# CITY OF

# SUNRISE

Fiscal Year 2021 Water and Wastewater Revenue Sufficiency Study and Rate Design

Report / September 28, 2021







September 28, 2021

Mr. Tim Welch, P.E. Utilities Director City of Sunrise – Utilities Department 777 Sawgrass Corporate Way Sunrise, FL 33325

Subject: Fiscal Year 2021 Water and Wastewater Revenue Sufficiency Study and Rate Design Analysis

Dear Mr. Welch:

Raftelis Financial Consultants, Inc. ("Raftelis") has completed the 2021 Revenue Sufficiency Study and Rate Design Analysis ("Study") on behalf of City of Sunrise (the "City") and has presented the results of our analyses, assumptions, and recommendations in this report for your consideration. The Study was requested by staff since Raftelis has not performed a formal review of the utility rates since the Fiscal Year 2011, and the City has not increased rates since 2019. The principle objectives of the Study were to: i) evaluate the sufficiency of the water and wastewater utility ("Utility" or "System") revenues to fund the operating, capital, debt service, and satisfy bond covenants(1) and fiscal policy requirements ("revenue requirements") for the Fiscal Years 2021 through 2030 ("Forecast Period") and provide corresponding rate revenue adjustment recommendations; ii) to design and recommend water and sewer rates that support water conservation and equitably recover the cost of service for the System; and iii) provide rate recommendations for the consolidation of the South Broward Utility ("SBU") system rates with that the City's outside customer rates. The following provides a summary of the key findings and recommendations of the Study:

- Revenue Sufficiency and the Financial Forecast Findings and Recommendations:
  - o Based on the findings of this evaluation, which should be read in its entirety, it is recommended that the City consider no price index adjustment for the Fiscal Year 2022 and reinstate the annual price indexing beginning with the Fiscal Year 2023 pursuant to Ordinance No. 242-07-B on September 26, 2007 ("Price Index"). We have recommended a change to the proposed rate structure, discussed in greater detail as follows, for the Fiscal Year 2022 that is anticipated to be revenue neutral meaning that the change in rates are not intended to result in a material change in overall rate revenues collected under forecasted customer billing statistics.
  - The primary driver for the need to raise rates beginning with the Fiscal Year 2023 is associated with: i) continued inflation to the cost of operations and maintenance; ii) addition of additional staffing to aid in execution of the planned capital improvements and maintenance of the System. By increasing rates

<sup>(1)</sup> Bond covenants refers to the requirements of the outstanding Bond Ordinance No. 696-X, as amended and supplemented from time to time ("Bond Ordinance").

Mr. Tim Welch, P.E. City of Sunrise – Utilities Department September 28, 2021 Page 2

to keep pace with the growth in operating expenses the City effectively maintains existing cashflow margins necessary to fund future capital needs and maintain the creditworthiness of the utility.

- o The current Study identifies capital appropriations of \$574 million over the Forecast Period with a majority of the capital appropriations identified in the first several years of the projection. Based on discussions with City staff the appropriations were spread out over the Forecast Period to reflect an increasing and more linear capital spending which totals approximately \$452 million. A key component of the Capital Improvement Plan is the City's Master Plan which includes ongoing water system improvements, wastewater pipeline flow capacity improvements, wastewater system inflow and infiltration improvements, and systemwide lift state improvements. The capital funding plan prioritized the use of existing, available cash balances and increased capital funding and reinvestment from rate revenues referred to as "Pay-Go" as first priorities. Because of the City's current cash position, Raftelis did not assume any use of additional debt to help fund the plan.
- Based on our analysis and the assumptions relied upon as delineated in this Study, the continuation of the inflation index adjustments starting in the Fiscal Year 2023 is expected to: i) maintain the strong creditworthiness of the System and ensure adequate funding for the projected funding requirements of the water and wastewater system, including capital reinvestment; ii) comply with the rate covenants as delineated in the Bond Ordinance and Loan Agreement with the Florida Department of Environmental Protection; and iii) maintain compliance with the internal fiscal policy goals of the utility.

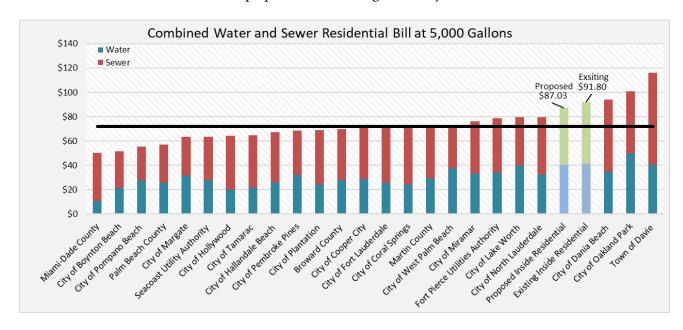
# • Rate Design Findings and Recommendations:

- Raftelis was tasked with designing new water and sewer system rates to consolidate rates among similar customer classes and encourage water conservation through increased pricing signals targeting higher water use for irrigation or non-essential use. The proposed water conservation-oriented rate structure is intended to support the objectives and requirements of the City's consumptive water use permit. The proposed rate structure changes include:
  - increasing the residential variable charge inclining block structure from two tiers to five tiers to promote conservation,
  - based on a cost allocation review shifting recovery from the fixed wastewater system charges to the variable water system charges to promote conservation,
  - consolidating the South Broward Utility ("SBU") water and sewer rates with the rates of the City to unify the overall system under one rate concurrent rate structure for water and sewer usage, and
  - reduction of the residential wastewater billing cap from 16,000 gallons to 12,000 gallons, which is more representative of indoor water use for residential customers and consistent with the current SBU wastewater billing cap.
  - Appendix A at the end of the report provides a detailed listing of the proposed rates.

• The proposed rate design changes are intended to be revenue neutral, meaning it is not intended to result in an increase or decrease in rate revenues under projected customer water demand and wastewater treatment requirements. The proposed rate structure changes should result in a decrease to the majority of inside city residential customers using less than 12,000 gallons a month. The following table provides a summary of the proposed changes to the inside city residential customer bills:

	Fiscal Year 2022 Inside City Residential Customer Bill Impacts													
Monthly Water Use=>	0 Kgal	4 Kgal	5 Kgal	8 Kgal	12 Kgal	16 Kgal								
Cumulative % of Bills Rendered	~5%	~54%	~66%	~87%	~95%	~98%								
Current Bill														
Water	\$20.87	\$37.23	\$41.32	\$53.59	\$69.96	\$86.31								
Wastewater	29.68	46.32	50.48	62.96	79.60	96.24								
Total	\$50.55	\$83.55	\$91.80	\$116.55	\$149.55	\$182.55								
Proposed Bill														
Water	\$22.12	\$35.92	\$40.63	\$54.80	\$76.60	\$105.64								
Wastewater	24.60	42.04	46.40	59.48	76.92	76.92								
Total	\$46.72	\$77.96	\$87.03	\$114.28	\$153.52	\$182.56								
Current W&S Bill	\$50.55	\$83.55	\$91.80	\$116.55	\$149.55	\$182.55								
Proposed W&S Bill	\$46.72	\$77.96	87.03	\$114.28	\$153.52	\$182.56								
\$ Change	(\$3.83)	(\$5.59)	(\$4.77)	(\$2.27)	\$3.97	\$.01								
% Change	(7.6%)	(6.7%)	(5.2%)	(1.9%)	2.7%	0.00%								

o To provide stakeholders with an understanding of how the current and proposed city rates compare with other Florida utilities we prepared the following fee survey:



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- o As can be seen from the prior chart the City's monthly bill is above average but is still in line with the utilities surveyed. The proposed rate structure change is expected to result in a slight decrease to the typical residential bill of \$4.77 or 5.20% bringing it closer to the comparison average.
- Based on the recommended rate design and application of the Price Index beginning with the Fiscal Year 2023 we have identified the following projections of customer bill impacts to the inside city residential customer for the Forecast Period:

	Identified Water and Wastewater Rate Revenue Adjustments												
		Fiscal Years Representing October 1 Through September 30,											
Description	2021	2022 [1]	2023	2024	2025	2026	2027	2028	2029	2030			
Inflationary Indexing Assumed [2]	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Monthly Residential Bill at 5,000 Gallons [3]	\$91.80	\$87.03	\$89.64	\$92.33	\$95.10	\$97.95	\$100.89	\$103.92	\$107.04	\$110.25			
Monthly Bill Increase	N/A	(\$4.77)	\$2.61	\$2.69	\$2.77	\$2.85	\$2.94	\$3.03	\$3.12	\$3.21			

<sup>[1]</sup> Assumes implementation of the proposed rate structure adjustments during Fiscal Year 2022.

 It is recommended that the City consider implementation of the proposed rate structure changes for the Fiscal Year 2022 and continue to monitor the need to implement the adopted price index for the Fiscal Year 2023 and beyond closer to the time of actual implementation.

<sup>[2]</sup> Assumes implementation of price index rate adjustments beginning with the Fiscal Year 2023.

<sup>[3]</sup> Amount shown for information purposes and represents the average residential 5/8" meter monthly customer bill.

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Following this letter is an attached summary report documenting recent trends, principal assumptions, and findings for your consideration. As always, we appreciate the opportunity to be of service to the City and the fine cooperation and valuable assistance given to us by City staff in the completion of the study.

Sincerely,

RAFTELIS FINANCIAL CONSULTANTS, INC.

Robert J. Ori

Executive Vice President

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RJO/dlc Attachments

# FISCAL YEAR 2021 WATER AND WASTEWATER REVENUE SUFFICIENCY STUDY AND RATE DESIGN ANALYSIS

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# FISCAL YEAR 2021 WATER AND WASTEWATER REVENUE SUFFICIENCY STUDY AND RATE DESIGN ANALYSIS

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### **FISCAL YEAR 2021**

### WATER AND WASTEWATER REVENUE SUFFICIENCY STUDY AND RATE DESIGN ANALYSIS

# **GENERAL**

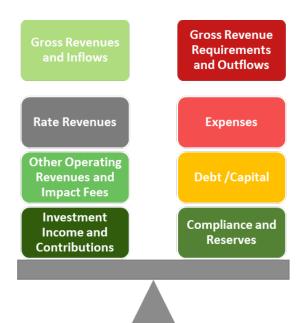
Raftelis Financial Consultants, Inc. ("Raftelis") has completed our financial forecast comprising the Fiscal Years 2021 through 2030 ("Forecast Period") and analysis of the water and wastewater utility system and rate design analysis ("Analysis" or "Study") on behalf of the City of Sunrise ("City"), and has presented the results of our analyses, assumptions, and recommendations in this report. The principal goals and objectives of the Study were to:

- Evaluate the sufficiency of the Utility revenues derived from existing rates for the water and wastewater utility system ("Utility") and to identify rate adjustments, if necessary, to fund the projected expenditures and funding requirements from rates;
- Identify a funding plan that would fully support the financing of the City's capital improvement plan ("CIP") during the Forecast Period that would balance the use of potential external and internal sources of funding and identify the effects of such plan on utility rates. The funding plan relies on internal sources derived from the use of capital reserves and funds available for ongoing capital investment derived from annual operations and new development; and
- Design and present proposed Fiscal Year 2022 water and sewer rates to the City to promote water
  conservation as a requirement of the City's consumptive water use permit and consolidation of the SBU rates
  with that of the City's outside city rate structure. The proposed rates were designed to be "revenue neutral",
  meaning that the proposed rates produced the same amount of overall revenue for the System. The City also
  tasked Raftelis with integrating the Southwest Plant into the Sunrise system, changing their current rates and
  rate structures to match that of the City.

The financial forecast was developed based on information provided by City staff including, but not limited to: i) detailed customer statistics to identify service area demands and trends; ii) updated financial information related to the capital improvement program and anticipated funding sources; iii) the Fiscal Year 2021 operating budget as adopted by the City; iv) the recently completed financial results for Fiscal Year 2020 and Fiscal-Year-to-Date 2021 financial information; and v) other financial or statistical information.

# FORECAST METHODOLOGY

- 1. An evaluation of the service area requirements for the individual water and wastewater systems was performed. This included a review of recent historical customers served and corresponding usage requirements such that: i) a representative forecast of System needs from a financial standpoint could be prepared; and ii) a projection of rate revenues consistent with the projected service area needs could be developed.
- 2. A projection of the Net Revenue Requirements from rates, which equates to the expenditure requirements funded from monthly user charges, was analyzed. An illustration of the components that make up the Net Revenue Requirements is summarized below:



- + Cost of Operation and Maintenance
- + Capital Expenditures and Debt Service
- + Fund Transfers Out / Covenant Compliance
- Other Revenue and Income
- Fund Transfers-In and Contributions
- = Net Revenue Requirements (Funded from Rates)

- 3. Included as a component of Net Revenue Requirements was the development of a funding plan for the System capital improvements. The funding of these improvements recognized the following parameters: i) the use of available operating reserves or other available cash balances as a first priority (above targeted reserve balances); ii) the use of Impact Fees, to the extent available, to fund expansion-related capital expenditures; iii) the recognition of a pay-as-you-go ("Pay-Go") capital funding program (funded by deposits to a Renewal and Replacement Fund from rates) to finance capital projects that primarily benefit existing rate payers; and iv) the use of additional debt / loans, if needed or identified by Utility staff, to fund large expenditures with extended service lives (leveraging of System revenues to reduce annual expenditure funded from rates) to the extent other funding sources were not readily or reasonably available.
- 4. In addition, the cash position of the System was evaluated and taken into consideration through the identification of targeted minimum ending cash balances to adequately reserve working capital balances (reduce financial risk) and provide for the anticipated capital funding needs of the System.
- 5. Provide a review of compliance with the rate covenant requirements on outstanding debt service in accordance with the Bond Ordinance 696-X, as amended and as supplemented from time to time that authorized the issuance of the Outstanding Bonds (the "Bond Ordinance") and other loan covenant requirements as delineated in subordinate loan agreements during the Forecast Period.
- 6. Estimate the necessary annual total System rate adjustments that would be required to fund the identified Net Revenue Requirements and meet the overall financial needs of the System.

# **FORECAST OF REVENUES**

The revenues for the Utility are principally generated from the rates for water and wastewater service. Such revenues account for approximately 95% of gross revenues over the Forecast Period. Late fees and administrative fees account for the majority of the remaining revenues at approximately two percent (2%) of gross revenues and income. Since the majority of the Utility revenues are generated from monthly rates for water and wastewater, the forecast of revenues is primarily predicated on assumptions of the estimated number of customers receiving service and their demands assumed for the Forecast Period.

## **CUSTOMER AND DEMAND FORECAST**

The forecast of water service revenues relied upon a review of recent historical trends in water customer account growth and use statistics. The following table provides a summary of the recent historical and projected trends in water customer billing statistics:

	Water S	system [1]	
Fiscal Year	Average Annual	Retail Sales	Monthly Use
(Historical)	No. of Accounts	(000s Gallons)	per Account (Gallons)
2018 (Hist.)	62,519	7,040,158	9,384
2019 (Hist.)	62,621	7,321,822	9,744
2020 (Hist.)	62,762	7,061,214	9,376
2021 (Est.)	62,890	7,078,938	9,380
2022	63,008	7,089,347	9,376
2023	63,111	7,097,527	9,372
2024	63,209	7,106,470	9,369
2025	63,292	7,113,185	9,366
2026	63,375	7,121,111	9,364
2027	63,448	7,127,255	9,361
2028	63,521	7,134,610	9,360
2029	63,584	7,140,184	9,358
2030	63,647	7,146,971	9,358
Annual Growth [2]	0.15%	0.13%	(0.02%)

<sup>[1]</sup> Amounts shown derived from Table 1 and include all customer classes.

As can be seen above, the City's historical water demand has fluctuated, but is generally consistent with Fiscal Year 2018 levels. Per discussion with City Staff, estimates for water consumption for the Fiscal Year 2021 were estimated to be similar to 2018. As can be seen above, the City is relatively built out, with limited room for customer growth. Generally, this is the sign of a maturing system that tends to focus on rehabilitation and replacement projects over expansionary projects.

With respect to the wastewater system, the historical and projected customer account and billed flow statistics has reflected similar trends as discussed for the water system. The following table provides a summary of the historical and projected wastewater system customer billing statistics:

<sup>[2]</sup> Reflects average annual compound growth rate from Fiscal Year 2018 through Fiscal Year 2030.

	Wastewater System [1]										
Fiscal Year (Historical)	Average Annual No. of Accounts	Retail Sales (000s Gallons)	Monthly Use per Account (Gallons)								
2018 (Hist.)	60,316	6,252,733	8,639								
2019 (Hist.)	60,426	6,471,717	8,925								
2020 (Hist.)	60,567	6,263,366	8,618								
2021 (Est.)	60,694	6,279,981	8,622								
2022	60,812	6,289,834	8,619								
2023	60,914	6,296,725	8,614								
2024	61,012	6,305,254	8,612								
2025	61,094	6,310,822	8,608								
2026	61,177	6,318,413	8,607								
2027	61,249	6,323,430	8,603								
2028	61,322	6,330,471	8,603								
2029	61,384	6,334,936	8,600								
2030	61,447	6,341,423	8,600								
Annual Growth [2]	0.15%	0.12%	(0.04%)								

<sup>[1]</sup> Amounts shown derived from Table 1 and include all customer classes.

