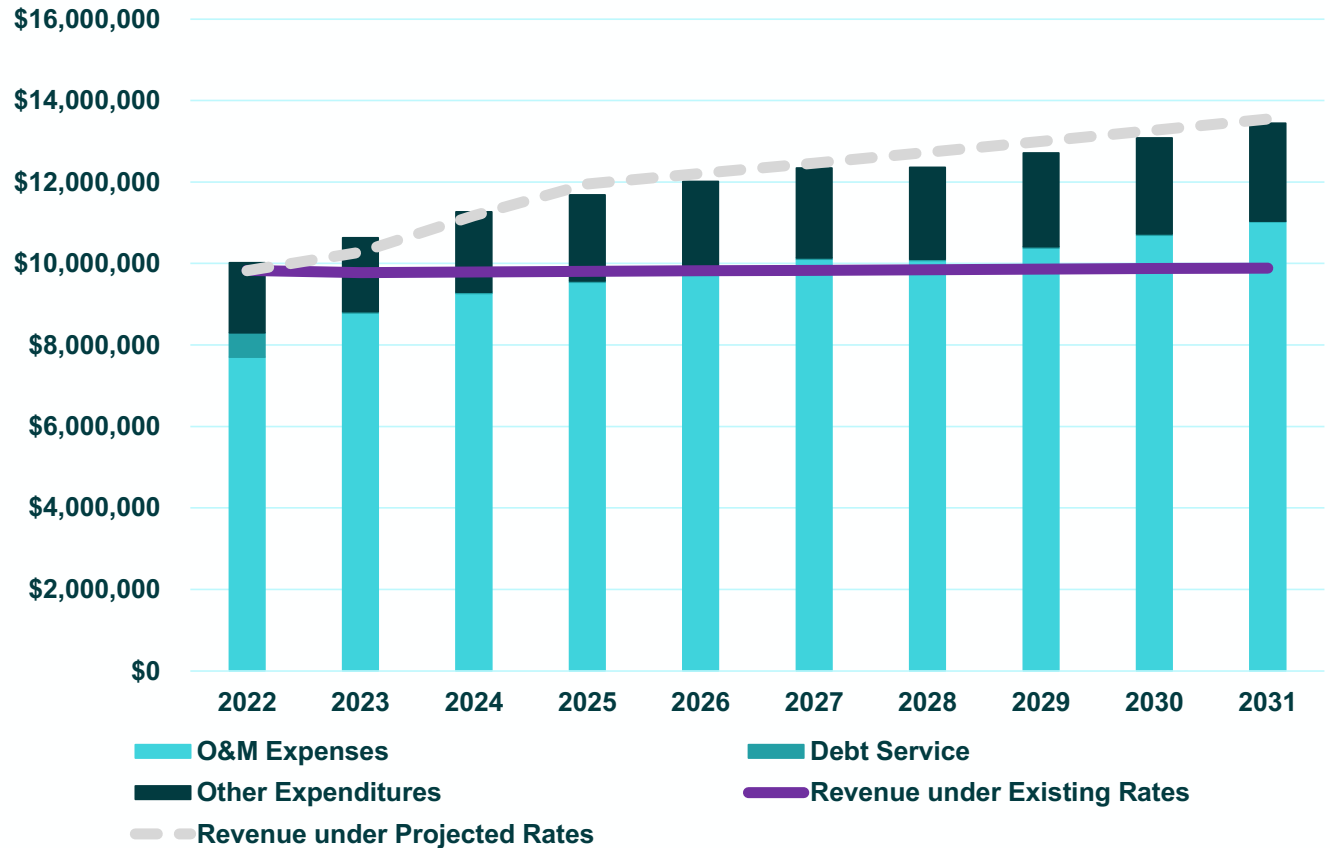
Water Revenue Sufficiency under Projected Rates

Revenues:

- 7.0% per year rate increase recommended in 2023 – 2025 (with rate structure changes in 2023)
- 2.0% per year rate increase projected in 2026 – 2031 due to inflation

Expense Assumptions:

- O&M expenses escalating on average at 4.1% per year
- Other expenditures include transfer to the General Fund (6.0% of revenues) and R&R transfers (12.0% of rate revenues)
- Series 2013 debt service matures in 2022. Subordinate SRF existing debt service matures in 2031



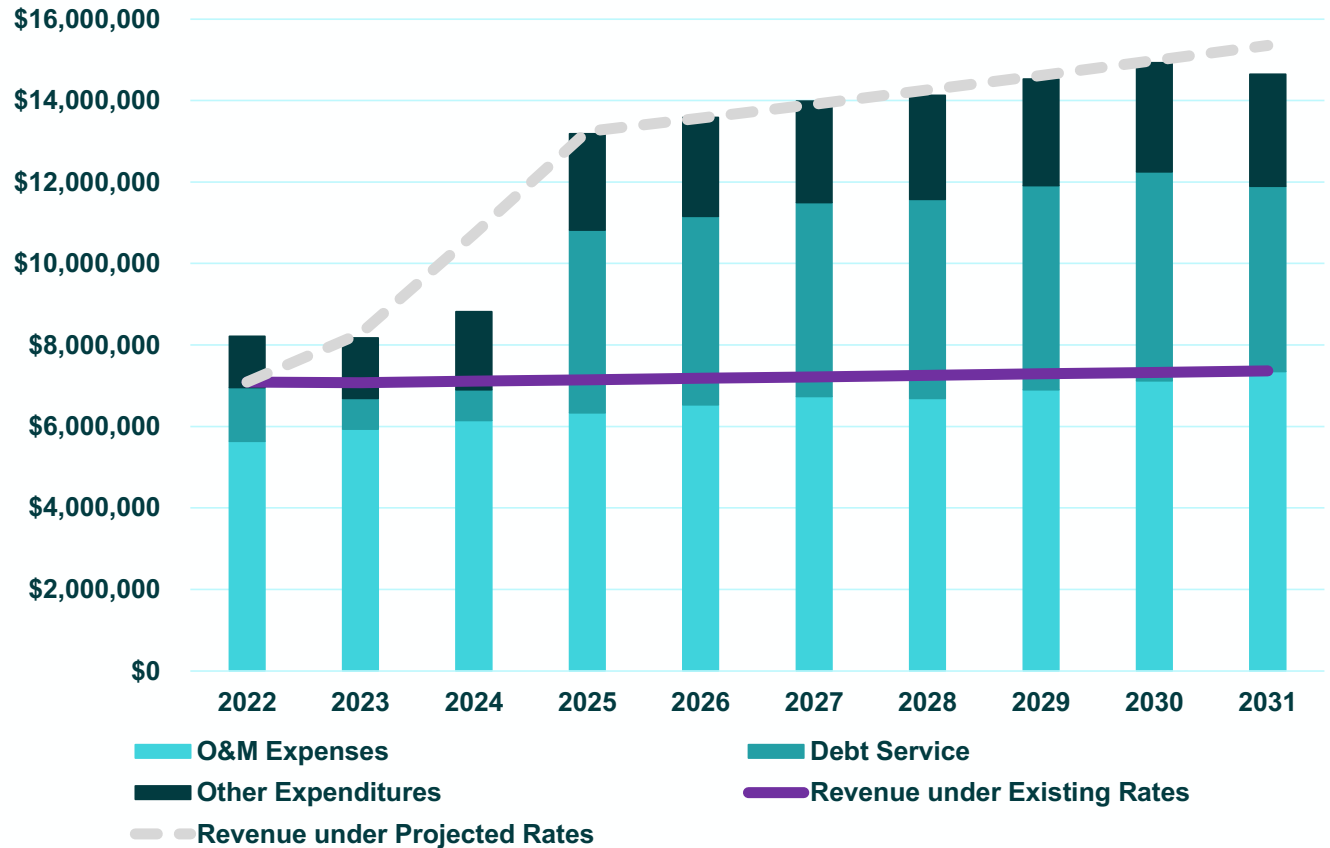
Wastewater Revenue Sufficiency under Projected Rates