Trends in wastewater account growth and billed flows have been and are anticipated to continue to be generally consistent with the growth characteristics recently experienced by the water system. Recognizing that billed sewer flows are determined based on metered water sales, the County employs a sewer billing cap for the residential class that limits the maximum amount of billed wastewater flow to 16,000 gallons per month for residential customers, and 11,000 for multi-family customers. For the financial forecast, customer account growth and billed wastewater flow is projected to be generally consistent with that assumed for the water system and was reduced in 2020 to reflect reductions in usage from COVID-19 and more conservative usage by the customer.

# **PROJECTED REVENUES**

The revenue forecast was based on: i) review of historical trends in revenues; ii) Fiscal Year 2021 operating budget; iii) year-to-date operating results for Fiscal Year 2021; iv) customer and demand forecast as previously discussed; v) assumed continuation of the inflationary index adjustment to fund the projected revenue requirements; and vi) discussions with City staff. The revenue forecast can be categorized into three (3) primary groups of revenues comprising of revenues derived from monthly service charges, growth / connection fee revenues, and all other revenues. Rate revenues from monthly service comprise the majority or approximately 95% of the total projected Utility revenues. After discussion with City Staff, late fees were reduced by 75% in 2021 to reflect a temporary moratorium on late fees and shut offs due to the COVID-19 pandemic. The late fees were then put back at budgeted levels starting in 2022 for the remainder of the forecast.

<sup>[2]</sup> Reflects average annual compound growth rate from Fiscal Year 2018 through Fiscal Year 2030.

	Projected Utility Revenues												
	Rate Adju	stment [1]	Water	Wastewater	Connection	Other							
Fiscal Year	Water	Sewer	Service	Service	Fee Revenues	Revenues	Total Revenues						
2021	0.00%	0.00%	\$53,209,474	\$58,053,999	\$736,842	\$3,184,373	\$115,184,688						
2022	0.00%	0.00%	54,094,385	59,036,619	775,623	4,288,902	118,195,529						
2023	3.00%	3.00%	55,776,279	60,846,058	816,446	4,294,445	121,733,228						
2024	3.00%	3.00%	57,536,051	62,762,342	859,416	4,304,554	125,462,363						
2025	3.00%	3.00%	59,317,524	64,688,367	904,649	4,315,713	129,226,253						
2026	3.00%	3.00%	61,134,396	66,731,275	952,262	4,326,309	133,144,242						
2027	3.00%	3.00%	63,043,173	68,785,818	1,002,381	4,343,524	137,174,896						
2028	3.00%	3.00%	64,992,864	70,897,291	1,055,138	4,363,615	141,308,907						
2029	3.00%	3.00%	66,997,371	73,080,313	1,110,671	4,383,514	145,571,869						
2030	3.00%	3.00%	69,068,158	75,327,801	1,169,128	4,406,177	149,971,264						
Growth Rate			2.94%	2.94%	5.26%	3.67%	2.98%						

<sup>[1]</sup> Reflects identified rate adjustments applied to charges for water and wastewater retail service only.

# **FORECAST OF EXPENDITURES**

The expenditures during the Forecast Period can be categorized into three primary groups of expenditures: operation and maintenance (operating) expenses, capital funding, and debt service. Presently, operating expenses account for the majority or 63% of gross revenue requirements, while transfers to fund capital reinvestment and return on investment accounted for 24% and debt service payments account for the remaining 13%.

# **OPERATING EXPENSES**

The forecast of operating expenses was developed based upon: i) a review of the recent trends in historical expenses; ii) the adopted Fiscal Year 2021, including review of certain year-to-date expenditures; iii) assumed growth rates / escalation factors of costs based on industry trends in such costs, projections of inflation by the Congressional Budget Office; and iv) discussions with the City staff

The principal operating expenses include personnel, administrative services, the Indian Trace cost reimbursement, and chemicals / electricity accounting for over 73% of total expenses. City staff indicated that based on the capital plan in place, additional staffing will be required over the coming years and provided Raftelis with estimated additional annual salaries, benefits, and vehicles expenses for Fiscal Years 2022 through 2030 to be included in the projections of operating expenses. The forecast of operating expenses relied upon various escalation factors ranging from approximately two percent (2%) to five percent (5%) depending on the assumed costs being escalated. The following table presents the forecast of operating expenses:

Projected Operating Expenses (\$000s) [1]												
				Fisc	al Year Endi	ng Septemb	er 30,					
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Combined Salaries and Wages	\$29,108	\$29,879	\$31,735	\$33,296	\$34,391	\$35,708	\$36,368	\$37,715	\$38,302	\$39,691		
Electricity	3,735	3,834	3,934	4,038	4,143	4,251	4,361	4,475	4,590	4,710		
Chemicals	2,751	2,797	2,856	2,919	2,986	3,052	3,119	3,187	3,258	3,329		
Administrative Services	5,149	5,237	5,347	5,465	5,590	5,713	5,839	5,967	6,099	6,233		
Indian Trace Cost Reimbursement	6,049	6,049	6,231	6,417	6,610	6,808	7,013	7,223	7,440	7,663		
Sludge Removal Expense	1,549	1,575	1,608	1,644	1,682	1,719	1,757	1,795	1,835	1,875		
Repairs and Maintenance	2,450	2,563	2,660	2,730	2,803	2,878	2,954	3,032	3,113	3,196		
Insurance	2,235	2,313	2,394	2,478	2,565	2,655	2,748	2,844	2,943	3,046		
Contractual Services	26	27	27	28	29	29	30	31	32	32		
Reclassified Capital Outlay to O&M	0	0	0	0	0	0	0	0	0	0		
Professional and Legal Services	4,003	4,114	4,228	4,345	4,466	4,590	4,717	4,848	4,983	5,122		
Other Operating Expenses	3,402	3,563	3,639	3,720	3,806	3,891	3,978	4,067	4,157	4,250		
Contingency Allowance	905	924	961	994	1,023	1,054	1,077	1,109	1,132	1,167		
Materials and Supplies	1,361	1,384	1,413	1,445	1,478	1,510	1,544	1,578	1,613	1,648		
Postage, Binding and Printing	326	334	342	351	360	369	378	387	397	407		
Credit Card Transaction Costs	746	759	775	792	810	828	846	864	884	903		
Water Conservation Program	208	212	216	221	226	231	236	241	246	252		
Sewer Service Plantation	37	37	38	39	40	41	42	43	44	45		
Total	\$64,038	\$65,601	\$68,404	\$70,921	\$73,005	\$75,325	\$77,005	\$79,407	\$81,066	\$83,568		

Operating expenses are projected to increase by an average annual growth rate of approximately three percent (3.0%) per year. For additional detail concerning the forecast of operating expenses, please reference Table3 at the end of this report. The City has plans to implement an AMI system in Fiscal Year 2023, and after discussions with City Staff Raftelis has added an additional \$100,000 per year for software upkeep, which is inflated at three percent (3.00%) per year of the forecast. Should the AMI program be delayed, the software costs would also be delayed accordingly.

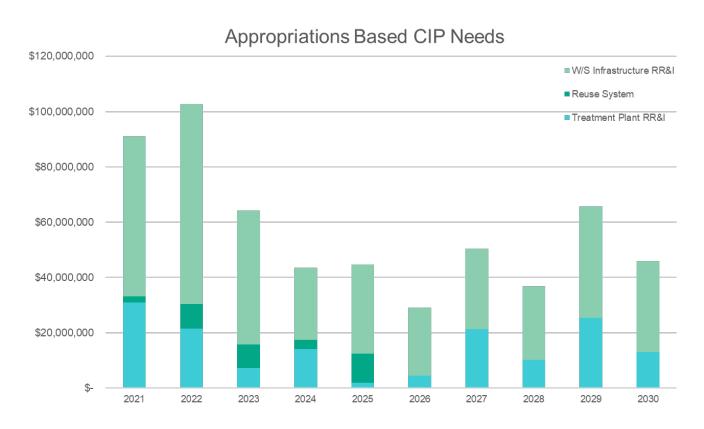
In addition to the implementation of the AMI program, the Forecast also assumes several additional FTEs to fulfill needs from increasing the execution of the capital plan, increased maintenance and renewal and replacement needs, as well as additional billing specialists. The table below outlines the additional FTEs, the year they are added to the forecast, as well as the impact to the forecast:

	Additional Full Time Employees [1]										
	Number of	Average Salary Plus									
Employee	FTEs	Benefits (FY22 \$)	Fiscal Years								
Inventory Clerk	1	\$45,900	2022								
Field Staff	6	55,720	2022 / 2025								
Project Managers	<u>5</u>	102,520	2022 / 2023 / 2024								
Total	<u>12</u>	<u>\$204,140</u>									

<sup>[1]</sup> Note that the FY21 budget assumed the addition of two (2) FTEs for customer billing and amounts shown above are in addition to any budgeted positions.

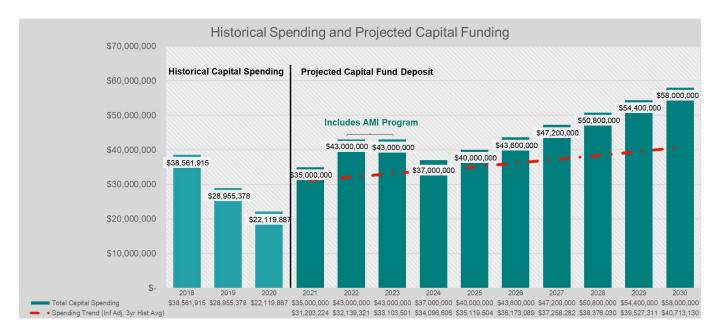
# **CAPITAL EXPENDITURES**

Capital reinvestment and funding is integral to the continuity and quality of service delivered to customers. These expenditures, coupled with the need to meet increased regulations and the growth requirements of the Utility, contributed to the CIP. The capital costs of the Utility were based on the existing capital improvement plan as identified by City Staff, which encompasses the forecast period (Fiscal Year 2021 through Fiscal Year 2030), as well as the Master Plan and the implementation of the AMI program over Fiscal Years 2022 and 2023. The original capital plan was presented on an appropriations basis which had increased capital spending in Fiscal Years 2021 and 2022 and can be seen on the graph below:



As can be seen on the graph above, Fiscal Years 2021 and 2022 had approximately \$190,000,000 in capital spending appropriations. Based on a historical review of historical capital spending and discussions with City staff the forecasted CIP was adjusted to a cash needs basis from an appropriations basis. The cash basis reflects: i) the planned

increase in project management staffing anticipated by staff to be required to execute the CIP; ii) the additional timing required from appropriations of funding to completion of design and then construction for the project; and iii) the size and nature of the project, for example the cash basis CIP as shown below includes \$8,000,000 per year in Fiscal Years 2022 and 2023 for acquisition and installation of new advanced metering infrastructure ("AMI") consisting of integrated system of smart meters, communications networks, and data management systems that enables two-way communication between utilities and customers and which can be procured and installed by private contractors within a 24-month period.



As can be seen in the prior chart the projected capital spending is generally consistent with recent historical trends in capital spending and is assumed to increase over time.

Funding for the capital needs of the System did not assume the need for any additional debt financing as shown in the CIP funding summary below:

	Capital Improvement Program (\$000s) [1]													
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total			
Capital Projects:														
Water System:	\$8,303	\$13,845	\$22,947	\$11,038	\$14,851	\$20,225	\$28,184	\$24,917	\$28,863	\$39,127	\$212,302			
Wastewater System	24,567	20,208	11,676	22,569	14,483	23,375	19,016	25,883	25,537	18,873	206,187			
Reuse System	2,130	8,946	8,377	3,393	10,665	0	0	0	0	0	33,512			
Total Capital Projects	\$35,000	\$43,000	\$43,000	\$37,000	\$40,000	\$43,600	\$47,200	\$50,800	\$54,400	\$58,000	\$452,000			
Funding Sources:														
Operating Reserves	\$2,292	\$1,548	\$5,669	\$1,217	\$1,418	\$1,480	\$4,560	\$7,818	\$12,223	\$0	\$38,224			
Renewal and Replacement Fund	30,250	15,480	25,462	17,175	32,851	15,493	34,683	9,611	16,662	2,739	200,406			
Impact Fees	0	0	0	0	0	0	167	1,156	0	0	1,323			
Rate Revenue	62	1,132	458	533	356	348	483	421	703	29	4,524			
System Reserves	0	0	0	0	39	170	820	0	0	0	1,029			
Capital Projects	2,397	24,840	11,411	18,074	5,337	26,109	6,488	31,794	24,813	55,232	206,495			
Total Funding Sources	\$35,000	\$43,000	\$43,000	\$37,000	\$40,000	\$43,600	\$47,200	\$50,800	\$54,400	\$58,000	\$452,000			

<sup>[1]</sup> Derived from Table 4 at the end of this report; Fiscal Year 2021 amounts include projects approved by the BOCC in prior years which are underway or active and considered as a component of construction-work-in-progress (capital project carryforwards). It should be noted that the amounts are presented on an appropriations basis (i.e., a budgeted claim against available funds) as opposed to a cash basis (i.e., expected timing of expenditures), which will differ as compared to actual project completion and spending.

As can be seen from the above table and as shown in greater detail in Table 4 at the end of this report, approximately 90% of the capital funding is associated with the renewal, replacement, rehabilitation, upgrade, and betterments (referred to as "renewals and replacements") of the existing infrastructure and is representative of the needs of a mature utility providing service to a large customer base. Additionally, the overall amount of programmed capital expenditures for the renewal and replacement of existing infrastructure is estimated at approximately \$199 million during the Forecast Period and averages approximately \$20 million in annual funding; when compared to the annual depreciation expense of approximately \$23.5 million as reported in the Fiscal Year 2019 Comprehensive Annual Financial Report, this demonstrates an active plan of capital reinvestment.

As previously discussed, the CIP is funding from internal sources including the use of existing cash reserves and future rate revenues. The financial forecast assumes an increase in the funding requirements from rate revenues for Pay-Go financing of the CIP. Adequate Pay-Go funding reduces the reliance on the need to debt finance the capital needs of the system and supports the fiscal sustainability of the utility when used to fund recurring "renewals and replacements" of the system. The following table provides a summary of the assumed transfers for capital reinvestment from rate revenues:

Annual Transfers for Capital Related Activities from Operating Revenues (\$000s) [*]											
Description (Fund)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
R&R Fund Transfer (402)	\$23,844	\$21,989	\$22,159	\$22,340	\$22,523	\$22,714	\$22,910	\$23,113	\$23,321	\$23,536	
Capital Funded From Rates	37	39	41	43	45	47	50	52	55	58	
System Surplus / (Deficiency)	6,284	9,461	9,810	10,637	11,956	13,158	22,295	23,649	25,850	27,312	
Total	\$30,166	\$31,489	\$32,010	\$33,020	\$34,525	\$35,919	\$45,254	\$46,814	\$49,227	\$50,905	

<sup>[\*]</sup> Derived from Table 5 at the end of this report.

As can be seen in the table above, the forecast assumes a general increase year-over-year in Pay-Go funding requirements in order to generally keep pace with the growth in expected capital needs of the System as previously discussed and presented. The Fiscal Year 2027 increase is related to the final repayment of existing debt service as will be discussed in greater detail in the next section. The assumed Renewal and Replacement transfers were allocated among the water and wastewater systems based on the relationship of the revenue generated for each system. Additionally, programed transfers were assumed out of the System Reserves and Operating Fund into the Capital Projects Fund (465) to help pay for projects associated with the City's CIP.

#### **DEBT SERVICE**

The City is currently has two Bonds outstanding, the Series 2018 Refunding bonds and the Series 2020 Refunding Bonds, which currently have principal outstanding in the amount of approximately \$166 million. The two debts were structured in such a way that as the Series 2018 Bonds are fully paid off the Series 2020 Bonds principal payments are increased. The City will see an approximately \$7.2 million drop off in debt service payments starting in Fiscal Year 2027 when the Series 2018 Bonds come offline. This reduction in debt service helps with system relief and the ability to maintain inflationary indexing rate adjustments while allowing more pay-go funding of the capital plan. The following table provides a summary of the existing debt service payments assumed for the development of the financial forecast by issue:

	Summary of Existing and Projected Debt Service Payment (\$000s)													
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030				
Outstanding Bonds:														
Series 2018 Refunding Bonds	\$15,039	\$15,035	\$15,028	\$15,034	\$15,027	\$15,028	\$0	\$0	\$0	\$0				
Series 2020 Refunding Bonds	2,697	2,698	2,699	2,695	2,695	2,695	10,530	10,531	10,530	10,527				
Total	\$17,736	\$17,733	\$17,727	\$17,728	\$17,722	\$17,723	\$10,530	\$10,531	\$10,530	\$10,527				

The outstanding bonds were allocated among the water and wastewater system based the allocation of the Series 1998A Bonds and the allocation of the Series 2010B Bonds which the Series 2018 and Series 2020 refunded. The Series 1998 Bonds were allocated based on the relationship between water and wastewater sales, and the Series 2010 Bonds were allocated based on the water and wastewater capital projects that were being funded from the issuance of the Bonds, as stated in the Series 2010 Bonds Official Statement.

# REVENUE SUFFICIENCY FORECAST FINDINGS AND RECOMMENDATIONS

Combined Water and Wastewater Systems Net Revenue Requirements and Rate Revenue Adjustments (\$000s) [1]											
				Fisc	al Year Endii	ng Septembe	er 30,				
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Combined System:											
Operating Expenses	\$64,038	\$65,601	\$68,404	\$70,921	\$73,005	\$75,325	\$77,005	\$79,407	\$81,066	\$83,568	
Debt Service	17,736	17,733	17,727	17,728	17,722	17,723	10,530	10,531	10,530	10,527	
Transfers (Capital/Reserves)	28,830	26,989	27,235	27,506	27,784	28,069	28,364	28,669	28,983	29,305	
Less Other Income	5,625	6,653	6,554	6,494	6,462	6,410	6,365	6,366	6,351	6,316	
Net Revenue Requirements	\$104,979	\$103,670	\$106,812	\$109,661	\$112,050	\$114,708	\$109,534	\$112,241	\$114,227	\$117,084	
Revenue from Rates:											
Existing Rate Revenue	\$111,263	\$113,131	\$116,622	\$120,298	\$124,006	\$127,866	\$131,829	\$135,890	\$140,078	\$144,396	
Identified Rate Adjustments	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Adjusted Rate Revenue	\$111,263	\$113,131	\$116,622	\$120,298	\$124,006	\$127,866	\$131,829	\$135,890	\$140,078	\$144,396	
Surplus/(Deficiency) [2]	\$6,284	\$9,461	\$9,810	\$10,637	\$11,956	\$13,158	\$22,295	\$23,649	\$25,850	\$27,312	

<sup>[1]</sup> Amounts shown derived from Table 5 at the end of this report.

Based on the key assumptions of the Study we have determined that the existing rates for retail service will not generate sufficient revenues to fund the projected revenue requirements of the System during the Forecast Period. The following table provides a breakdown of the projected revenue requirements by System and on a combined basis.

It is recommended that the City continue to adjust the Water and Wastewater System rates by continuation of inflationary indexing starting in Fiscal Year 2023 (October 1, 2022). Based on our analyses as discussed in this Report, this one will be sufficient to fully fund the CIP. The primary drivers of the need for the inflationary index adjustment include: i) projected increases in gross revenue requirements stemming from the effects of inflation on operating and maintenance expenditures; and ii) the need for increased Pay-Go funding of the capital improvement program.

<sup>[2]</sup> It should be noted that any surplus recognized is transferred to the System Reserves to help fund Capital Improvements.

The following table provides a summary of the projected compliance with the financial policies based on the financial and rate implementation plan as presented in this Study:

Financial Policy Compliance												
				Fiscal	Year Endir	ng Septem	ber 30,					
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Operating Reserves:												
Calculated	78	120	138	181	169	162	181	184	178	196		
Minimum	120	120	120	120	120	120	120	120	120	120		
Target Met (Yes/No)	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Net Revenue Margin:												
Calculated	45.2%	45.2%	44.5%	44.1%	44.0%	43.9%	44.3%	44.2%	44.6%	44.6%		
Maximum	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%		
Target Met (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
All-In Coverage:												
Calculated	298%	306%	309%	315%	324%	333%	581%	597%	621%	638%		
Minimum	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%		
Target Met (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

As can be seen from the prior table, the Utility is expected to meet or exceed the targets and benchmark ratios identified in the Utility financial policies. In order to provide additional information, the following table presents a summary of the projected cash balances by Utility fund during the Forecast Period:

	Summary of Projected Ending Balances by Fund (\$000s) [1]												
				Fisc	al Year Endir	ng Septembe	er 30,						
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030			
Operating Reserve Fund (401)	\$13,720	\$21,633	\$25,774	\$35,195	\$33,734	\$33,412	\$38,146	\$39,978	\$39,605	\$44,916			
Renewal and Replacement Fund (402)	16,109	22,618	19,315	24,479	14,152	21,372	9,599	23,100	29,760	50,557			
Water Connection Fee Account (403)	8,818	8,793	8,789	8,806	8,846	8,911	9,001	9,119	9,266	9,443			
Wastewater Connection Fee Account (403)	7,932	7,899	7,886	7,894	7,925	7,980	7,893	6,838	6,962	7,117			
Debt Service Reserve Subaccount (405)	0	0	0	0	0	0	0	0	0	0			
Bond Proceeds (Construction Fund) (406, 407, 408)	0	0	0	0	0	0	0	0	0	0			
Water and Wastewater System Reserves (464)	25,858	20,858	11,858	2,858	2,819	2,649	1,829	1,829	1,829	1,829			
Water and Wastewater Capital Projects (465)	181,543	161,703	159,292	150,218	156,881	142,772	149,285	131,490	120,678	87,446			
Total Fund Balance	\$253,981	\$243,505	\$232,914	\$229,450	\$224,356	\$217,096	\$215,753	\$212,355	\$208,100	\$201,308			
Restricted Funds [2]	(16,750)	(16,692)	(16,675)	(16,700)	(16,771)	(16,891)	(16,894)	(15,957)	(16,228)	(16,560)			
Financial Policy Restrictions [3]	(7,895)	(8,088)	(8,433)	(8,744)	(9,001)	(9,287)	(9,494)	(9,790)	(9,994)	(10,303)			
Net Above Restrictions and Min. Reserve Reqs. [4]	\$237,230	\$226,812	\$216,239	\$212,750	\$207,585	\$200,205	\$198,859	\$196,398	\$191,872	\$184,748			

<sup>[1]</sup> Derived from information provided on Table 6 at the end of this report.

As can be seen above, it is anticipated that the use of existing cash reserves to finance the capital needs of the Utility will be required. The cash balances are projected to decline during the Forecast Period primarily from the increased capital funding needs. Should the City identify additional capital improvements beyond what is contemplated in this Report, it would still be able to use reserves to fund the projects, however, if capital spending were to drastically increase, the need for additional funding through debt issuance might need to occur A graphical summary of the financial results and performance measures are included within Appendix B attached to this report.

For the purposes of this analysis, a comparison of residential water and wastewater charges with other neighboring utilities was prepared to provide an indication of the competitiveness of the existing residential rates charged by City. Based on this comparison, which can be seen on Tables 8 through 10 at the end of this report, the existing rates for service are considered above average with the other surveyed utilities. It should be noted that several of the utilities on the comparison are currently engaged in rate studies, or have plans to raise rates in Fiscal Year 2022, whereas the City will not see a rate increase until Fiscal Year 2023 through inflationary indexing.

<sup>[2]</sup> Amounts shown reflect funds that have restricted uses or liability / claims against the fund and include: Water Connection Fees, Wastewater Connection Fees, Debt Service Reserve, and Debt Sinking Funds.

<sup>[3]</sup> Amounts shown reflect minimum reserve requirements pursuant to the County's adopted Fiscal Policy including: Fiscal Policy of Operating Reserves equivalent to 45 Days of current operating and maintenance expenses

<sup>[4]</sup> Represents net unrestricted cash assumed to be available or committed to fund future capital needs of the System.

# PROPOSED RATE DESIGN AND CONSOLIDATION

The City's current water and wastewater rates include two separate rate structure (cost recovery) components. These components are: i) a monthly base charge that serves as a readiness-to-serve charge that recovers a portion on the revenue requirements considered as being fixed (links to capacity); and ii) a volumetric or flow charge which includes an inverted block rate structure to promote water conservation. The fixed costs represent expenses that are consistent and do not vary based on the water use or the customer demands of the system. Fixed costs generally would include, but are not limited to, debt service and capital facility funding, certain employee salaries and other employee benefits, insurance on utility plant, and other related costs. The variable costs represent expenses that are incurred based on actual water and wastewater use. Items that would be considered to be variable-related would include, but are not limited to, electricity and chemicals, operating supplies, and certain salaries and other employee benefits.

The monthly base charge (readiness-to-serve) is primarily billed per the customer's meter size, with exception to residential accounts which are billed based on the number of underlying residential units. Larger metered accounts are charged a greater base rate reflecting the greater capacity reservation. The volumetric charges are billed to customers based on their metered water consumption. Non-residential and multifamily customers are charged the same rate for all metered water consumption. Residential single family customers are charged an inclining block tiered structure.

As previously mentioned, the primary objectives of the proposed rate design included: i) consolidate rates among similar customer classes; and ii) recommend a water conservation-oriented rate structure intended to support the objectives and requirements of the City's consumptive water use permit. The proposed rate structure changes include:

- increasing the residential variable charge inclining block structure from two tiers to five tiers to promote conservation;
- based on a cost allocation review shifting recovery from the fixed wastewater system charges to the variable water system charges to promote conservation;
- consolidating the South Broward Utility ("SBU") water and sewer rates with the rates of the City to unify the overall system under one rate concurrent rate structure for water and sewer usage;
- reduction of the residential wastewater billing cap from 16,000 gallons to 12,000 gallons, which is more representative of indoor water use for residential customers and consistent with the current SBU wastewater billing cap;
- the proposed structure is generally designed to be revenue neutral meaning no net increase or decrease in revenues.
- Appendix A at the end of the report provides a detailed listing of the proposed rates. It should be noted that the Outside City rates, as well as South Broward Utilities, includes a 25% surcharge to their rates.

The following considerations were made in development of the proposed rate design:

1. Based on a review of the cost of service among the water and wastewater system it is proposed that in design of the recommended rates that the wastewater base charge recovery be reduced and shifted primarily to the water variable cost recovery as shown below:

Utility Cost Recovery by System and Base / Variable Charge

3	,								
	Water Cha	rge Revenue	Wastewater Charge Revenue						
Description	Base	Variable	Base	Variable					
	0044	#20.0	#20.5	#0 C 7					
Current	\$24.4 m	\$29.8 m	\$32.5 m	\$26.7 m					
Change	<u>+\$1.0 m</u>	<u>+\$4.7 m</u>	<u>-\$5.7 m</u>	<u>\$0.0 m</u>					
Proposed	<u>\$25.4 m</u>	<u>\$34.5 m</u>	<u>\$26.8 m</u>	<u>\$26.7 m</u>					

2. The proposed conservation tiered pricing for residential customers considered a five (5) tiered structure with inclining block increments every 4,000 gallons. The initial 4,000-gallon usage block allows for some diversity in household size yet links to typical indoor use for single-family residences. To increase water conservation incentives yet recognize differences in discretionary and excessive use, it is recommended that a stronger pricing signal be recognized based on our understanding of the conservation objectives of the water management districts and a review of rate structures for other jurisdictions. The proposed water use tier adjustments would include i) having each additional tier up to the fourth (4th) block be the same as the first based on a billing frequency of all residential customers usage, and ii) a fifth (5th) block that would further promote water conservation.

Tier	Monthly Usage Block
Tier 1	0 - 4,000 Gallons
Tier 2	4,001 - 8,000 Gallons
Tier 3	8,001 - 12,000 Gallons
Tier 4	12,001 - 8,000 Gallons
Tier 5	Above 16,000 Gallons

3. Wastewater residential and multi-family customers would see a change in their sewer billing cap, to represent more of the industry standard for capped usage. A billing cap is a set amount of gallons, that once exceeded will produce no additional charge to the customer. Currently the billing cap for residential and multi-family customers was set at 16,000 gallons and 11,000 gallons. The proposed billing cap would be set at 12,000 gallons for each customer class. The SBU System would see no change in their existing wastewater billing cap.

4. The proposed rates for service are summarized below and in greater detail with comparison to the existing rate structure within Appendix A.

Monthly Service Charge (Inside City):											
	Water	Service	Sewer	Service							
Meter Size	Residential	Commercial	Residential	Commercial							
5/8"	\$22.11	\$30.95	\$24.60	\$34.44							
3/4"	\$22.11	\$46.43	\$24.60	\$51.66							
1"	\$22.11	\$77.39	\$24.60	\$86.10							
1-1/2"	\$22.11	\$154.77	\$24.60	\$172.20							
2"	\$22.11	\$247.63	\$24.60	\$275.52							
3"	\$22.11	\$464.31	\$24.60	\$516.60							
4"	\$22.11	\$773.85	\$24.60	\$861.00							
Multi-Family	\$15.48	-	\$17.22	-							

Consumption Charge: (per 1,000 Gallons of Metered Water):	Residential	Commercial / Multi-Family [2]	Residential / Multi-Family [3]	Commercial
Block 1 (0-4,000)	\$3.45	\$4.86	\$4.36	\$4.36
Block 2 (4,001-8,000)	\$4.72	N/A	N/A	N/A
Block 3 (8,001-12,000)	\$5.45	N/A	N/A	N/A
Block 4 (12,001-16,000)	\$7.26	N/A	N/A	N/A
Block 5 (Above 16,000)	\$9.08	N/A	N/A	N/A

<sup>[1]</sup> Represents bill for an inside city customer. Outside city customers have an outside city surcharge of 25% added to their rate.

## **CUSTOMER IMPACT ANALYSIS**

It should be noted that a change in rate structure will affect customers differently than a change based on a uniform application of a rate increase (i.e., all customers get the same percentage rate adjustment). Based on the rate objectives discussed with the City as it relates to revenue stability (zero use to customers using around 8,000 gallons will see reduction in their bill, while customers who use more than 8,000 gallons will see an increase in their bill. Because of the reduction in the wastewater cap, residential customers who use 16,000 gallons will see no change in their overall bill. Multi-Family customers will see a reduction in their bill up to 3,000 gallons, with a four tenths percent (0.4%) increase at 4,000, before seeing an increase in their overall bill. One reason behind this is the increase in wastewater billing cap for the class from 11,000 gallons to 12,000 gallons. The commercial class will also see a reduction in bills with lower usage, however, since this class as a whole uses more water and wastewater, most commercial customers will see an increase in their overall water and wastewater bill. Attached in Appendix C is the presentation made to City Commissioners regarding the financial forecast and rate design, which highlights some of the levels of customer impact per class and meter size.

<sup>[2]</sup> Charge is for all gallons consumed.

<sup>[3]</sup> Charge is up to 12,000 gallons of consumption, after 12,000 gallons no additional charge to customer.

# STUDY CONCLUSIONS AND RECOMMENDATIONS

Based on the assumptions, considerations, and analyses as summarized herein, we are of the opinion that:

- 1. Based on the findings of this evaluation, which should be read in its entirety, it is recommended that the City consider no price index adjustment for the Fiscal Year 2022 and reinstate the annual price indexing beginning with the Fiscal Year 2023 pursuant to Ordinance No. 242-07-B on September 26, 2007 ("Price Index").
- 2. We would recommend the City consider implementation of the proposed rate structure as identified in Appendix A to: i) consolidate rates among similar customer classes; and ii) recommend a water conservation-oriented rate structure intended to support the objectives and requirements of the City's consumptive water use permit.
- 3. The primary driver for the need to raise rates beginning with the Fiscal Year 2023 is associated with: i) continued inflation to the cost of operations and maintenance; ii) addition of additional staffing to aid in execution of the planned capital improvements and maintenance of the System. By increasing rates to keep pace with the growth in operating expenses the City effectively maintains existing cashflow margins necessary to fund future capital needs and maintain the creditworthiness of the utility.
- 4. The current Study identifies capital appropriations of \$574 million over the Forecast Period with a majority of the capital appropriations identified in the first several years of the projection. Based on discussions with City staff the appropriations were spread out over the Forecast Period to reflect an increasing and more linear capital spending which totals approximately \$452 million. A key component of the Capital Improvement Plan is the City's Master Plan which includes ongoing water system improvements, wastewater pipeline flow capacity improvements, wastewater system inflow and infiltration improvements, and systemwide lift state improvements. The capital funding plan prioritized the use of existing, available cash balances and increased capital funding and reinvestment from rate revenues referred to as "Pay-Go" as first priorities. Because of the City's current cash position, Raftelis did not assume any use of additional debt to help fund the plan.
- 5. Based on our analysis and the assumptions relied upon as delineated in this Study, the continuation of the inflation index adjustments starting in the Fiscal Year 2023 is expected to: i) maintain the strong creditworthiness of the System and ensure adequate funding for the projected funding requirements of the water and wastewater system, including capital reinvestment; ii) comply with the rate covenants as delineated in the Bond Ordinance and Loan Agreement with the Florida Department of Environmental Protection; and iii) maintain compliance with the internal fiscal policy goals of the utility.