Revenues:

- 23.0% per year rate increase recommended in 2023 – 2025 (with rate structure changes in 2023)
- 2.0% per year rate increase projected in 2026 – 2031 due to inflation

Expense Assumptions:

- O&M expenses escalating on average at 3.0% per year
- Other expenditures include transfer to the General Fund (6.0% of revenues) and R&R transfers (12.0% of rate revenues)
- Series 2013 debt service matures in 2022. Subordinate SRF existing debt service matures in 2030
- Proposed Series 2023 debt service begins in 2025



Rate Design Criteria

- Consolidate rate structures (3 service areas to 1)
- Tradeoffs
 - › Existing rates vary widely between each service area
 - › Inside City currently have higher base charges than outside City and Indian River Shores
 - › Inside City currently have much lower water usage rates, especially for block 1 and block 4
 - › Key takeaway: under the proposed rate structure, rates will be uniform among each service area moving forward

Rate Design Criteria Cont.

- Base charges
 - › Meter size approach
 - › Consolidate small meter size rates – 5/8” and 3/4” consolidate into a single standard rate
 - › Base charge revenue
 - Maintain existing revenue % from monthly base charges
 - 32% water revenue from base charges
 - 52% wastewater revenue from base charges
- Water usage charges
 - › Consolidate different service area ranges
 - › Maintain the four usage tiers on residential potable water*
 - › Residential water usage pricing:
 - Block 1 – essential use; 0.25 of average usage rate; maintains “lifeline rate structure” for up to 3,000 gallons per month
 - Block 2 – average use; 1.00 of average usage rate for 3,001 to 12,000 gallons per month
 - Block 3 – first irrigation conservation signal; 2.00 of average usage rate for 12,001 to 20,000 gallons per month
 - Block 4 – stronger irrigation conservation signal; 2.50 of average usage rate for usage above 20,000 gallons per month

* All service areas currently have four water usage tiers, but at difference gallon ranges and usage rates.

Water Rate Consolidation

Existing Inside City

Rate Component	Amount
Residential Base Charge	
5/8" Meter Base	\$13.60
Consumption Charges (per kgal)	
Block 1 (0 – 5,000 gallons)	\$0.83
Block 2 (5,001 – 15,000 gallons)	\$2.78
Block 3 (15,001 – 30,000 gallons)	\$5.56
Block 4 (Above 30,000 gallons)	\$6.95

Existing County and Indian River Shores

Rate Component	Amount
Residential Base Charge	
1 ERU (5/8" x 3/4")	\$8.75
Consumption Charges (per kgal)	
Block 1 (0 – 4,000 gallons)	\$2.20
Block 2 (4,001 – 7,000 gallons)	\$2.57
Block 3 (7,001 – 12,000 gallons)	\$4.95
Block 4 (Above 12,000 gallons)	\$9.75

Proposed Consolidated FY 2023

Rate Component	Amount
Residential Base Charge	
Less than 1" Meter Base	\$12.45
Consumption Charges (per kgal)	
Block 1 (0 – 3,000 gallons)	\$0.95
Block 2 (3,001 – 12,000 gallons)	\$3.80
Block 3 (12,001 – 20,000 gallons)	\$7.60
Block 4 (Above 20,000 gallons)	\$9.50

Proposed FY 2023 Potable Water Rates

Residential / Multi-Residential

Rate Component	Amount
Residential Base Charge	
5/8" x 3/4" Meter	\$12.45
1" Meter	\$20.41
1.5" Meter	\$33.67
2" Meter	\$49.57
Multi-Residential (per unit)	\$11.21
Consumption Charges (per kgal)	
Block 1 (0 – 3,000 gallons)	\$0.95
Block 2 (3,001 – 12,000 gallons)	\$3.80
Block 3 (12,001 – 20,000 gallons)	\$7.60
Block 4 (Above 20,000 gallons)	\$9.50

Commercial

Rate Component	Amount
Base Charge	
5/8" x 3/4" Meter	\$12.45
1" Meter	\$20.41
1.5" Meter	\$33.67
2" Meter	\$49.57
3" Meter	\$91.99
4" Meter	\$139.71
6" Meter	\$272.28
Consumption Charges (per kgal)	
All Usage	\$3.80