# FISCAL YEAR 2021 WATER AND WASTEWATER REVENUE SUFFICIENCY STUDY AND RATE DESIGN ANALYSIS

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City of Sunrise, Florida 2021 Water and Wastewater Rate Study

# Historical and Projected Customer Statistics

Line	-	Histor	ical						Projected					
No.	Description	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	Water System Residential Class - Inside City													
1 2	Normal Growth Incremental Growth		101 0	75 0	70 0	65 0	60 0	55 0	50 0	45 0	40 0	35 0	30 0	25 0
3	Average Accounts Served	21,783	21,885	21,960	22,030	22,095	22,155	22,210	22,260	22,305	22,345	22,380	22,410	22,435
4 5	Water Sales (000's) Average Monthly Flow per Account (Ga	1,241,129 4,748	1,323,960 5,041	1,251,176 4,748	1,255,164 4,748	1,258,868 4,748	1,262,286 4,748	1,265,420 4,748	1,268,269 4,748	1,270,833 4,748	1,273,112 4,748	1,275,106 4,748	1,276,815 4,748	1,278,240 4,748
6	Residential Class - Outside City Normal Growth		27	55	50	45	40	35	30	30	30	30	30	30
7 8	Incremental Growth Average Accounts Served	32,293	32,320	32,375	32,425	32,470	32,510	32,545	32,575	32,605	32,635	32,665	32,695	32,725
9 10	Water Sales (000's) Average Monthly Flow per Account (Ga	2,894,243 7,469	3,071,157 7,919	2,901,570 7,469	2,906,051 7,469	2,910,084 7,469	2,913,669 7,469	2,916,806 7,469	2,919,495 7,469	2,922,183 7,469	2,924,872 7,469	2,927,561 7,469	2,930,249 7,469	2,932,938 7,469
11	General Service Class - Inside City Normal Growth		-29	3	0	3	0	3	0	3	0	3	0	3
12 13	Incremental Growth Average Accounts Served	1,836	1,807	1,810	1,810	1,813	1,813	1,816	1,816	1,819	1,819	1,822	1,822	1,825
	-													
14 15	Water Sales (000's) Average Monthly Flow per Account (Ga	645,134 29,282	627,671 28,946	635,998 29,282	635,998 29,282	637,052 29,282	637,052 29,282	638,106 29,282	638,106 29,282	639,161 29,282	639,161 29,282	640,215 29,282	640,215 29,282	641,269 29,282
16	General Service Class - Outside City [1] Normal Growth		1	3	0	3	0	3	0	3	0	3	0	3
17 18	Incremental Growth Average Accounts Served	1,233	1,234	1,237	1,237	1,240	1,240	1,243	1,243	1,246	1,246	1,249	1,249	1,252
19	Water Sales (000's)	465,363	493,964	466,873	466,873	468,005	468,005	469,137	469,137	470,270	470,270	471,402	471,402	472,534
20	Average Monthly Flow per Account (Ga	31,452	33,358	31,452	31,452	31,452	31,452	31,452	31,452	31,452	31,452	31,452	31,452	31,452
21	Multi-Family Class - Inside City [2] Normal Growth		1	0	1	0	0	0	0	0	0	0	0	0
22 23	Incremental Growth Average Accounts Served	876	878	878	879	879	879	879	879	879	879	879	879	0 879
24	Unit Growth		98	0	140	0	0	0	0	0	0	0	0	0
25 26	Average Units Served  Base Water Sales (000's)	19,326 816,000	19,424 818,288	19,424 820,134	19,564 826,045									
27	Average Monthly Flow per Unit (Gallon	3,519	3,511	3,519	3,519	3,519	3,519	3,519	3,519	3,519	3,519	3,519	3,519	3,519
28	Multi-Family Class - Outside City Normal Growth		0	0	1	0	0	0	0	0	0	0	0	0
29 30	Incremental Growth Average Accounts Served	459	459	459	460	460	460	460	460	460	460	460	460	460
31 32	Unit Growth Average Units Served	10,010	10,020	10,020	10,060	10,060	10,060	10,060	10,060	10,060	10,060	10,060	10,060	10,060
33 34	Water Sales (000's) Average Monthly Water Use per Unit	486,715 4,052	482,663 4,014	487,201 4,052	489,146 4,052									
35	Government Service Class - Inside City Normal Growth		4	0	0	0	0	0	0	0	0	0	0	0
36 37	Incremental Growth	22	0 26	0 26	0 26	0 26	0 26	0 26	0 26	0 26	0 26	0 26	0 26	0 26
38	Average Accounts Served  ERC Growth	22	7	0		0	0	0	0	0	0	0	0	0
39	Average ERC's Served	543	550	550	550	550	550	550	550	550	550	550	550	550
40 41	Water Sales (000's) Average Monthly Flow per Account (Ga	37,378 141,583	42,702 136,865	44,174 141,583										
42	Government Service Class - Outside City Normal Growth		0	0	0	0	0	0	0	0	0	0	0	0
43 44	Incremental Growth Average Accounts Served	50	50	50	50	50	50	50	50	50	50	50	50	50
45	ERC Growth	50	6	0	0	0	0	0	0	0	0	0	0	0
46	Average ERC's Served	784	790	790	790	790	790	790	790	790	790	790	790	790
47 48	Water Sales (000's) Average Monthly Flow per Account (Ga	33,533 55,888	42,911 71,518	33,533 55,888										
49	Irrigation Service - Inside City [3] Normal Growth		-1	0	1	0	1	0	1	0	1	0	1	0
50	Incremental Growth	58	0	0	0	0	0	0	0	0	0	0	0	0
51 52	Average Accounts Served  Water Sales (000's)	40,042	57 32,212	57 39,352	58 40,042	58 40,042	59 40,732	59 40,732	60 41,423	60 41,423	61 42,113	61 42,113	62 42,804	62 42,804
53	Average Monthly Flow per Account (Ga	57,532	47,094	57,532	57,532	57,532	57,532	57,532	57,532	57,532	57,532	57,532	57,532	57,532
54	Irrigation Service - Outside City [3] Normal Growth		-1	0.00%	0	0	0	0	0	0	0	0	0	0
55 56	Incremental Growth Average Accounts Served	454	453	453	453	453	0 453	453	453	453	453	453	453	453
57	Average Accounts Served  Water Sales (000's)		91,088						453 94,957					
57	Water Sales (000's) Average Monthly Flow per Account (Ga	95,132 17,481	91,088 16,769	94,957 17,481										
59	South Broward Residential (Special Rate) Normal Growth		2	0.10%	3	0	0	0	0	0	0	0	0	0
60 61	Incremental Growth Average Accounts Served	2,988	2,990	2,993	2,996	2,996	2,996	2,996	2,996	2,996	2,996	2,996	2,996	2,996
62 63	Water Sales (000's)	222,050	229,896	222,428	222,651	222,651	222,651	222,651	222,651	222,651	222,651	222,651	222,651	222,651
0.5	Average Monthly Flow per Account (Ga	6,193	6,407	6,193	6,193	6,193	6,193	6,193	6,193	6,193	6,193	6,193	6,193	6,193

Table 1 City of Sunrise, Florida 2021 Water and Wastewater Rate Study

#### Historical and Projected Customer Statistics

Line	_	Histor	rical						Projected					
No.	Description	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
64	South Broward Commercial (Special Rate) Normal Growth		1	1.40%	2	2	2	2	2	2	2	2	2	2
65 66	Incremental Growth Average Accounts Served	142	143	145	147	149	151	153	155	157	0 159	161	163	165
67 68	Water Sales (000's) Average Monthly Flow per Account (Ga	34,475 20,256	34,803 20,353	35,123 20,256	35,609 20,256	36,095 20,256	36,582 20,256	37,068 20,256	37,554 20,256	38,040 20,256	38,526 20,256	39,012 20,256	39,498 20,256	39,985 20,256
69	South Broward Government (Special Rate) Normal Growth		1	0	0	0	0	0	0	0	0	0	0	0
70 71	Incremental Growth	3	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4
	Average Accounts Served	,		•		•		•		•			-	
72 73	ERC Growth Average ERC's Served	2	2	2	2	2	2	2	2	2	2	2	2	2
74 75	Water Sales (000's) Average Monthly Flow per Account (Ga	53 1,472	291 6,063	71 1,472	71 1,472	71 1,472	71 1,472	71 1,472	71 1,472	71 1,472	71 1,472	71 1,472	71 1,472	71 1,472
76	South Broward Irrigation (Special Rate) [3] Normal Growth		-8	0.00%	0	0	0	0	0	0	0	0	0	0
77	Incremental Growth		0	0	0	0	0	0	0	0	0	0	0	0
78	Average Accounts Served	320	312	312	312	312	312	312	312	312	312	312	312	312
79 80	Water Sales (000's) Average Monthly Flow per Account (Ga	24,396 6,358	25,174 6,718	23,824 6,358	23,824 6,358	23,824 6,358	23,824 6,358	23,824 6,358	23,824 6,358	23,824 6,358	23,824 6,358	23,824 6,358	23,824 6,358	23,824 6,358
	Customers Billed Per ERC (X≥6"s) Multi-Family (Tao Development)													
81	Average Accounts Served	0	0	0	0	0	0	0	0	0	0	0	0	0
82 83	Normal Unit Growth Incremental unit Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
84	Average Units Served	0	0	0	0	0	0	0	0	0	0	0	0	0
85	Normal ERC Growth		0	0	0	0	0	0	0	0	0	0	0	0
86 87	Incremental ERC Growth Average ERCs Served	0	0	0	0	0	0	0	0	0	0	0	0	0
88 89	Water Sales (000's) Average Monthly Flow per Account (Ga	0	0	0	0	0	0	0	0	0	0	0	0	0
	Commercial Class [1] [4]													
90	Account Growth		2	0	0	0	0	0	0	0	0	0	0	0
91 92	ERC Growth Average Accounts Served	2	<u>0</u> 4	<u>0</u>	4			4	<u>0</u> 4	4	4	4	4	4
93	Normal ERC Growth		378	0	0	0	0	0	0	0	0	0	0	0
94 95	Incremental ERC Growth	194	572	572	572	572	572	572	572	572	572	572	572	<u>0</u> 572
	Average ERCs Served													
96 97	Water Sales (000's) Average Monthly Flow per Account (Ga	4,515 188,125	5,042 105,042	4,800 100,000	4,800 100,000	4,800 100,000	4,800 100,000	4,800 100,000	4,800 100,000	4,800 100,000	4,800 100,000	4,800 100,000	4,800 100,000	4,800 100,000
98 99	Total Average ERC's Served for $X \ge 6$ Total Water Sales $X \ge 6$	194 4,515	572 5,042	572 4,800	572 4,800	572 4,800	572 4,800	572 4,800	572 4,800	572 4,800	572 4,800	572 4,800	572 4,800	572 4,800
100	Total Water System	62,519	62.621	62,762	C2 800	63,008	62.111	62.200	62.202	63,375	63,448	(2.52)	63,584	62.647
101	Average Accounts Served Total Water Sales (000's)	7,040,158	62,621 7,321,822	7,061,214	62,890 7,078,938	7,089,347	63,111 7,097,527	63,209 7,106,470	63,292 7,113,185	7,121,111	7,127,255	63,521 7,134,610	7,140,184	63,647 7,146,971
102	Estimated Water Production (000's)	8,665,637	9,012,334	8,691,555	8,713,371	8,726,183	8,736,252	8,747,260	8,755,525	8,765,281	8,772,844	8,781,897	8,788,758	8,797,112
103	Unaccounted for/ Unbilled Water: Amount	1,625,479	1,690,512	1,630,341	1,634,433	1,636,836	1,638,725	1,640,790	1,642,340	1,644,170	1,645,589	1,647,287	1,648,574	1,650,141
104 105	Percent of Production Average Daily Flow (MGD)	18.76% 23.741	18.76% 24.691	18.76% 23.812	18.76% 23.872	18.76% 23.907	18.76% 23.935	18.76% 23.965	18.76% 23.988	18.76% 24.014	18.76% 24.035	18.76% 24.060	18.76% 24.079	18.76% 24.102
		23.741	24.091	23.012	23.672	23.901	23.933	23.903	23.700	24.014	24:033	24.000	24.079	24.102
	Wastewater System Residential Class - Inside City													
106 107	Normal Growth Incremental Growth		101	75 0	70 0	65 0	60 0	55 0	50 0	45 0	40 0	35 0	30 0	25 0
108	Average Accounts Served	21,786	21,887	21,962	22,032	22,097	22,157	22,212	22,262	22,307	22,347	22,382	22,412	22,437
109 110	Revenue Gallons (000's) Average Monthly Flow per Account (Ga	1,201,910 4,597	1,276,969 4,862	1,211,606 4,597	1,215,468 4,597	1,219,054 4,597	1,222,364 4,597	1,225,398 4,597	1,228,157 4,597	1,230,639 4,597	1,232,846 4,597	1,234,777 4,597	1,236,432 4,597	1,237,811 4,597
	Residential Class - Outside City													
111 112	Normal Growth Incremental Growth		27 0	55 0	50 0	45 0	40 0	35 0	30 0	30 0	30 0	30 0	30 0	30 0
113	Average Accounts Served	31,384	31,411	31,466	31,516	31,561	31,601	31,636	31,666	31,696	31,726	31,756	31,786	31,816
114 115	Revenue Gallons (000's) Average Monthly Flow per Account (Ga	2,421,031 6,429	2,550,127 6,766	2,427,350 6,429	2,431,207 6,429	2,434,679 6,429	2,437,765 6,429	2,440,465 6,429	2,442,779 6,429	2,445,093 6,429	2,447,407 6,429	2,449,722 6,429	2,452,036 6,429	2,454,350 6,429
	General Service Class - Inside City													
116 117	Normal Growth Incremental Growth		-29 0	3 0	0	3 0	0	3 0	0	3 0	0	3 0	0	3 0
118	Average Accounts Served	1,688	1,664	1,667	1,667	1,670	1,670	1,673	1,673	1,676	1,676	1,679	1,679	1,682
119 120	Revenue Gallons (000's) Average Monthly Flow per Account (Ga	615,715 30,406	594,220 29,759	608,235 30,406	608,235 30,406	609,330 30,406	609,330 30,406	610,424 30,406	610,424 30,406	611,519 30,406	611,519 30,406	612,614 30,406	612,614 30,406	613,708 30,406
	General Service Class - Outside City [1]													
121 122	Normal Growth Incremental Growth		1 0	3 0	0	3	0	3 0	0	3	0	3 0	0	3
123	Average Accounts Served	1,132	1,130	1,133	1,133	1,136	1,136	1,139	1,139	1,142	1,142	1,145	1,145	1,148
124 125	Revenue Gallons (000's) Average Monthly Flow per Account (Ga	454,534 33,461	473,885 34,947	454,936 33,461	454,936 33,461	456,140 33,461	456,140 33,461	457,345 33,461	457,345 33,461	458,549 33,461	458,549 33,461	459,754 33,461	459,754 33,461	460,959 33,461
	Multi-Family Class - Inside City [2]		_	_		_	_	_	_	_	_	_	_	
126 127	Normal Growth Incremental Growth		1	0	1	0	0	0	0	0	0	0	0	0
128	Average Accounts Served	843	845	845	846	846	846	846	846	846	846	846	846	846
129 130	Unit Growth Average Units Served	17,904	98 17,904	17,904	140	18,044	18,044	18,044	18,044	18,044	18,044	18,044	18,044	0 18,044
131	Revenue Gallons (000's)	804,175	810,983	804,175	810,463	810,463	810,463	810,463	810,463	810,463	810,463	810,463	810,463	810,463
132	Average Monthly Flow per Unit (Gallon	3,743	3,775	3,743	3,743	3,743	3,743	3,743	3,743	3,743	3,743	3,743	3,743	3,743

City of Sunrise, Florida 2021 Water and Wastewater Rate Study

#### Historical and Projected Customer Statistics

T :	_	TEsta	to at						Davis start					
Line No.	Description	Histor 2018	2019	2020	2021	2022	2023	2024	Projected 2025	2026	2027	2028	2029	2030
	Multi-Family Class - Outside City													
133	Normal Growth		0	0	1	0	0	0	0	0	0	0	0	0
134 135	Incremental Growth Average Accounts Served	458	458	458	459	459	459	459	459	459	459	459	459	0 459
	-		10	0	40	0	0	0	0	0	0		0	0
136 137	Unit Growth Average Units Served	10,010	10,020	10,020	10,060	10,060	10,060	10,060	10,060	10,060	10,060	10,060	10,060	10,060
138	Revenue Gallons (000's)	481,852	480,722	482,333	484,259	484,259	484,259	484,259	484,259	484,259	484,259	484,259	484,259	484,259
139	Average Monthly Flow per Unit (Gallon	4,012	3,998	4,012	4,012	4,012	4,012	4,012	4,012	4,012	4,012	4,012	4,012	4,012
	Government Service Class - Inside City													
140	Normal Growth		4	0	0	0	0	0	0	0	0	0	0	0
141 142	Incremental Growth Average Accounts Served	17	20	20	20	20	20	20	20	20	20	20	20	20
	ERC Growth		7	0	0	0		0	0		0		0	
143 144	Average ERC's Served	435	443	443	443	443	443	443	443	443	443	443	443	443
145	Revenue Gallons (000's)	35,906	41,213	36,611	36,611	36,611	36,611	36,611	36,611	36,611	36,611	36,611	36,611	36,611
146	Average Monthly Flow per Account (Ga	6,886	7,752	6,886	6,886	6,886	6,886	6,886	6,886	6,886	6,886	6,886	6,886	6,886
	Government Service Class - Outside City													
147 148	Normal Growth Incremental Growth		0	0	0	0	0	0	0	0	0	0	0	0
148	Average Accounts Served	35	35	35	35	35	35	35	35	35	35	35	35	35
150	ERC Growth		6	0	0	0	0	0	0	0	0	0	0	0
151	Average ERC's Served	641	649	649	649	649	649	649	649	649	649	649	649	649
152	Revenue Gallons (000's)	25,956	27,498	26,281	26,281	26,281	26,281	26,281	26,281	26,281	26,281	26,281	26,281	26,281
153	Average Monthly Flow per Account (Ga	3,374	3,530	3,374	3,374	3,374	3,374	3,374	3,374	3,374	3,374	3,374	3,374	3,374
	South Broward Residential (Special Rate)													
154	Normal Growth		2	3	3	0	0	0	0	0	0	0	0	0
155 156	Incremental Growth Average Accounts Served	2,850	2,850	2,853	2,856	2,856	2,856	2,856	2,856	2,856	2,856	2,856	2,856	2,856
157	Revenue Gallons (000's)	176,922	182,164	177,093	177,279	177,279	177,279	177,279	177,279	177,279	177,279	177,279	177,279	177,279
158	Average Monthly Flow per Account (Ga	5,173	5,326	5,173	5,173	5,173	5,173	5,173	5,173	5,173	5,173	5,173	5,173	5,173
	South Broward Commercial (Special Rate)													
159	Normal Growth		1	2	2	2	2	2	2	2	2	2	2	2
160 161	Incremental Growth Average Accounts Served	122	123	125	127	129	131	133	135	137	139	141	143	0 145
162 163	Revenue Gallons (000's) Average Monthly Flow per Account (Ga	30,232 20,650	30,165 20,437	30,975 20,650	31,471 20,650	31,967 20,650	32,462 20,650	32,958 20,650	33,453 20,650	33,949 20,650	34,445 20,650	34,940 20,650	35,436 20,650	35,931 20,650
164	South Broward Government (Special Rate) Normal Growth		1	0	0	0	0	0	0	0	0	0	0	0
165	Incremental Growth		0	0	0	0	0	0	0	0	0	0	0	0
166	Average Accounts Served	0	1	1	1	1	1	1	1	1	1	1	1	1
167 168	ERC Growth	0	1	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	0	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	0
	Average ERC's Served	0							-					
169 170	Revenue Gallons (000's) Average Monthly Flow per Account (Ga	0	171 14,250	171 14,000										
		Ü	14,200	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000
	Customers Billed Per ERC (X>6"'s) Multi-Family (TOA Development)													
171	Average Accounts Served	0	0	0	0	0	0	0	0	0	0	0	0	0
172	Normal Unit Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
173	Incremental Unit Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
174	Average Units Served	U	0	U	U	U	U	U	U	U	U	U	0	
175 176	Normal ERC Growth Incremental ERC Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
177	Average ERCs Served	0	0	0	0	0	0	0	0	0	0	0	0	0
178	Revenue Gallons (000's)	0	0	0	0	0	0	0	0	0	0	0	0	0
179	Average Monthly Flow per Unit (Gallons)	0	0	0	0	0	0	0	0	0	0	0	0	0
	Commercial Class [1]	_	_	_	_	_	_	_	_	_	_	_		
180 181	Account Growth ERC Growth	2	3 0	0	0	0	0	0	0	0	0	0	0	0
182	Average Accounts Served	2	3	3	3	3	3	3	3	3	3	3	3	3
183	Normal ERC Growth	184	220	0	0	0	0	0	0	0	0	0	0	0
184 185	ERC Growth Average ERCs Served	184	220	220	220	220	220	220	220	220	220	220	220	0 220
	-													
186 187	Revenue Gallons (000's) Average Monthly Flow per Account (Gallons	4,500 187,500	3,600 100,000											
	Total Average Erc's Served for x>6 Total Revenue Gallons for X>6	184 4,500	220 3,600											
		-9	-,	.,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,00
190	Total Wastewater System Average Accounts Served	60,316	60,426	60,567	60,694	60,812	60,914	61,012	61,094	61,177	61,249	61,322	61,384	61,447
191	Total Revenue Gallons (000's)	6,252,733	6,471,717	6,263,366	6,279,981	6,289,834	6,296,725	6,305,254	6,310,822	6,318,413	6,323,430	6,330,471	6,334,936	6,341,423
192	Estimated Wastewater Treated (000's)	9,336,741	9,311,588	9,011,810	9,035,716	9,049,892	9,059,807	9,072,079	9,080,090	9,091,012	9,098,231	9,108,361	9,114,786	9,124,119
	Difference in Billed and Treted Flows	2 847 542	2 930 971	2 749 444	2755725	2 760 050	2 762 002	2766 025	2 760 260	2 772 500	2 774 901	2 777 900	2 770 050	2702606
193 194 195	Difference in Billed and Treted Flows Amount Percent of Treated Average Daily Flow (MGD)	2,847,542 30.50% 25.580	2,839,871 30.50% 25.511	2,748,444 30.50% 24.690	2,755,735 30.50% 24.755	2,760,058 30.50% 24.794	2,763,082 30.50% 24.821	2,766,825 30.50% 24.855	2,769,268 30.50% 24.877	2,772,599 30.50% 24.907	2,774,801 30.50% 24.927	2,777,890 30.50% 24.954	2,779,850 30.50% 24.972	2,782,696 30.50% 24.998

Footnotes:

[11] Customer statistics shown for the general outside city customer class reflect a reclaissifcation or reduction in the number of customer accounts and billed flows for purposes of forecasting rate revenus. General service customers are billed either based upon:

i) the respective customers metersize, up to four (4) inches; or ii) based upon the customers ERCs as determined by the Department of Planning and Development in accordance with the minimum design flow provisions of FA.C. 64E-6.008 (Rate Resolution August 2009) for customers with meter sizes greater than or equal to six (6) inches.

[2] The Toa multi-family residential development (the "Toa") recieves both water and cooling tower services from the City on a single meter. For billing purposes, the Toa recieves monthly bills based on a determined ERC factor ide to the number of multi-family units and an allowance for the cooling tower. The TAO intially began recieving service in March 2008. For purposes of this analysis, customer statistics were reclassified from the inside multi-family customer class designation.

[3] The city provides irrigation services to the government class, however such customers extastitics were recognized within the government customer classification for purposes of calculating rate revenues, since all government customer accounts are billed on a Per ERC basis as determined by the Department of Planning and Development in accordance with the minimum design flow provisions of F.A.C. 64E-6.008 (Rate Resolution August 2009).

Table 2

City of Sunrise, Florida

2021 Water and Wastewater Rate Study

# **Projected Operating Expense Escalation Factors**

Line		Escalation									
No.	Description	Reference	2022	2023	2024	2025	2026	2027	2028	2029	2030
	_	_									
1	Constant	Constant	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	General Inflation	Inflation	1.0170	1.0210	1.0220	1.0230	1.0220	1.0220	1.0220	1.0220	1.0220
3	Labor Escalator	Labor	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250
4	Pension / POB	Pension	1.0450	1.0450	1.0450	1.0450	1.0450	1.0450	1.0450	1.0450	1.0450
5	Professional Services	ProfSvc	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250
6	Repair and Maintenance - Primary Plant	Repair	1.0500	1.0400	1.0270	1.0270	1.0270	1.0270	1.0270	1.0270	1.0270
7	Repair and Maintenance - General	Repair - Gen	1.0500	1.0400	1.0270	1.0270	1.0270	1.0270	1.0270	1.0270	1.0270
8	Capital Outlay	Capital	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500
9	Gas & Oil	Fuel	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250
10	General Insurance Escalator	Insurance	1.0350	1.0350	1.0350	1.0350	1.0350	1.0350	1.0350	1.0350	1.0350
11	Property Insurance Escalator	PropIns	1.0350	1.0350	1.0350	1.0350	1.0350	1.0350	1.0350	1.0350	1.0350
12	Marginal Escalator	Margin	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
13	Phase Eliminate	Phase Elmnt	0.5000	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500
14	Eliminate	Eliminate	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
											0.000
15	Weston Cable Escalator	Weston	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
16	Motor Vehicles	Mvehicles	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500
17	Electric (Adjustment + Flow Growth)	Electric	1.0266	1.0262	1.0264	1.0259	1.0262	1.0259	1.0261	1.0258	1.0260
18	Chemicals (Adjustment + Flow Growth)	Chemical	1.0216	1.0212	1.0214	1.0209	1.0212	1.0209	1.0211	1.0208	1.0210
19	Sludge - Water (Adjustment + Flow Growth)	Sludge_W	1.0185	1.0222	1.0233	1.0239	1.0231	1.0229	1.0230	1.0228	1.0230
20	Sludge - Wastewater (Adjustment + Flow Growth		1.0186	1.0221	1.0234	1.0239	1.0232	1.0228	1.0231	1.0227	1.0230
21	Customer Acct. Growth + Inflation - Water	Cust-Water	1.0189	1.0226	1.0236	1.0243	1.0233	1.0232	1.0232	1.0230	1.0230
22	Customer Acct. Growth + Inflation - Sewer	Cust-Sewer	1.0189	1.0227	1.0236	1.0243	1.0234	1.0232	1.0232	1.0230	1.0230
23	Flow Growth + Inflation - Water	Water Flow	1.0185	1.0222	1.0233	1.0239	1.0231	1.0229	1.0230	1.0228	1.0230
24	Flow Growth + Inflation - Sewer	Sewer Flow	1.0186	1.0221	1.0234	1.0239	1.0232	1.0228	1.0231	1.0227	1.0230
25	Customer Account Growth - Water	Grth-Water	1.0019	1.0016	1.0016	1.0013	1.0013	1.0012	1.0012	1.0010	1.0010
26	Customer Account Growth - Sewer	Grth-Sewer	1.0019	1.0017	1.0016	1.0013	1.0014	1.0012	1.0012	1.0010	1.0010
	Rate Indexing	Index	1.0000	1.0300	1.0300	1.0300	1.0300	1.0300	1.0300	1.0300	1.0300
27	Water Rate Adjustments	WRates	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
28	Wastewater Rate Adjustments	SRates	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
29	Weighted Average Rate Adjustments	Rates	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30	Rate Revenue - Water	Water Rev	1.0166	1.0311	1.0316	1.0310	1.0306	1.0312	1.0309	1.0308	1.0309
31	Rate Revenue - Sewer	Sewer Rev	1.0169	1.0306	1.0315	1.0307	1.0316	1.0308	1.0307	1.0308	1.0308

Table 3

City of Sunrise, Florida
2021 Water and Wastewater Rate Study

# Summary of Projected Operating Expenses [1]

Line			Projected Fiscal Year Ending September 30,										
No.	Description	Allocator	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
,	Water System												
1	Salaries and Wages, Including Benefit	P	\$ 14,417,354	\$ 14,582,525	\$ 15,192,772	\$ 15,732,370	\$ 16,290,207	\$ 16,824,826	\$ 17,314,286	\$ 17,819,086	\$ 18,339,585	\$ 18,876,021	\$ 19,381,655
2	Reclassified Capitalized Labor	RP	444,322	288,825	74,070	465,506	691,631	715,513	895,095	731,293	895,038	663,448	861,511
	G 1: 101 : 1W		φ.1.4.0.c1.cπ.c	ф 1.4.0 <del>7</del> 1.250	Φ 15 266 0 12	Φ 1 6 107 07 6	# 1 C 001 020	ф 17 5 40 220	ф 10 200 201	Φ 10 550 250	ф 10 224 <i>(</i> 22	# 10 <b>52</b> 0 160	<b>** ** ** ** ** ** ** **</b>
3	Combined Salaries and Wages	_	\$ 14,861,676	\$ 14,871,350	\$ 15,266,842	\$ 16,197,876	\$ 16,981,838	\$ 17,540,339	\$18,209,381	\$ 18,550,379	\$ 19,234,623	\$ 19,539,469	\$ 20,243,167
4	Electricity	Е	1,696,754	1,900,604	1,951,101	2,002,130	2,054,895	2,108,209	2,163,450	2,219,403	2,277,359	2,336,073	2,396,866
5	Chemicals	С	1,477,212	1,399,774	1,423,570	1,453,465	1,485,442	1,519,607	1,553,038	1,587,205	1,622,124	1,657,810	1,694,282
6	Administrative Services (DOCA)	DOCA	2,620,659	2,620,659	2,665,211	2,721,180	2,781,046	2,845,010	2,907,600	2,971,568	3,036,942	3,103,755	3,172,037
7	Indian Trace Cost Reimbursement	It	3,078,463	3,078,463	3,078,463	3,170,817	3,265,941	3,363,919	3,464,837	3,568,782	3,675,845	3,786,121	3,899,704
8	Repairs and Maintenance	M	950,508	1,253,082	1,310,583	1,360,049	1,396,142	1,433,355	1,471,402	1,510,463	1,550,565	1,591,737	1,634,008
9	Insurance	Ins	1,030,651	1,137,034	1,176,831	1,218,020	1,260,650	1,304,773	1,350,440	1,397,705	1,446,625	1,497,257	1,549,661
10	Contractual Services	Contract	13,012	13,232	13,563	13,902	14,249	14,605	14,971	15,345	15,728	16,122	16,525
11	Reclassified Capital Outlay	RC	-	-	-	-	-	-	-	-	-	-	-
12	Professional and Legal Services	Prof	1,507,056	2,111,002	2,169,642	2,230,030	2,292,164	2,356,094	2,421,835	2,489,460	2,559,024	2,630,584	2,704,200
13	Other Operating Expenses	О	1,596,865	1,730,557	1,812,581	1,851,241	1,892,519	1,936,531	1,979,714	2,023,852	2,068,988	2,115,122	2,162,299
14	Contingency Allowance	Con	434,862	451,767	461,526	479,843	496,498	510,691	526,263	537,908	554,038	565,610	582,967
15	Materials and Supplies	MS	741,932	694,488	706,390	721,286	737,208	754,207	770,851	787,860	805,244	823,008	841,164
16	Sludge Removal Expense	Slud	189,213	332,500	338,153	345,254	352,849	360,965	368,906	377,022	385,316	393,793	402,457
17	Water Conservation Program	Wconsv	92,155	208,100	211,638	216,082	220,836	225,915	230,885	235,965	241,156	246,461	251,884
18	Postage, Binding, and Printing	Post	151,120	165,729	169,860	174,102	178,452	182,912	187,482	192,165	196,965	201,885	206,927
19	Credit Card Transaction Costs	CCT	347,084	379,652	386,106	394,214	402,887	412,153	421,220	430,487	439,958	449,637	459,529
20	Sewer Service Plantation	Plantation	15,946	18,748	19,067	19,468	19,896	20,354	20,801	21,259	21,727	22,205	22,693
21	Total Water System Expenses		\$ 30,805,169	\$ 32,366,741	\$ 33,161,124	\$ 34,568,959	\$ 35,833,513	\$ 36,889,640	\$ 38,063,077	\$ 38,916,827	\$40,132,228	\$40,976,649	\$42,240,370

Footnotes on Page 3 of 3.