Proposed FY 2023 Irrigation Rates

Residential

Rate Component	Amount
Residential Base Charge	
5/8" x 3/4" Meter	\$12.45
1" Meter	\$20.41
1.5" Meter	\$33.67
2" Meter	\$49.57
3" Meter	\$91.99
4" Meter	\$139.71
6" Meter	\$272.28
Consumption Charges (per kgal)	
Block 1 (0 – 10,000 gallons)	\$3.80
Block 2 (10,001 – 25,000 gallons)	\$7.60
Block 3 (Above 25,000 gallons)	\$9.50

Multi-Residential / Commercial

Rate Component	Amount
Base Charge	
5/8" x 3/4" Meter	\$12.45
1" Meter	\$20.41
1.5" Meter	\$33.67
2" Meter	\$49.57
3" Meter	\$91.99
4" Meter	\$139.71
6" Meter	\$272.28
Consumption Charges (per kgal)	
Block 1 (0 – 30,000 gallons)	\$3.80
Block 2 (30,001 – 50,000 gallons)	\$7.60
Block 3 (Above 50,000 gallons)	\$9.50

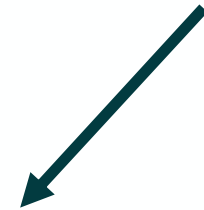
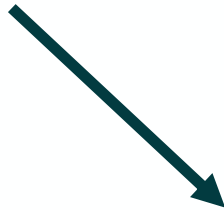
Wastewater Rate Consolidation

Existing Inside City

Rate Component	Amount
Residential Base Charge	
5/8" Meter Base	\$19.89
Consumption Charges (per kgal)	
Block 1 (0 – 10,000 gallons)	\$3.59

Existing County and Indian River Shores

Rate Component	Amount
Residential Base Charge	
1 ERU (5/8" x 3/4")	\$15.60
Consumption Charges (per kgal)	
Block 1 (0 – 12,000 gallons)	\$2.86



Proposed Consolidated FY 2023

Rate Component	Amount
Residential Base Charge	
Less than 1" Meter Base	\$23.04
Consumption Charges (per kgal)	
Block 1 (0 – 12,000 gallons)	\$4.18

Proposed FY 2023 Wastewater Rates

Residential / Multi-Residential

Rate Component	Amount
Residential Base Charge	
All Meter Sizes	\$23.04
Multi-Residential (per unit)	\$20.73
Consumption Charges (per kgal)	
Block 1 (0 – 12,000 gallons) *	\$4.18

Commercial

Rate Component	Amount
Base Charge	
5/8" x 3/4" Meter	\$23.04
1" Meter	\$41.42
1.5" Meter	\$72.09
2" Meter	\$108.86
3" Meter	\$206.97
4" Meter	\$317.31
6" Meter	\$623.85
Consumption Charges (per kgal)	
All Usage	\$4.18

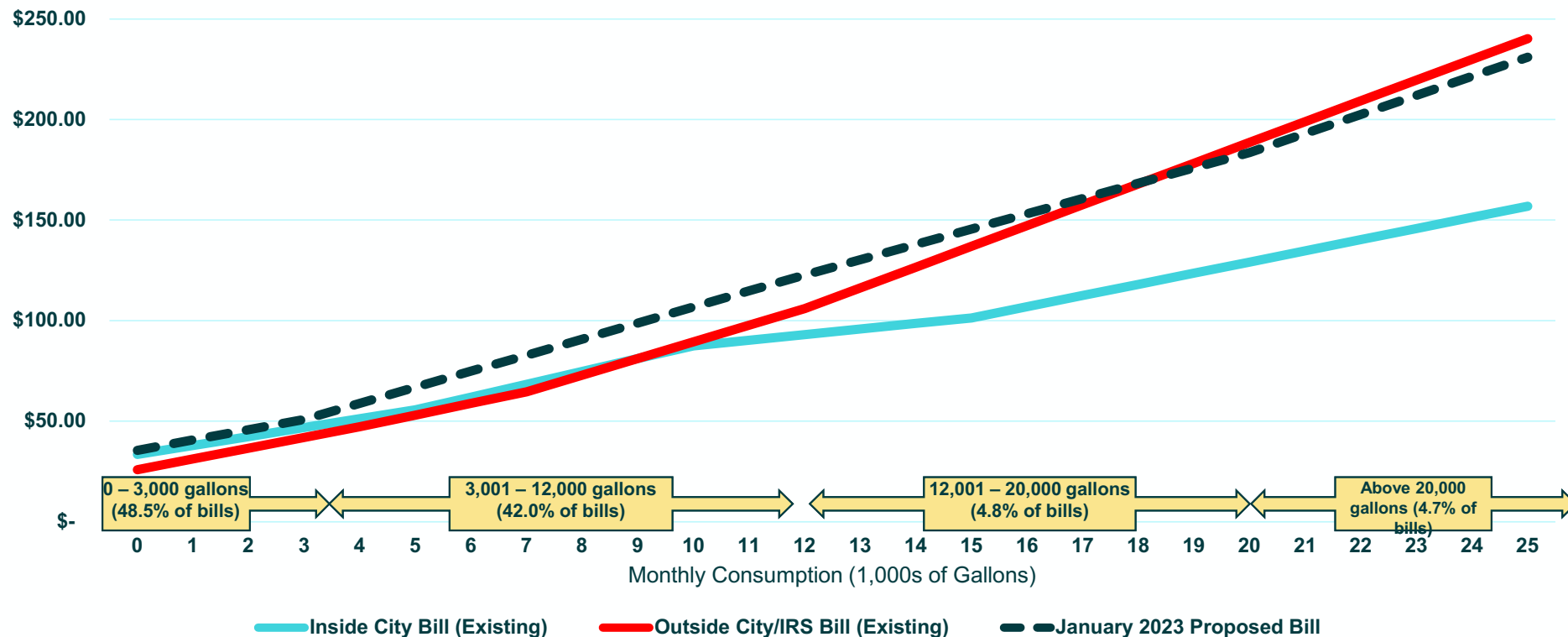
15 * Residential wastewater charges capped at 12,000 gallons per month.