City of Sunrise, Florida 2021 Water and Wastewater Rate Study

Table 3

# Summary of Projected Operating Expenses [1]

Line			Projected Fiscal Year Ending September 30,										
No.	Description	Allocator	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
			-			-							
	Wastewater System												
22	Salaries and Wages, Including Benefit	P	\$ 13,803,742	\$ 13,947,591	\$ 14,538,389	\$ 15,071,262	\$ 15,622,316	\$ 16,134,725	\$ 16,603,417	\$ 17,086,758	\$17,585,138	\$18,098,737	\$18,586,401
23	Reclassified Capitalized Labor	RP	444,322	288,825	74,070	465,506	691,631	715,513	895,095	731,293	895,038	663,448	861,511
24	Combined Salaries and Wages		\$ 14,248,064	\$ 14,236,416	\$ 14,612,459	\$15,536,767	\$16,313,947	\$16,850,238	\$17,498,512	\$17,818,051	\$18,480,176	\$18,762,185	\$ 19,447,912
25	Electricity	E	1,637,299	1,834,006	1,882,734	1,931,974	1,982,891	2,034,337	2,087,642	2,141,634	2,197,560	2,254,216	2,312,879
26	Sludge Removal Expense	Slud	1,000,373	1,216,500	1,237,225	1,263,229	1,291,037	1,320,743	1,349,817	1,379,532	1,409,901	1,440,938	1,472,659
27	Administrative Services (DOCA)	DOCA	2,528,831	2,528,831	2,571,821	2,625,829	2,683,597	2,745,320	2,805,717	2,867,443	2,930,526	2,994,998	3,060,888
28	Chemicals	C	1,425,450	1,350,726	1,373,688	1,402,535	1,433,391	1,466,359	1,498,619	1,531,589	1,565,284	1,599,720	1,634,914
29	Indian Trace Cost Reimbursement	It	2,970,592	2,970,592	2,970,592	3,059,710	3,151,501	3,246,046	3,343,428	3,443,730	3,547,042	3,653,454	3,763,057
30	Repairs and Maintenance	M	905,344	1,196,768	1,252,054	1,299,528	1,334,075	1,369,682	1,406,101	1,443,492	1,481,882	1,521,297	1,561,765
31	Reclassified Capital Outlay	RC	-	-	-	-	-	-	-	-	-	-	-
32	Insurance	Ins	995,037	1,098,066	1,136,498	1,176,275	1,217,445	1,260,056	1,304,158	1,349,803	1,397,046	1,445,943	1,496,551
33	Professional and Legal Services	Prof	1,367,431	1,892,257	1,944,285	1,997,852	2,052,950	2,109,625	2,167,886	2,227,798	2,289,408	2,352,766	2,417,924
34	Contractual Services	Contract	12,556	12,768	13,087	13,415	13,750	14,094	14,446	14,807	15,177	15,557	15,946
35	Contingency Allowance	Con	437,990	453,011	462,648	481,023	497,757	511,854	527,334	538,882	554,910	566,372	583,612
36	Materials and Supplies	MS	714,918	666,364	677,774	692,061	707,334	723,641	739,606	755,921	772,595	789,634	807,049
37	Other Operating Expenses	О	1,540,428	1,670,956	1,750,117	1,787,439	1,827,288	1,869,777	1,911,464	1,954,073	1,997,645	2,042,181	2,087,723
38	Postage, Binding, and Printing	Post	145,839	160,027	164,016	168,112	172,312	176,618	181,030	185,551	190,186	194,936	199,805
39	Sewer Service Plantation	Plantation	15,387	18,092	18,399	18,785	19,199	19,640	20,072	20,514	20,965	21,427	21,898
40	Credit Card Transaction Costs	CCT	334,922	366,348	372,576	380,400	388,769	397,711	406,461	415,403	424,542	433,882	443,427
41	Water Conservation Program	Wconsv	-	-	-	-	-	-	-	-	-	-	-
42	Total Wastewater System Expenses		\$ 30,280,463	\$31,671,728	\$ 32,439,973	\$ 33,834,936	\$35,087,243	\$ 36,115,739	\$ 37,262,294	\$38,088,224	\$ 39,274,846	\$40,089,504	\$41,328,008

Footnotes on Page 3 of 3.

Table 3

City of Sunrise, Florida
2021 Water and Wastewater Rate Study

# Summary of Projected Operating Expenses [1]

Line			Projected Fiscal Year Ending September 30,										
No.	Description	Allocator	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	3 1: 10												
	Combined Systems	-	0.00.004.004	****								A A C O T L T T O	A 25 0 40 0 5 4
43	Salaries and Wages, Including Benefit	P	\$ 28,221,096	\$ 28,530,117	\$ 29,731,161	\$ 30,803,632	\$31,912,523	\$ 32,959,551	\$ 33,917,703	\$ 34,905,844	\$ 35,924,723	\$ 36,974,758	\$ 37,968,056
44	Reclassified Capitalized Labor	RP	888,644	577,650	148,139	931,011	1,383,262	1,431,025	1,790,191	1,462,586	1,790,076	1,326,896	1,723,023
45	Combined Salaries and Wages		\$ 29,109,740	\$ 29,107,767	\$29,879,301	\$31.734.643	\$ 33,295,785	\$ 34,390,576	\$ 35,707,894	\$ 36,368,430	\$ 37.714.799	\$ 38.301.654	\$ 39.691.079
46	Electricity	Е	3,334,054	3,734,610	3,833,835	3,934,104	4,037,786	4,142,546	4,251,092	4,361,037	4,474,919	4,590,288	4,709,746
47	Chemicals	C	2,902,662	2,750,500	2,797,259	2,856,001	2,918,833	2,985,966	3.051.657	3,118,794	3,187,407	3,257,530	3,329,196
48	Administrative Services (DOCA)	DOCA	5,149,490	5,149,490	5,237,031	5,347,009	5,464,643	5,590,330	5,713,317	5,839,010	5,967,468	6,098,753	6,232,925
49	Indian Trace Cost Reimbursement	It	6,049,055	6,049,055	6,049,055	6,230,526	6,417,442	6,609,965	6,808,264	7,012,512	7,222,888	7,439,574	7,662,762
50	Sludge Removal Expense	Slud	1,189,586	1,549,000	1,575,377	1,608,482	1,643,886	1,681,708	1,718,723	1,756,554	1,795,217	1,834,732	1,875,116
51	Repairs and Maintenance	M	1,855,852	2,449,850	2,562,636	2,659,577	2,730,217	2,803,037	2,877,503	2,953,955	3,032,447	3,113,034	3,195,773
52	Insurance	Ins	2,025,688	2,235,100	2,313,329	2,394,295	2,478,095	2,564,829	2,654,598	2,747,509	2,843,671	2,943,200	3,046,212
53	Contractual Services	Contract	25,568	26,000	26,650	27,316	27,999	28,699	29,417	30,152	30,906	31,678	32,470
53	Reclassified Capital Outlay to O&M	RC	-	-	-	-	-	-	-	-	-	-	-
54	Professional and Legal Services	Prof	2,874,488	4,003,259	4,113,927	4,227,882	4,345,114	4,465,719	4,589,722	4,717,258	4,848,432	4,983,351	5,122,124
55	Other Operating Expenses	О	3,137,293	3,401,513	3,562,698	3,638,680	3,719,807	3,806,308	3,891,178	3,977,925	4,066,633	4,157,303	4,250,022
56	Contingency Allowance	Con	872,853	904,777	924,174	960,867	994,255	1,022,545	1,053,597	1,076,790	1,108,948	1,131,982	1,166,579
57	Materials and Supplies	MS	1,456,850	1,360,852	1,384,164	1,413,348	1,444,543	1,477,847	1,510,457	1,543,780	1,577,839	1,612,642	1,648,213
58	Postage, Binding, and Printing	Post	296,959	325,756	333,877	342,214	350,764	359,530	368,511	377,716	387,151	396,821	406,732
59	Credit Card Transaction Costs	CCT	682,006	746,000	758,682	774,614	791,656	809,864	827,681	845,890	864,499	883,518	902,956
60	Water Conservation Program	Wconsv	92,155	208,100	211,638	216,082	220,836	225,915	230,885	235,965	241,156	246,461	251,884
61	Sewer Service Plantation	Plantation	31,333	36,840	37,466	38,253	39,095	39,994	40,874	41,773	42,692	43,631	44,591
62	Total Combined System Expenses		\$ 61,085,631	\$ 64,038,469	\$ 65,601,097	\$ 68,403,894	\$70,920,756	\$ 73,005,379	\$75,325,371	\$ 77,005,050	\$ 79,407,074	\$ 81,066,153	\$83,568,379
Footnotes:				4.83%	2.44%	4.27%	3.68%	2.94%	3.18%	2.23%	3.12%	2.09%	3.09%

<sup>[1]</sup> Amounts shown do not include any depreciation or amortization expenses

Table 4

City of Sunrise, Florida

2021 Water and Wastewater Rate Study

### Projected Capital Improvement Program Funding [1]

Line		Projected Fiscal Year Ending September 30,										Forecast	
No.	Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		Total
	WATER SYSTEM	<b>0.1 7 6 6 9 9 9</b>	ф 1 500 <b>25</b> 7	<b>*</b> 5 412 161	Φ.	<b>•</b> 446.764	A 1.076.110	A 2 005 050	A 5 015 500	#12.222.042	•	•	22 240 201
1	Operating Reserves	\$ 1,766,393	\$ 1,500,257	\$ 5,412,161		\$ 446,764	\$ 1,076,112	\$ 3,005,970	\$ 7,817,592	\$12,223,042		\$	33,248,291
2	Renewal and Replacement Fund	5,578,873	8,386,326	18,935,153	9,785,129	14,834,271	11,517,992	21,989,250	2,195,628	2,662,907	2,739,070		98,624,599
3	Water Impact Fees	-	-	-	-	-	-	-	-	-	-		-
4	Rate Revenue	18,575	19,504	20,479	21,503	22,579	23,707	24,893	26,138	27,444	28,817		233,640
5	System Reserves	-	-	-	-	39,037	170,131	819,669	-	-	-		1,028,837
6	Capital Projects	938,985	3,939,359	(1,420,445)	1,231,663	(491,408)	7,437,493	2,344,341	14,877,726	13,949,489	36,358,968		79,166,170
7	Prior Period Bond Proceeds	-	-	-	-	-	-	-	-	-	-		-
8	Grants and Other Contributions	_	-	-	-	_	-	_	_	-	_		-
9	Total Water System  WASTEWATER SYSTEM	\$ 8,302,826	\$13,845,445	\$22,947,348	\$11,038,296	\$14,851,244	\$20,225,435	\$28,184,123	\$24,917,084	\$28,862,882	\$39,126,854	\$	212,301,537
10	Operating Reserves	\$ 525,244	\$ 48,156	\$ 256,608	\$ 1,216,820	\$ 970,968	\$ 403,676	\$ 1,554,208	\$ -	\$ -	\$ -	\$	4,975,679
11	Renewal and Replacement Fund	24,374,254	7,093,377	6,526,951	6,632,632	7,350,958	3,975,322	12,693,623	7,415,645	13,998,598	-		90,061,359
12	Wastewater Impact Fees	_	-	-	-	-	-	167,155	1,155,598	-	-		1,322,753
13	Rate Revenue	43,129	1,112,115	437,598	511,735	333,214	324,356	457,645	395,096	675,407	_		4,290,294
14	System Reserves	_	_	_	-	_	_	_	_	-	-		-
15	Capital Projects	(375,671)	11,954,768	4,454,584	14,207,549	5,828,197	18,671,211	4,143,246	16,916,578	10,863,113	18,873,145		105,536,720
16	Prior Period Bond Proceeds	-	-	-	-	-	-	-	-	-	-		-
17	Grants and Other Contributions	-	-	-	-	-	-	-	-	-	-		-
18	Total Wastewater System	\$24,566,956	\$20,208,415	\$11,675,741	\$22,568,736	\$14,483,336	\$23,374,565	\$19,015,877	\$25,882,916	\$25,537,118	\$18,873,145	\$	206,186,806

Table 4

City of Sunrise, Florida

2021 Water and Wastewater Rate Study

#### Projected Capital Improvement Program Funding [1]

Line		Projected Fiscal Year Ending September 30,								Forecast			
No.	Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		Total
19 20 21	REUSE SYSTEM Operating Reserves Renewal and Replacement Fund Wastewater Impact Fees	\$ - 296,768	\$ -	\$ - - -	\$ - 757,703	\$ - 10,665,421	\$ - -	\$ - -	\$ - - -	\$ - -	\$ - -	\$	- 11,719,891 -
22	Rate Revenue	-	-	-	-	-	-	-	-	-	-		-
23	System Reserves	-	-	-	-	-	-	-	-	-	-		-
24	Capital Projects	1,833,450	8,946,140	8,376,911	2,635,266	-	-	-	-	-	-		21,791,766
25	Prior Period Bond Proceeds Grants and Other Contributions	-	-	-	-	-	-	-	-	-	-		-
26	Grants and Other Contributions	-	-	-	-	-	-	-	-	-	-		-
27	Total Reuse System	\$ 2,130,218	\$ 8,946,140	\$ 8,376,911	\$ 3,392,969	\$10,665,421	\$ -	\$ -	\$ -	\$ -	\$ -	\$	33,511,657
	COMBINED SYSTEM												
28	Operating Reserves	\$ 2,291,637	\$ 1,548,412	\$ 5,668,769	\$ 1,216,820	\$ 1,417,732	\$ 1,479,788	\$ 4,560,178	\$ 7,817,592	\$12,223,042	\$ -	\$	38,223,970
29	Renewal and Replacement Fund	30,249,895	15,479,702	25,462,104	17,175,464	32,850,650	15,493,314	34,682,873	9,611,273	16,661,505	2,739,070		200,405,849
30	Impact Fees Fund	-	-	-	-	-	-	167,155	1,155,598	-	-		1,322,753
31	Rate Revenue	61,705	1,131,619	458,077	533,238	355,792	348,063	482,538	421,234	702,851	28,817		4,523,934
32	System Reserves		-	-	-	39,037	170,131	819,669					1,028,837
33	Capital Projects	2,396,764	24,840,266	11,411,050	18,074,478	5,336,789	26,108,704	6,487,587	31,794,304	24,812,602	55,232,113		206,494,657
34	Prior Period Bond Proceeds	-	-	-	-	-	-	-	-	-	-		-
35	Grants and Other Contributions	-	-	-	-	-	-	-	-	-	-		-
36	Total Combined System	\$35,000,000	\$43,000,000	\$43,000,000	\$37,000,000	\$40,000,000	\$43,600,000	\$47,200,000	\$50,800,000	\$54,400,000	\$58,000,000	\$	452,000,000

Footnote

<sup>[1]</sup> Funding totals reflect Raftelis adjustments to reflect a cash needs basis which reflects: i) the planned increase in project management staffing anticipated by staff to be required to execute the CIP; ii) the additional timing required from appropriations of funding to completion of design and then construction for the project; and iii) the size and nature of the project.

Table 5

City of Sunrise, Florida
2021 Water and Wastewater Rate Study

#### Projected Net Revenue Requirements - Combined Systems

Line		Projected Fiscal Year Ending September 30,										
No.	Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
1	Combined Systems Operating Expenses:	\$64,038,469	\$65,601,097	\$68,403,894	\$70,920,756	\$73,005,379	\$75,325,371	\$77,005,050	\$79,407,074	\$81,066,153	\$83,568,379	
	Other Revenue Requirements:											
2	Existing Debt Service	\$17,735,900	\$17,732,720	\$17,727,105 0	\$17,728,497	\$17,722,255 0	\$17,722,828 0	\$10,530,081	\$10,530,811	\$10,529,734 0	\$10,526,850	
3	Proposed Debt Service	0	0	-	0		-	0	0	-	0	
5	Capital Funded From Rates Transfer to R&R Fund	37,151 23,844,422	39,008 21,989,220	40,959 22,158,819	43,007 22,339,607	45,157 22,523,380	47,415 22,713,759	49,786 22,909,711	52,275 23,112,818	54,889 23,321,440	57,633 23,535,577	
6	Reserve Account Transfers	23,044,422	21,969,220	22,136,619	22,339,007	22,323,360	22,/13,/39	22,909,711	23,112,616	23,321,440	23,333,377	
7	Return on Investment (ROI)	4,948,331	4,961,196	5,035,498	5,122,920	5,215,074	5,308,040	5,404,799	5,504,313	5,606,344	5,711,530	
8	Total Other Revenue Requirements	\$46,565,804	\$44,722,144	\$44,962,381	\$45,234,030	\$45,505,865	\$45,792,043	\$38,894,377	\$39,200,216	\$39,512,407	\$39,831,590	
9	Gross Revenue Requirements	\$110,604,273	\$110,323,241	\$113,366,275	\$116,154,786	\$118,511,245	\$121,117,413	\$115,899,427	\$118,607,290	\$120,578,559	\$123,399,968	
	Less Income and Funds from Other Sources:											
10	Other Revenues	\$3,184,373	\$4,288,902	\$4,294,445	\$4,304,554	\$4,315,713	\$4,326,309	\$4,343,524	\$4,363,615	\$4,383,514	\$4,406,177	
11	Non-Operating Other Revenues	0	0	0	0	0	0	0	0	0	0	
12	Interest Income	2,440,600	2,364,500	2,259,600	2,189,200	2,146,000	2,083,200	2,021,700	2,002,600	1,967,600	1,909,400	
13	Transfer from Operating Reserves	0	0	0	0	0	0	0	0	0	0	
14	Net Revenue Requirements	\$104,979,300	\$103,669,839	\$106,812,230	\$109,661,033	\$112,049,531	\$114,707,904	\$109,534,203	\$112,241,075	\$114,227,446	\$117,084,391	
15	Rate Indexing	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
16	Revenue From Existing Water and Wastewater Rates	\$ 111,263,473	\$ 113,131,004	\$116,622,338	\$120,298,393	\$124,005,891	\$127,865,671	\$131,828,991	\$135,890,155	\$140,077,684	\$ 144,395,959	
17	Revenue From Recognized Prior Period Rate Adjustments	-	-	-	-	-	-	-	-	-	-	
18	Amount	\$ 6,284,173	\$ 9,461,165	\$ 9,810,108	\$ 10,637,361	\$ 11,956,360	\$ 13,157,767	\$ 22,294,788	\$ 23,649,079	\$ 25,850,238	\$ 27,311,568	
19	Percent of Rate Revenue	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	RATE RECOMMENDATIONS: Effective Increase											
20	Projected Increase Water	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
21	Projected Increase Wastewater	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
22	Months Rate Increase in Effect	12	12	12	12	12	12	12	12	12	12	
23	Revenue From Water and Wastewater Rates:											
24	Current Year Rate Adjustment	-	-	-	-	-	-	-	-	-	-	
25	Prior Year Rate Adjustment	-	-	-	-	-	-	-	-	-	-	
26	Adjusted Water and Wastewater Rate Revenue	\$ 111,263,473	\$ 113,131,004	\$116,622,338	\$120,298,393	\$124,005,891	\$127,865,671	\$131,828,991	\$135,890,155	\$140,077,684	\$144,395,959	
27	Revenue Surplus / (Deficiency) After Adjustments	\$6,284,173	\$ 9,461,165	\$9,810,108	\$10,637,361	\$11,956,360	\$13,157,767	\$22,294,788	\$23,649,079	\$25,850,238	\$27,311,568	
28	As Percent	5.65%	8.36%	8.41%	8.84%	9.64%	10.29%	16.91%	17.40%	18.45%	18.91%	
										-		

Table 6

City of Sunrise, Florida
2021 Water and Wastewater Rate Study

#### Analysis of Cash and Investments and Development of Interest Income

Line No.		vestment eference	2021		2022	2023	2024		2025	2026		2027		2028	202	9	2030
1 2 3 4 5	ENDING CASH BALANCE SUMMARY: FUND 401 - OPERATING RESERVE FUND FUND 402 - RENIEWAL AND REPLACEMENT FUND FUND 403 - WATER CONNECTION FEE ACCOUNT FUND 403 - WASTEWATER CONNECTION FEE ACCOUNT FUND 405 - DEBT SERVICE RESERVE SUBACCOUNT	S	16,108,508 8,817,954 7,932,287 0	2	21,633,090 22,618,026 8,793,366 7,898,899 0	19,314,741 8,789,089 7,885,622 0	\$ 35,194. 24,478. 8,806. 7,893.	297 830 0	33,733,599 14,151,615 8,846,421 7,924,854 0	\$ 33,411 21,372 8,910 7,980	,852 ,085 0	9,598,898 9,001,143 7,893,121 0	2	23,100,443 9,118,811 6,838,392 0	29,7 9,2	04,871 \$ 60,378 65,647 62,427 0	44,916,439 50,556,885 9,443,311 7,116,991 0
6 7 8	FUND 406, 407 & 408 - BOND PROCEEDS (Construction Func FUND 464 - WATER & WASTEWATER SYSTEM RESERVE FUND 465 - WATER & WASTEWATER CAPITAL PROJECTS		0 25,858,145 181,543,426		0 20,858,145 51,703,160	11,858,145 159,292,110	2,858 150,217		0 2,819,108 156,880,842	2,648 142,772		0 1,829,308 149,284,551		0 1,829,308 31,490,247		0 29,308 77,645	0 1,829,308 87,445,533
9 10 11	TOTAL PROJECTED END OF YEAR BALANCES TOTAL PROJECTED END OF YEAR BALANCES (Less Debt l	\$ Related Fu \$		\$ 24	13,504,685 13,504,685 1355	\$ 232,914,136 \$ 232,914,136 1243				\$ 217,095 \$ 217,095		215,753,207 215,753,207 1023	\$ 21			00,276 \$ 00,276 \$ 937	201,308,466 201,308,466 879
12	FUND 401 - OPERATING RESERVE FUND Beginning Balance	(U) \$	9,727,802	\$ 1	13,720,338	\$ 21,633,090	\$ 25,774	429 \$	35,194,970	\$ 33,733	.599 \$	33,411,578	\$ 3	38,146,188	\$ 39,9	77,675 \$	39,604,871
13 14	Transfers In - Additional Transfers Transfers In - Debt Defeasance/Maturity		0		0	0		0	0		0	0		0		0	0
15	Total Funds Available	S	9,727,802			\$ 21,633,090	\$ 25,774		35,194,970	\$ 33,733	,599 \$	33,411,578	\$ 3	38,146,188		77,675 \$	39,604,871
16 17	Transfers Out - CIP Transfers Out - Operations		2,291,637		1,548,412 0	5,668,769 0	1,216	820 0	1,417,732 0	1,479	,788 0	4,560,178 0		7,817,592 0	12,2	23,042	0
18 19	Transfers Out - Additional R&R Fund Transfers Out -Water and Wastewater Capital Projects (Fund		0		0	0		0	12,000,000	12,000	0	13,000,000		0	14.0	000,000	22,000,000
20		-03)		s	1,548,412		\$ 1,216			\$ 13,479		17,560,178		21,817,592		23,042 \$	22,000,000
	Total Transfers Out of Funds	4	2,2,1,037														
21 22	Transfers In - End of Year Surplus Transfers Out - End of Year Deficiency		6,284,173 0		9,461,165 0	9,810,108 0	10,637	0	11,956,360 0	13,157	0	22,294,788 0		23,649,079	25,8	50,238	27,311,568 0
23 24	Interest Rate Interest Income on Fund		1.00% 117,200		1.00% 176,800	1.00% 237,000	304	00% 800	1.00% 344,600		.00% ,700	1.00% 357,800	•	1.00% 390,600	3	1.00% 97,900	1.00% 422,600
25 26	Ending Balance	S	13,720,338	\$ 2	21,633,090 : 120	\$ 25,774,429	\$ 35,194	970 \$ 120	33,733,599 120	\$ 33,411	.578 \$ 120	38,146,188 120	\$ 3	39,977,675 120	\$ 39,6	04,871 \$ 120	44,916,439 120
27 28	Target - Days of Operating Expenses Target Minimum Available Cash Target Minimum Cash Balance Met - Yes or No		21,053,743 No		21,567,484 Yes	22,488,952 Yes	23,316. Yes		24,001,769 Yes	24,764 Yes		25,316,729 Yes		26,106,435 Yes	26,6 Ye	51,886	27,474,535 Yes
29	Percent Allocable to Water System		47.83%		47.83%	47.83%	47.	83%	47.83%	47	.83%	47.83%	i	47.83%		47.83%	47.83%
30 31	Amount Allocable to Water System Amount Allocable to Wastewater System	5	56,052 61,148	S S	84,557 92,243	\$ 113,348 \$ 123,652		775 \$ 025 \$			,553 \$ ,147 \$	171,123 186,677		186,810 203,790		90,301 \$ 07,599 \$	202,114 220,486
	FUND 402 - RENEWAL AND REPLACEMENT FUND	_	21% 78		33% 120	38% 138		50% 181	46% 169		44% 162	50% 181		50% 184		49% 178	54% 196
32 33 34	Beginning Balance Transfers In - Operations Transfers In - Fund 401	\$				\$ 22,618,026 22,158,819	\$ 19,314 22,339	741 \$		\$ 14,151 22,713	,615 \$					00,443 \$ 21,440	29,760,378 23,535,577
35	Transfers Out - CIP		30,249,895	1	15,479,702	25,462,104	17,175		32,850,650	15,493		34,682,873		9,611,273	16,6	61,505	2,739,070
37	Interest Rate	ı	1.00%		1.00%	1.00%	1.	00%	1.00%	1	.00%	1.00%	5	1.00%		1.00%	1.00%
38 39	Interest Income on Fund Use of Interest Income to Fund Revenue Requirements	(U)	193,100 193,100		193,600 193,600	209,700 209,700	219 219		193,200 193,200		,600 ,600	154,900 154,900		163,500 163,500		64,300 64,300	401,600 401,600
40	Ending Balance	5		\$ 2	22,618,026				14,151,615			9,598,898		23,100,443	\$ 29,7	60,378 \$	50,556,885
41 42	Percent Allocable to Water System Amount Allocable to Water System	- 5	47.83% 92,353	\$	47.83% 92,592	\$ 100,292		83% 740 \$	47.83% 92,400	\$ 84	.83% .940 \$	47.83% 74,083		47.83% 78,196	\$ 1	47.83% 26,405 \$	47.83% 192,070
43	Amount Allocable to Wastewater System		100,747	\$	101,008	\$ 109,408	\$ 114.	260 \$	100,800	\$ 92	,660 \$	80,817	\$	85,304	\$ 1	37,895 \$	209,530
44 45	FUND 403 - WATER CONNECTION FEE ACCOUNT Beginning Balance Transfers In - Connection Fee Revenue	□ §	8,364,033 368,421	s	8,817,954 387,812	\$ 8,793,366 408,223	\$ 8,789. 429.	089 \$ 708	8,806,297 452,324	\$ 8,846 476	,421 \$ ,131	8,910,852 501,190	\$	9,001,143 527,569		18,811 \$ 55,336	9,265,647 584,564
46 47	Transfers Out -CIP Transfers Out -Expansion Related Debt Service		0		0 500,000	0 500,000	500.	000	0 500,000	500	000,	0 500,000		0 500,000	5	00,000	0 500,000
48	Interest Rate	l	1.00%		1.00%	1.00%	1.	00%	1.00%	1	.00%	1.00%	5	1.00%		1.00%	1.00%
49 50	Interest Income on Fund Use of Interest Income to Fund Revenue Requirements	(R)	85,500 0		87,600 0	87,500 0	87.	500 0	87,800 0	88	300	89,100 0		90,100 0		91,500 0	93,100 0
51	Ending Balance	\$			8,793,366				8,846,421		,852 \$	9,001,143		9,118,811		65,647 \$	9,443,311
52 53	Percent Allocable to Water System Amount Allocable to Water System	- 5	100.00% 85,500		100.00% 87,600	100.00% \$ 87,500		00% 500 \$	100.00% 87,800		.00%	100.00% 89,100		100.00% 90,100		00.00% 91,500 \$	93,100
54	Amount Allocable to Wastewater System		0	\$	0	\$ 0	\$	0 \$	0	\$	0 \$	0	\$	0	\$	0 \$	0
55 56	FUND 403 - WASTEWATER CONNECTION FEE ACCOU Beginning Balance Transfers In - Connection Fee Revenue	NT S	7,487,166 368,421	\$	7,932,287 387,812	\$ 7,898,899 408,223	\$ 7,885, 429	622 \$ 708	7,893,830 452,324	\$ 7,924 476		7,980,085 501,190	\$	7,893,121 527,569		38,392 \$ 55,336	6,962,427 584,564
57 58	Transfers Out - Capital Improvements Transfers Out - Expansion Related Debt Service		0		0 500,000	0 500,000	500.	000	0 500,000	500	000,	167,155 500,000		1,155,598 500,000	5	00,000	0 500,000
59 60	Interest Rate Interest Income on Fund		1.00% 76,700		1.00% 78,800	1.00% 78,500		00% 500	1.00% 78,700		.00%	1.00% 79,000		1.00% 73,300		1.00% 68,700	1.00% 70,000
61	Use of Interest Income to Fund Revenue Requirements	(R)	76,700		78,800	78,500 0	/8,	0	78,700	79	0 0	79,000		73,300		0	70,000
62 63	Ending Balance Percent Allocable to Water System	\$	7,932,287 0.00%	\$	7,898,899 0.00%	\$ 7,885,622 0.00%		830 \$ 00%	7,924,854 0.00%		,085 \$	7,893,121 0.00%		6,838,392 0.00%	\$ 6,9	62,427 \$ 0.00%	7,116,991 0.00%
64	Amount Allocable to Water System	5	0	S	0.00% 0 : 78,800 :	\$ 0	\$	0 \$ 500 \$	0 78,700	\$	0 \$		\$	0 73,300	S S	0.00% 0 \$ 68,700 \$	0.00% 0 70,000
65	Amount Allocable to Wastewater System		76,700	3	/6,800	/8,500	» /8.	JUU \$	/8,/00	a 79	,100 \$	/9,000	3	/3,300	٥	00,700 \$	/0,000