Proposed Monthly Water and Wastewater Bill Impacts

Customer Class	Usage (gallons)	Existing Bill	FY 2023 Bill	\$ Change
Residential – 5/8” Meter	4,000	\$47.27 - \$51.17	\$58.86	\$7.69 - \$11.59
Commercial – 5/8” Meter (Inside City)	5,000	\$64.44	\$75.39	\$10.95
Commercial – 1” Meter (Inside City)	16,000	\$157.10	\$189.51	\$32.41
Commercial – 2” Meter (Inside City)	80,000	\$643.33	\$796.83	\$153.50

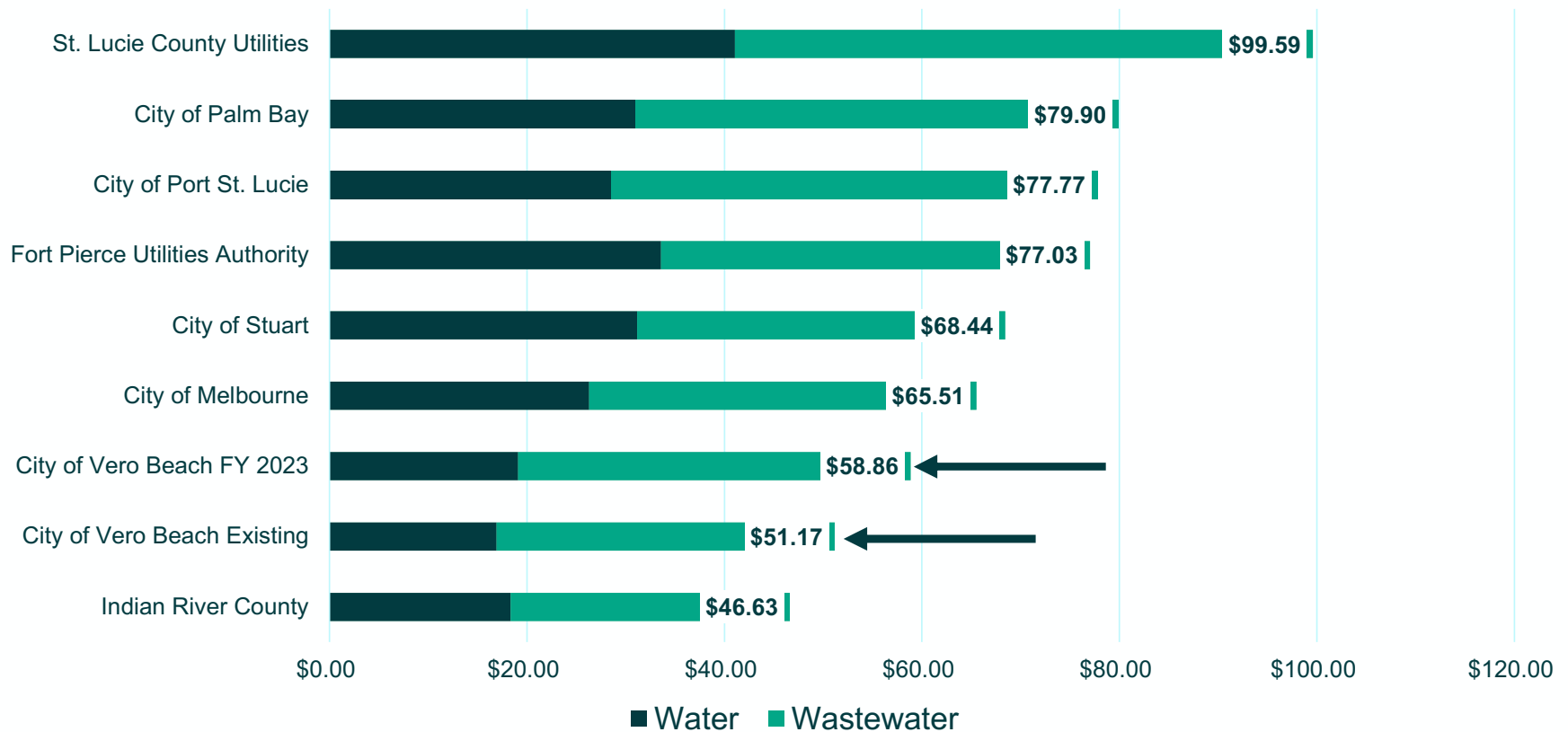
Note: Amounts above exclude the City’s utility tax and IRC franchise fee.

Residential Water & Wastewater Bill Comparison



Note: Dollar amounts above exclude the City's utility tax and IRC franchise fee. Percentages shown above represent the distribution of fiscal year 2021 residential (Less than 1-inch meter) customer bills between the consumption levels indicated.

Residential (Inside City) Comparison at 4,000 Gallons



Proposed Typical Residential Bills at 4,000 Gallons (Inside City; 5/8” Meter)

Description	Water Bill	Bill % Change	Wastewater Bill	Bill % Change	Combined Bill	Bill % Change
Existing	\$16.92		\$34.25		\$51.17	
January 2023	\$19.10	12.9%	\$39.76	16.1%	\$58.86	15.0%
October 2023	\$20.41	6.9%	\$48.89	23.0%	\$69.30	17.7%
October 2024	\$21.83	7.0%	\$60.12	23.0%	\$81.95	18.3%
October 2025	\$22.25	1.9%	\$61.29	1.9%	\$83.54	1.9%

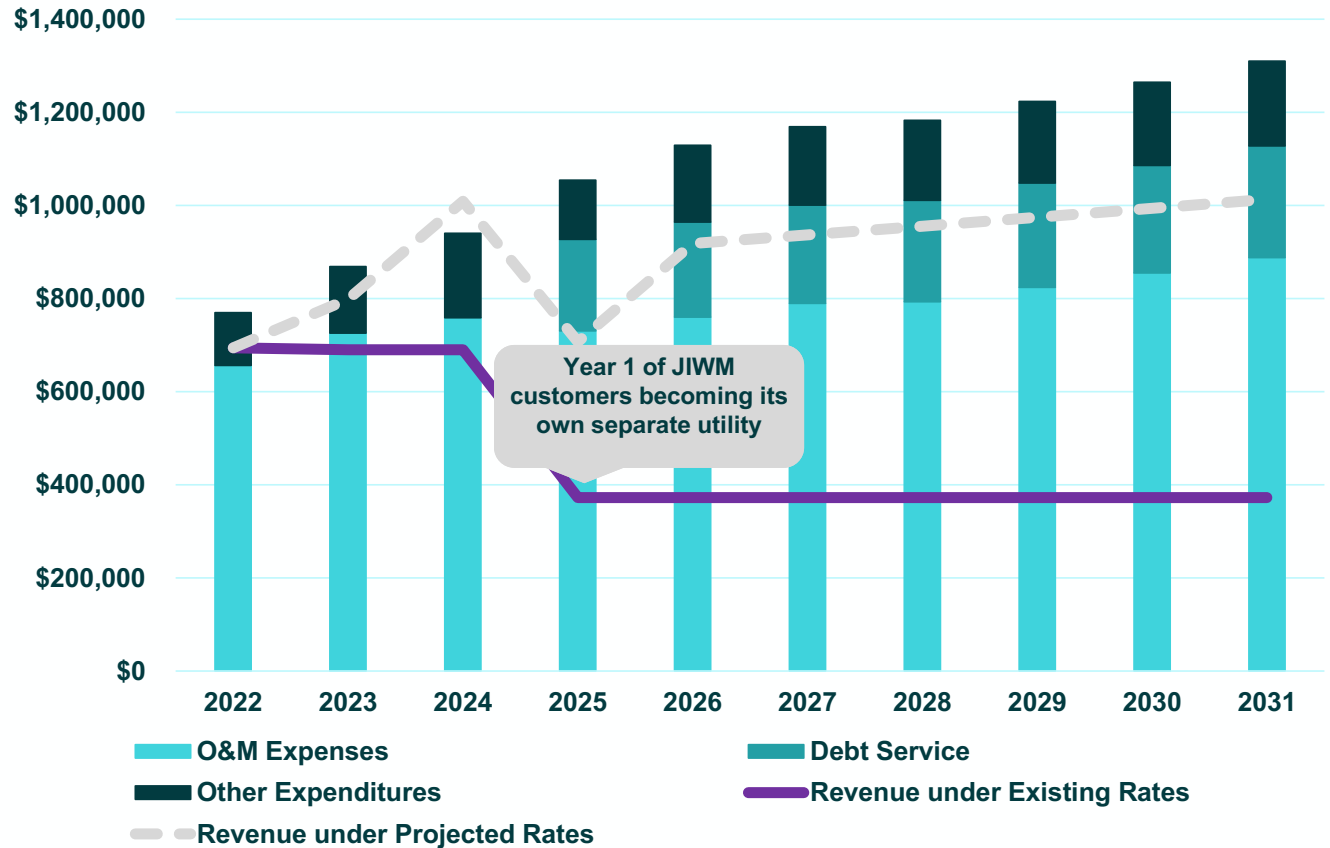
Reuse Revenue Sufficiency under Projected Rates

Revenues:

- 21.0% per year rate increase recommended in 2023 – 2024
- 30.0% per year rate increase recommended in 2025 – 2026
- 2.0% per year rate increase projected in 2027 – 2031 due to inflation

Expense Assumptions:

- O&M expenses escalating on average at 3.4% per year
- Other expenditures include transfer to the General Fund (6.0% of revenues) and R&R transfers (12.0% of rate revenues)
- Proposed Series 2023 debt service begins in 2025



Reuse Revenue Requirements (w/out JIWM)

Description	Existing (FY 2022)	FY 2026
O&M Expenses	\$656,271	\$759,596
Debt Service	\$0	\$204,273
Transfer to General Fund	30,930	54,900
Transfer to R&R Fund	82,500	109,900
Total Revenue Requirements	\$769,701	\$1,128,669
Reuse Revenue *	\$372,300	\$917,900

** Reuse revenues exclude Johns Island Water Management customers; FY 2026 revenues include proposed reuse rate increases.*

Proposed Reuse Rates

- \$0.67 per 1,000 gallons charged to all existing reuse customers
- Proposed reuse rates based on three customer classifications as shown below

Customer Classification	January 1, 2023	October 1, 2023	October 1, 2024	October 1, 2025
General Service	\$1.00	\$1.22	\$1.59	\$2.06
Master-Metered	\$0.84	\$1.02	\$1.33	\$1.72
Non-Pressure	\$0.67	\$0.67	\$0.67	\$0.87

Next Steps

- Request City Council approval to begin preparation of rate ordinance based on proposed rates and rate design
- Proposed implementation schedule:
 - › First reading of rate ordinance – October 18, 2022
 - › Provide notice of public hearing on rates to utility customers (via billing inserts) – October 20 to November 25, 2022
 - › Public hearing / adoption of rate ordinance – December 6, 2022
 - › Effective date of new rates and rate design – January 1, 2023
- Review revenue sufficiency in Summer 2023

Additional Information

Total Customers by System – Fiscal Year 2021

Description	Water System	Sewer System	Reuse System
Customer Accounts	13,687	10,255	108
Units/ERUs	19,875	16,142	N/A
Annual Metered Gallons (1,000s)	1,672,116	1,159,664	924,118
Average Monthly Use/Unit (Gallons)	7,000	6,000	713,000

Water Customers – Fiscal Year 2021

Description	Inside City	Outside City	Indian River Shores	Total
Residential				
Customer Accounts	6,342	2,915	2,079	11,336
Annual Metered Gallons (1,000s)	472,681	301,139	192,413	966,233
Average Monthly Use (gallons)	6,200	8,600	7,700	7,100
Multi-Residential				
Customer Accounts	414	79	113	606
Units/ERUs	3,830	1,047	1,444	6,321
Annual Metered Gallons (1,000s)	149,203	26,932	29,927	206,062
Average Monthly Use/Unit (gallons)	3,200	2,100	1,700	2,700
Commercial				
Customer Accounts	1,489	118	138	1,745
Units/ERUs	1,489	438	289	2,216
Annual Metered Gallons (1,000s)	371,245	80,999	47,577	499,821
Average Monthly Use/Acct. (gallons)	20,800	57,200	28,700	23,900

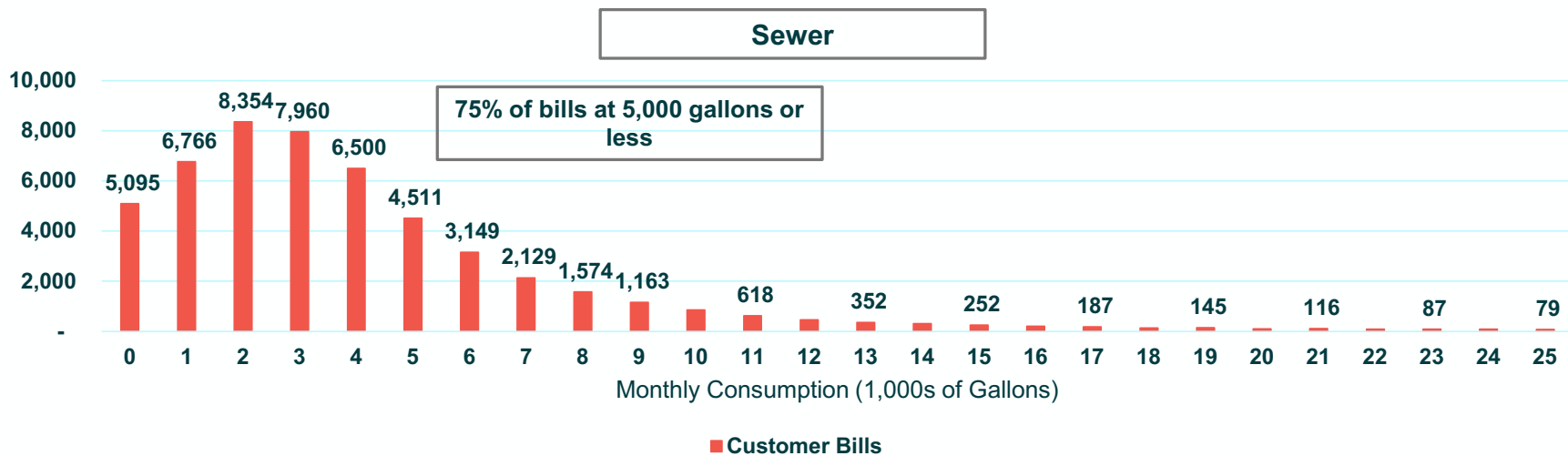
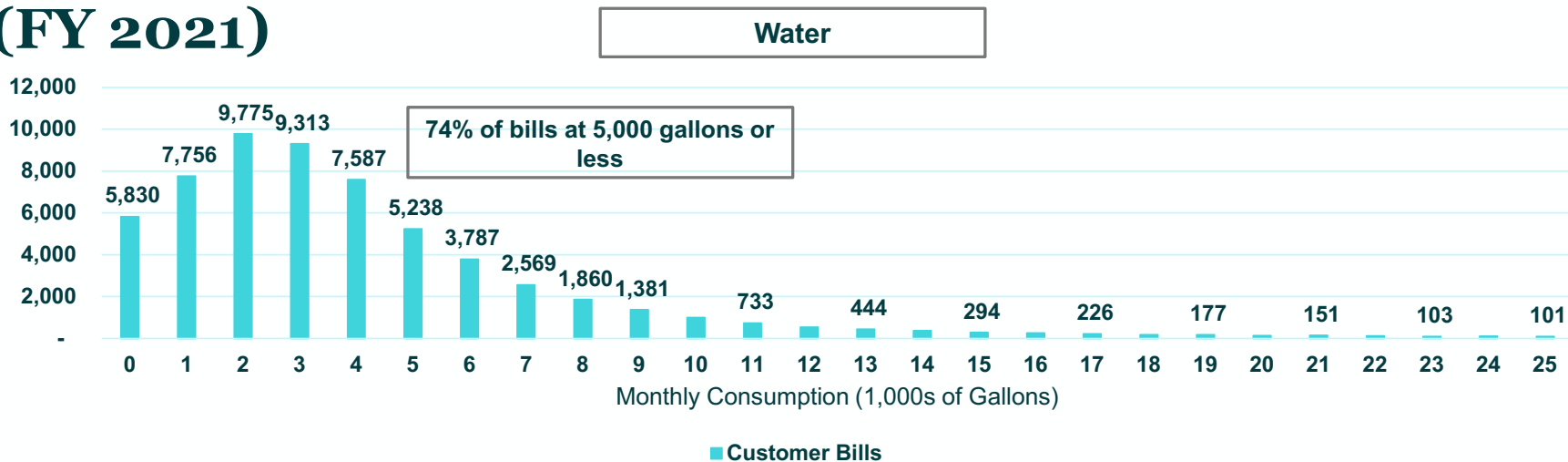
Sewer Customers – Fiscal Year 2021

Description	Inside City	Outside City	Indian River Shores	Total
Residential				
Customer Accounts	5,244	1,486	1,749	8,479
Annual Metered Gallons (1,000s)	367,324	173,182	135,732	676,238
Average Monthly Use (gallons)	5,800	9,700	6,500	6,600
% of Water Res. Customers	82.7%	51.0%	84.1%	74.8%
Multi-Residential				
Customer Accounts	342	72	111	525
Units/ERUs	3,708	1,024	1,441	6,173
Annual Metered Gallons (1,000s)	114,277	26,405	29,633	170,315
Average Monthly Use/Unit (gallons)	2,600	2,100	1,700	2,300
Commercial				
Customer Accounts	1,144	40	67	1,251
Units/ERUs	1,144	224	121	1,489
Annual Metered Gallons (1,000s)	264,984	30,632	17,495	313,111
Average Monthly Use/Acct. (gallons)	19,300	63,800	21,800	20,900

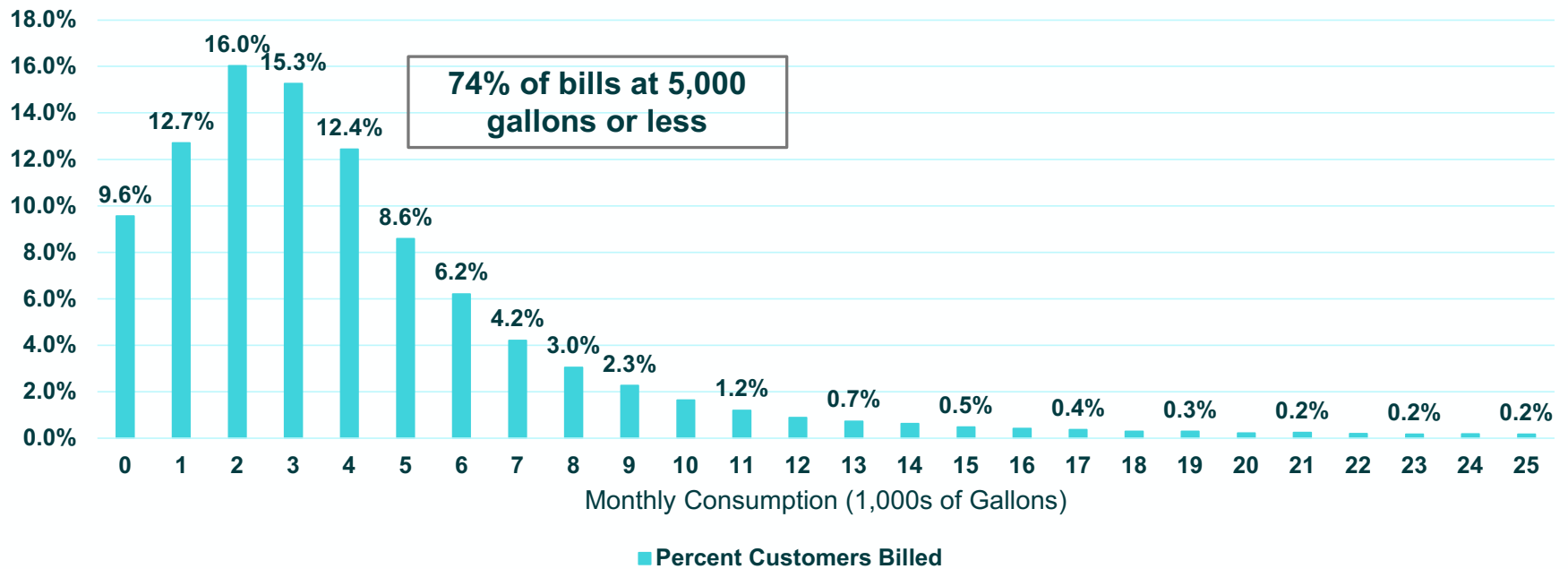
Reuse Customers – Fiscal Year 2021

Description	Inside City	Outside City	Indian River Shores	Total
Pressure				
Customer Accounts	76	10	19	105
Annual Metered Gallons (1,000s)	164,648	57,223	475,620	697,491
Average Monthly Use (gallons)	180,500	476,900	2,086,100	553,600
Non-Pressure				
Customer Accounts	1	1	1	3
Annual Metered Gallons (1,000s)	76,540	29,135	120,952	226,627
Average Monthly Use (gallons)	6,378,300	2,427,900	10,079,300	6,295,200

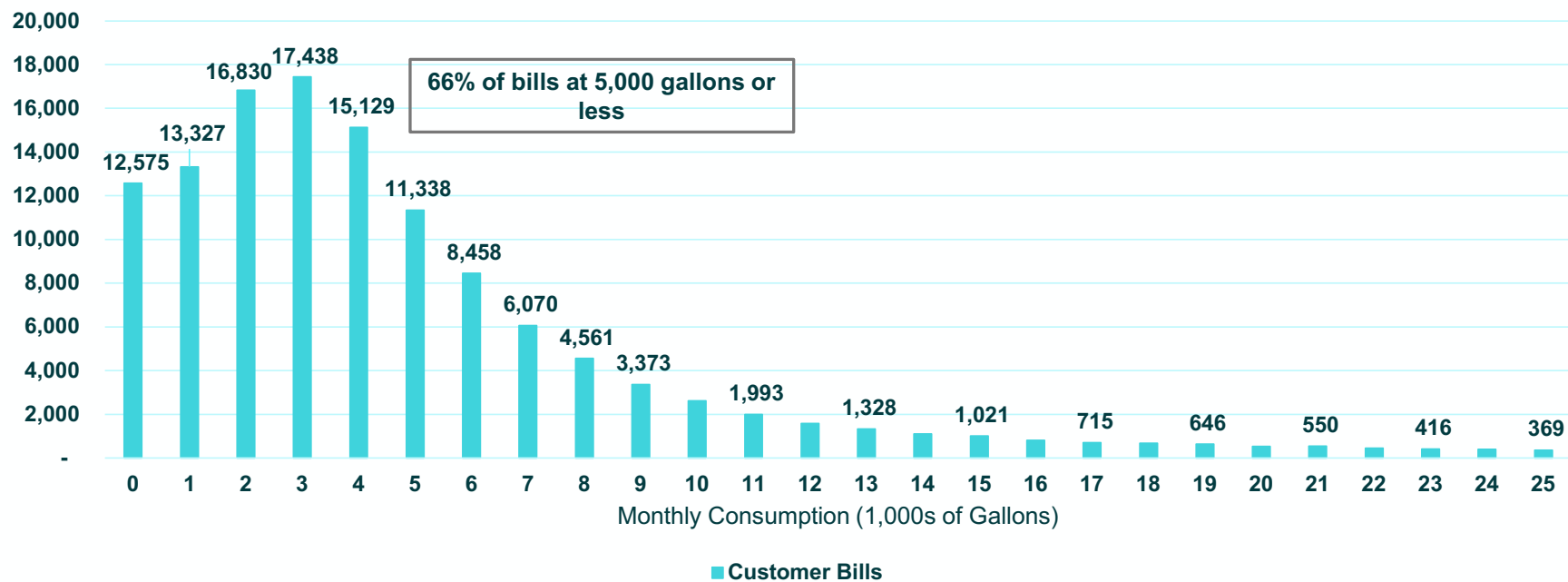
5/8-Inch Residential – Inside City Bill Frequency Chart (FY 2021)



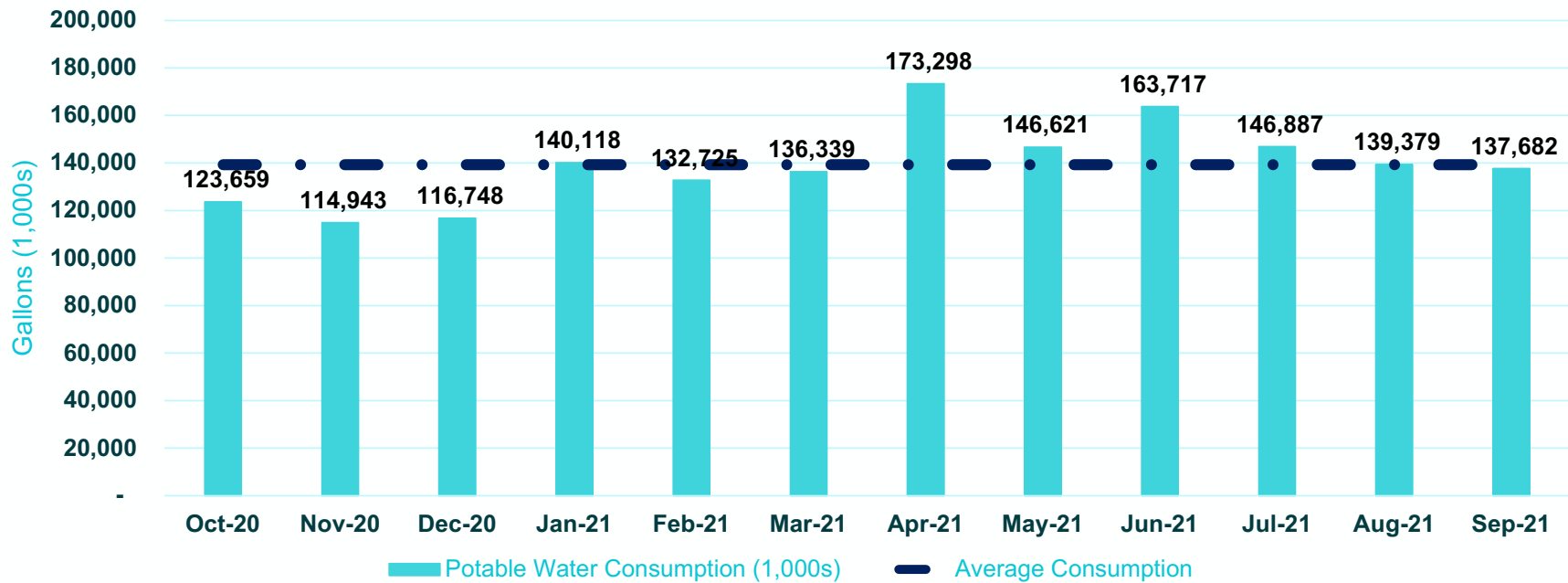
5/8-Inch Residential – Inside City Potable Water Bill Frequency Chart (FY 2021)



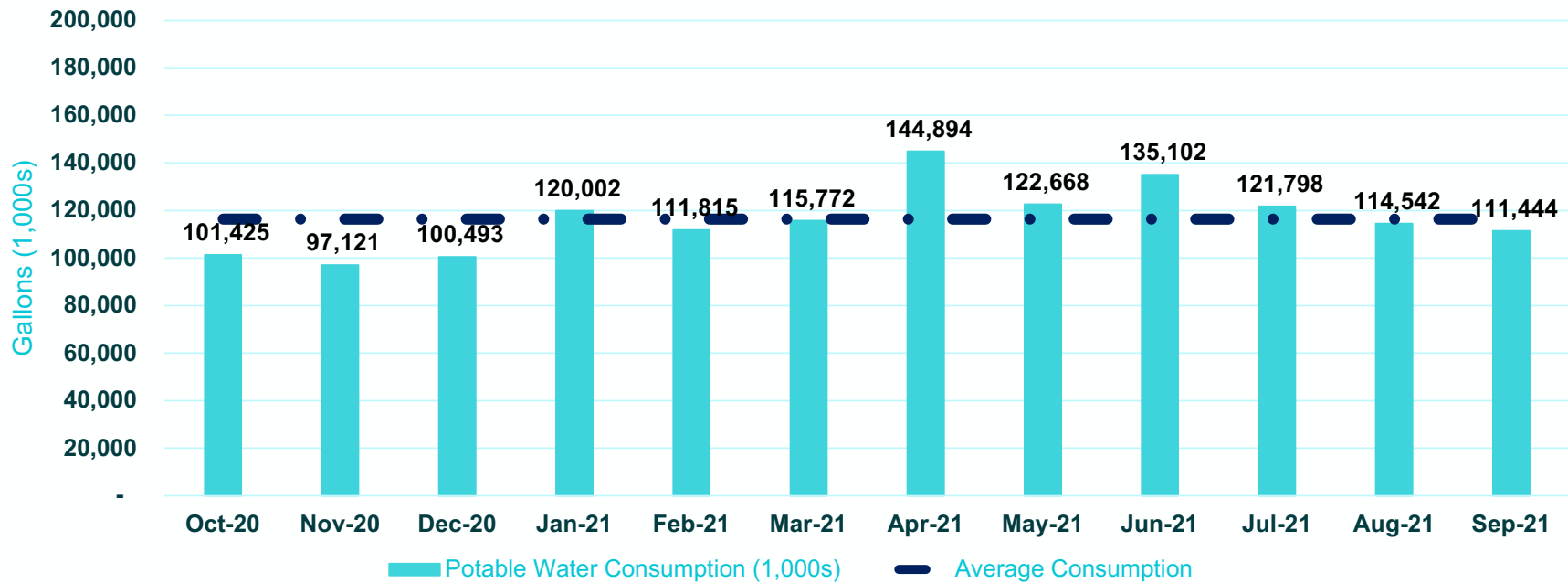
Residential – Potable Water Bill Frequency Chart (FY 2021)



Monthly Potable Water Consumption (FY 2021)



Monthly Potable Water Consumption (FY 2021) *



* Excludes potable irrigation sales