Table 6
City of Sunrise, Florida
2021 Water and Wastewater Rate Study

#### Analysis of Cash and Investments and Development of Interest Income

Tamelers In	Line No.	Description	Investment Reference	2021		2022	2023	2024		2025	2026	202	27	2028	20	129	2030
Part		Beginning Balance	г		\$				\$			s			s		0
Company						0		0		0						0	0
Manuse Care Inche   1				-		0	-	-		-	-		-	-		0	0
Part	70	Transfers Out - Debt 3	29	0			0	0		0	0		0	0		0	0
Second Control   1				-			-	-		-	-		-	-		0	0
1				-		0	-	-		0	-		-	-		0	0
1	74	Interest Rate		1.00%		1.00%	1.00%	1.00%		1.00%	1.00%		1.00%	1.00%		1.00%	1.00%
Manus Albandes Water Spread   138	75	Interest Income on Fund	(U)	0		0	0	0		0	0		0	0		0	0
10   10   10   10   10   10   10   10	77	Ending Balance		\$ 0	\$	0 \$	0 :	\$ 0	\$	0	\$ 0	\$	0 \$	0	\$	0 \$	0
Page									e						e		13.85%
1																	0
Tamber of Performance Production (Part of Section Accordance (Part of Section Accord		Beginning Balance	n Fund)		\$				\$			\$			\$		0
Balance floore for bank floore floo																	0
Balance floore for bank floore floo	85	Interest Rate - Earnings Available for Project Funding (V.	e No	0.00%		0.00%	0.00%	0.00%		0.00%	0.00%		0.00%	0.00%		0.00%	0.00%
Page	86	Interest Income on Fund		0		0	0	0		0	0		0	0		0	0 0
Many Allacadia to Waters System   S									\$						\$		
Note   Property   Pr									\$						\$		13.85%
Page	91								\$								
Tameler Ou-Fund 455		Beginning Balance			\$				\$			\$ 2,6			\$ 1,		1,829,308 0
Section   Sect												8					0
See			<b>7</b>														1.00%
Profess   Prof			(U)														18,300 18,300
Process Alleschle to Water System   \$0,000   \$	00			© 25 959 145	•	20 959 145 . 6	11 050 145	¢ 2 050 145	e	2 910 109	\$ 2649.077	¢ 15	220 200 €	1 920 209	¢ 1	920.209 €	1,829,308
Part									3						3 I,		50.00%
FUND 465 - WATER & WASTEWATER CAPITAL PROBECTS   1818 940,100   1818 1543,126   5 161,703,160   5 192,921,100   5 150,207,000   12,000,000   12,000,000   12,000,000   14,000,000   14,000,000   12,000,000   12,000,000   12,000,000   13,000,000   14,000,000   12,000,000   12,000,000   12,000,000   14,000,000   12,000,000   14,000,000   12,000,000   12,000,000   12,000,000   13,000,000   14,000,000   12,000,000   12,000,000   13,000,000   14,000,000   12,000,000   12,000,000   13,000,000   14,000,000   12,000,000   12,000,000   13,000,000   14,000,000   12,000,000   12,000,000   14,000,000   12,000,000   12,000,000   12,000,000   12,000,000   14,000,000   12,00																	9,150 9,150
10   10   10   10   10   10   10   10					-	,	0.1000			,	- 10,000	-	11,200 0	2,120		2,100	2,120
Transfers   Fund   Fu	103		DJECTS	\$ 183,940,190	\$ 1	81,543,426 \$	161,703,160	\$ 159,292,110	\$	150,217,632	\$ 156,880,842	\$ 142,7	772,138 \$	149,284,551	\$ 131.	,490,247 \$	120,677,645
Transfers Out - Capital Improvements   2,396,764   2,4840,266   11,411,050   18,074,478   5,336,789   26,108,704   6,487,587   31,794,304   2,4812,602   5,52107   16,665,600   16,665,600   1,408,5												12.6					0
Part   Interest Rate   1.00%	105	Transfers In - Fund 401		U		U	U	U		12,000,000	12,000,000	15,0	000,000	14,000,000	14,	,000,000	22,000,000
1.00	106			2,396,764		24,840,266	11,411,050	18,074,478		5,336,789	26,108,704	6,4	187,587	31,794,304	24,	,812,602	55,232,113
Part		Interest Rate															1.00%
			(II)														1,040,600 1,040,600
11   Percent Allocable to Water System   \$9.00%   \$9.00		•	(-,														
SINKING FUND ACCOUNT					5 1				3						\$ 120,		87,445,533 50.00%
SINKING FUND ACCOUNT   Sinking Fund Deposit   \$1,735,900   \$17,732,720   \$17,732,720   \$17,722,105   \$17,722,825   \$17,722,828   \$10,530,081   \$10,530,811   \$10,529,734   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,529,734   \$10,530,811   \$10,530,811   \$10,529,734   \$10,530,811   \$10,530,811   \$10,529,734   \$10,530,811   \$10,530,811   \$10,530,811   \$10,529,734   \$10,530,811   \$10,530,811   \$10,529,734   \$10,530,811   \$10,530,811   \$10,530,811   \$10,529,734   \$10,530,811									\$					701,950			
115   Sinking Fund Deposit	113	•		3 713,700		050,100 \$	002,500	y 113,130	Ψ	707,750	ψ / <del>17</del> /,130	,	750,150 9	701,730	9	030,400 \$	320,300
115   Average Balance (25% of Annual Debt Service)	114			\$ 17.735.900	s	17,732,720 \$	17,727.105	\$ 17,728.497	\$	17,722.255	\$ 17,722.828	\$ 10.5	530,081 \$	10,530.811	\$ 10.	.529,734 S	10,526,850
117   Interest Income on Fund	115	Average Balance (25% of Annual Debt Service)		4,433,975		4,433,180	4,431,776	4,432,124		4,430,564	4,430,707		532,520	2,632,703		,632,433	2,631,712
118   Use of Interest Income to Fund Revenue Requirements   U																	1.00% 26,300
20 Amount Allocable to Water System			(U)														26,300
INTEREST INCOME SUMMARY Unrestricted Interest Income		Amount Allocable to Water System		\$ 6,134		6,134 \$	6,134	\$ 6,134		6,134	\$ 6,134	\$	3,642 \$	3,642		3,642 \$	13.847% 3,642
Unrestricted Interest Income   St.   1,197,539   St.   1,158,183   St.   1,104,075   St.   1,067,199   St.   1,045,294   St.   1,014,427   St.   1,031,503   St.   1,031,503   St.   1,007,702   St.   1,031,503   St.   1,031,503   St.   1,007,702   St.   1,031,503   St.   1,031,503   St.   1,031,503   St.   1,007,702   St.   1,031,503	121	Amount Allocable to Wastewater System		\$ 38,166	\$	38,166 \$	38,166	\$ 38,166	\$	38,166	\$ 38,166	\$	22,658 \$	22,658	\$	22,658 \$	22,658
122   Allocated To Water System   S   1,197,539   S   1,158,183   S   1,104,075   S   1,067,199   S   1,045,294   S   1,014,427   S   990,197   S   979,747   S   959,898   S   5   1,243,061   S   1,243,061   S   1,206,317   S   1,555,25   S   1,122,001   S   1,007,06   S   1,068,773   S   1,031,503   S   1,022,853   S   1,007,702   S   S   S   S   S   S   S   S   S																	
124   Allocated To Wastewater System   1,243,061   1,206,317   1,155,252   1,122,001   1,100,706   1,068,773   1,031,503   1,022,853   1,007,702   5	122			\$ 1.197.539	s	1.158.183 \$	1.104.075	\$ 1.067.199	s	1.045.294	\$ 1.014.427	s 9	990.197 \$	979,747	s	959.898 S	927,276
Restricted Interest Income																	982,124
125   Allocated To Water System   \$ 85,500   \$ 87,600   \$ 87,500   \$ 87,500   \$ 87,500   \$ 87,800   \$ 88,300   \$ 89,100   \$ 90,100   \$ 91,500   \$ 120   \$ 120   \$ 120   \$ 162,200   \$ 166,400   \$ 166,400   \$ 166,000   \$ 166,000   \$ 166,500   \$ 167,400   \$ 168,100   \$ 168,100   \$ 163,400   \$ 160,200   \$ 16	124	Total		\$ 2,440,600	\$	2,364,500 \$	2,259,600	\$ 2,189,200	\$	2,146,000	\$ 2,083,200	\$ 2,0	021,700 \$	2,002,600	\$ 1,	,967,600 \$	1,909,400
125   Allocated To Water System   \$ 85,500   \$ 87,600   \$ 87,500   \$ 87,500   \$ 87,500   \$ 87,800   \$ 88,300   \$ 89,100   \$ 90,100   \$ 91,500   \$ 120   \$ 120   \$ 120   \$ 162,200   \$ 166,400   \$ 166,400   \$ 166,000   \$ 166,000   \$ 166,500   \$ 167,400   \$ 168,100   \$ 168,100   \$ 163,400   \$ 160,200   \$ 16		Restricted Interest Income															
127 Total \$ 162,200 \$ 166,400 \$ 166,000 \$ 166,000 \$ 166,500 \$ 167,400 \$ 168,100 \$ 163,400 \$ 160,200 \$ 1 1		Allocated To Water System			\$				\$						\$		
Total Interest Income  128 Allocated To Water System \$ 1,283,039 \$ 1,245,783 \$ 1,191,575 \$ 1,154,699 \$ 1,133,094 \$ 1,102,727 \$ 1,079,297 \$ 1,069,847 \$ 1,051,398 \$	126	Allocated To Wastewater System		76,700		78,800	78,500	78,500		78,700	79,100		79,000	73,300		68,700	70,000
128 Allocated To Water System \$ 1,283,039 \$ 1,245,783 \$ 1,191,575 \$ 1,154,699 \$ 1,133,094 \$ 1,102,727 \$ 1,079,297 \$ 1,069,847 \$ 1,051,398	127	Total		\$ 162,200	\$	166,400 \$	166,000	\$ 166,000	\$	166,500	\$ 167,400	\$ 1	168,100 \$	163,400	\$	160,200 \$	163,100
128 Allocated To Water System \$ 1,283,039 \$ 1,245,783 \$ 1,191,575 \$ 1,154,699 \$ 1,133,094 \$ 1,102,727 \$ 1,079,297 \$ 1,069,847 \$ 1,051,398		Total Interest Income															
		Allocated To Water System			\$				\$								1,020,376 1,052,124
130 Total \$ 2,602,800 \$ 2,530,900 \$ 2,425,600 \$ 2,355,200 \$ 2,312,500 \$ 2,250,600 \$ 2,189,800 \$ 2,166,000 \$ 2,127,800 \$ 2,000 \$ 2,100,000	130	Total		\$ 2,602,800	\$	2,530,900 \$	2,425,600	\$ 2,355,200	\$	2,312,500	\$ 2,250,600	\$ 2,1	189,800 \$	2,166,000	\$ 2,	,127,800 \$	2,072,500

#### City of Sunrise, Florida 2021 Water and Wastewater Rate Study

#### Projected Debt Service Coverage Analysis - Water and Wastewater System

Line						Fiscal Year Endi	ng September 30,				
No.	Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	System Revenues:										
1	Water and Wastewater Rate Revenue [1]	\$111.263.473	\$113,131,004	\$116.622.338	\$120.298.393	\$124.005.891	\$127.865.671	\$131.828.991	\$135,890,155	\$140.077.684	\$144,395,959
2	Other Operating Revenue [2]	3,184,373	4,288,902	4,294,445	4,304,554	4,315,713	4,326,309	4,343,524	4,363,615	4,383,514	4,406,177
3	Unrestricted Interest Income	2,440,600	2,364,500	2,259,600	2,189,200	2,146,000	2,083,200	2,021,700	2,002,600	1,967,600	1,909,400
4	Total System Revenues	\$116,888,445	\$119,784,406	\$123,176,382	\$126,792,147	\$130,467,604	\$134,275,180	\$138,194,216	\$142,256,370	\$146,428,798	\$150,711,536
5	Operating Expenses:	64,038,469	65,601,097	68,403,894	70,920,756	73,005,379	75,325,371	77,005,050	79,407,074	81,066,153	83,568,379
6	Net Revenues	\$52,849,977	\$54,183,309	\$54,772,488	\$55,871,391	\$57,462,225	\$58,949,809	\$61,189,165	\$62,849,296	\$65,362,645	\$67,143,157
	Annual Senior Lien Debt Service										
7	Existing Debt Payments	\$17,735,900	\$17,732,720	\$17,727,105	\$17,728,497	\$17,722,255	\$17,722,828	\$10,530,081	\$10,530,811	\$10,529,734	\$10,526,850
8	Proposed Debt Payments	0	0	0	0	0	0	0	0	0	0
9	Total	\$17,735,900	\$17,732,720	\$17,727,105	\$17,728,497	\$17,722,255	\$17,722,828	\$10,530,081	\$10,530,811	\$10,529,734	\$10,526,850
10	Revenue Covenant - Test 1:  Debt Service Coverage:	2000/	20.60/	2000/	2150/	22.40	2224	5010/	50504	62104	62004
10	Calculated	298%	306%	309%	315%	324%	333%	581%	597%	621%	638%
11	Minimum Required	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
	AND										
12	Net Revenues After Senior Lien Debt Service Less:	\$35,114,077	\$36,450,589	\$37,045,383	\$38,142,894	\$39,739,970	\$41,226,981	\$50,659,085	\$52,318,485	\$54,832,911	\$56,616,308
13	Requried Reserve Account Transfers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Required Renewal and Replacement Account Transfers	s:									
14	Budgeted Transfers	\$23,844,422	\$21,989,220	\$22,158,819	\$22,339,607	\$22,523,380	\$22,713,759	\$22,909,711	\$23,112,818	\$23,321,440	\$23,535,577
15	Budgeted System Revenues at Five (5%) Percent	\$5,844,422	\$5,989,220	\$6,158,819	\$6,339,607	\$6,523,380	\$6,713,759	\$6,909,711	\$7,112,818	\$7,321,440	\$7,535,577
	Coverage Requirement Met:										
16	Assuming Budgeted R&R Transfers	\$11,269,655	\$14,461,369	\$14,886,564	\$15,803,287	\$17,216,590	\$18,513,222	\$27,749,374	\$29,205,667	\$31,511,471	\$33,080,731
17	Assuming 5% of System Revenues	\$29,269,655	\$30,461,369	\$30,886,564	\$31,803,287	\$33,216,590	\$34,513,222	\$43,749,374	\$45,205,667	\$47,511,471	\$49,080,731

#### Footntoes:

[1] Amounts shown reflect revenues derived from rates for monthly service; pursuant to the Bond Ordinance, amounts do not include any revenues associated with the application of the outside City surcharge imposed on customer receiving service outside the corporate limits of the City. Amounts include the application of projected rate adjustments. Below is a summary of the identified rate adjustments:

Inflationary Rate Indexing Adjustment	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Water System	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Wastewater System	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

[2] Amounts shown reflect guaranteed revenues, capacity reservation fee revenues, billing fees, rentals, administrative fee, service charges, and other miscellaneous revenues.

#### City of Sunrise, Florida Water and Wastewater System

#### Comparison of Typical Monthly Residential Bills For Water Service

					Residential Ser	rvice for a 5/8'	or 3/4" Meter	•	
Line		0	3,000	5,000	7,000	9,000	11,000	15,000	20,000
No.	Description	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons
	City of Sunrise								
1	Fiscal Year 2021 Rates - Inside City Customers	\$20.87	\$33.14	\$41.32	\$49.50	\$57.68	\$65.86	\$82.22	\$102.67
2	Fiscal Year 2021 Rates - Proposed Rates	\$22.11	\$32.46	\$40.63	\$50.07	\$60.24	\$71.14	\$98.37	\$141.95
	1			,					
	Other Utilities Located In Broward County:								
3	Broward County	\$17.13	\$21.99	\$27.81	\$37.54	\$51.18	\$64.82	\$96.39	\$137.64
4	Collier County [2]	12.79	22.33	28.69	36.05	43.41	51.75	70.39	93.69
5	City of Coral Springs [2]	14.44	19.87	24.46	30.02	36.97	45.31	68.23	99.48
6	City of Dania Beach	14.55	26.82	35.00	48.08	61.16	74.24	102.03	142.88
7	Town of Davie	22.23	33.24	40.58	51.52	62.46	75.23	104.43	140.93
8	City of Fort Lauderdale [2]	7.01	14.63	25.83	37.03	49.64	63.66	99.05	146.35
9	City of Hallandale Beach	20.35	23.72	26.06	29.12	32.18	36.12	45.76	57.81
10	City of Hollywood [2]	7.82	15.32	20.32	30.32	40.32	50.32	70.32	120.27
11	City of Margate [2]	12.58	23.86	31.38	39.84	49.24	58.64	77.44	105.69
12	City of Miramar	15.93	26.34	33.28	41.78	50.28	58.78	75.78	102.48
13	City of North Lauderdale	14.60	25.22	32.30	39.38	46.46	56.01	80.05	110.10
14	City of Oakland Park [2]	15.20	35.12	50.00	64.88	80.83	97.85	132.93	180.68
15	City of Pembroke Pines [2]	17.90	17.90	31.80	45.70	59.60	73.50	101.30	136.05
16	City of Plantation	14.24	20.30	24.34	30.41	38.51	46.61	68.87	99.22
17	City of Pompano Beach	14.60	22.22	27.30	32.38	37.46	43.48	57.40	81.60
18	City of Tamarac	11.77	17.08	21.80	27.72	34.84	41.96	64.21	95.36
	Other Utilities Located Outside Broward County:								
19	City of Boynton Beach [2]	\$12.90	\$18.06	\$21.51	\$24.95	\$28.39	\$34.57	\$46.93	\$62.38
20	Fort Pierce Utilities Authority [2]	14.90	26.36	34.00	41.64	49.28	57.88	77.00	105.65
21	City of Lake Worth	21.14	31.37	40.03	50.53	62.89	77.11	121.54	183.74
22	Martin County [2]	18.03	24.96	29.58	34.20	38.82	44.41	57.53	78.48
23	Miami-Dade County [2]	4.07	4.07	10.67	17.27	33.24	49.20	81.14	97.10
24	Palm Beach County [2]	16.37	20.93	25.82	32.56	39.30	51.16	85.12	127.57
25	Seacoast Utility Authority [2]	22.08	25.44	27.68	33.21	42.03	50.85	68.49	90.54
26	City of West Palm Beach [2]	23.66	31.88	37.36	42.84	49.01	55.87	69.59	89.18
27	Other Florida Utilities' Average	\$15.26	\$22.88	\$29.48	\$37.46	\$46.56	\$56.64	\$80.08	\$111.87

Footnotes

<sup>[1]</sup> Unless otherwise noted, amounts shown reflect residential rates in effect on April 1, 2021 and are exclusive of taxes or franchise fees, if any, and reflects rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

<sup>[2]</sup> Utility is currently involved in a rate study, is planning to conduct a rate study, or will implement a rate revision within the next twelve months.

#### City of Sunrise, Florida Water and Wastewater System

#### Comparison of Typical Monthly Residential Bills For Wastewater Service

Residential Service for a 5/8" or 3/4" Meter Line 0 3,000 5,000 7,000 9,000 15,000 20,000 11,000 Gallons Gallons No. Description Gallons Gallons Gallons Gallons Gallons Gallons City of Sunrise Fiscal Year 2021 Rates - Inside City Customers \$42.16 \$50.48 \$58.80 1 \$29.68 \$67.12 \$75.44 \$92.08 \$96.24 2 Fiscal Year 2021 Rates - Proposed Rates \$24.60 \$37.68 \$63.84 \$72.56 \$46.40 \$55.12 \$76.92 \$76.92 Other Utilities Located In Broward County: 3 **Broward County** \$20.54 \$33.32 \$41.84 \$50.36 \$58.88 \$67.40 \$84.44 \$84.44 4 Collier County [2] 26.67 35.73 41.77 47.81 53.85 56.87 56.87 56.87 5 City of Coral Springs [2] 23.85 37.47 46.55 91.95 114.65 55.63 64.71 73.79 City of Dania Beach 21.52 43.90 58.82 73.74 88.66 103.58 133.42 170.72 6 7 Town of Davie 75.68 39.83 61.34 90.02 104.36 118.70 147.38 147.38 8 City of Fort Lauderdale [2] 12.12 25.47 45.13 64.79 84.45 104.11 143.43 192.58 32.74 9 City of Hallandale Beach 20.21 41.28 50.20 59.12 68.53 88.33 113.08 10 City of Hollywood [2] 7.83 29.61 44.13 58.65 73.17 87.69 116.73 116.73 31.94 11 City of Margate [2] 31.94 31.94 31.94 31.94 31.94 31.94 31.94 42.90 12 City of Miramar 18.65 33.20 52.60 62.30 72.00 91.40 115.65 13 City of North Lauderdale 26.45 38.93 47.25 55.57 63.89 72.21 88.85 109.65 14 City of Oakland Park [2] 18.01 37.63 50.71 76.87 89.95 116.11 63.79 116.11 15 City of Pembroke Pines [2] 22.91 22.91 50.71 141.06 36.81 64.61 78.51 106.31 City of Plantation 18.65 34.28 44.70 55.12 65.54 75.96 96.80 122.85 16 17 City of Pompano Beach 13.02 22.11 28.17 34.23 40.29 43.32 43.32 43.32 18 City of Tamarac 18.75 33.15 42.75 52.35 61.95 71.55 76.35 76.35 Other Utilities Located Outside Broward County: City of Boynton Beach [2] 18.95 25.49 29.85 34.21 34.21 34.21 34.21 34.21 19 16.04 33.29 44.79 73.54 20 Fort Pierce Utilities Authority [2] 56.29 67.79 73.54 73.54 21 City of Lake Worth 15.66 29.88 39.36 48.84 58.32 67.80 72.54 72.54 22 Martin County [2] 18.70 32.41 41.55 50.69 59.83 64.40 64.40 64.40 23 Miami-Dade County [2] 26.66 26.66 39.81 52.96 66.11 105.56 138.43 79.26 24 18.21 24.39 31.29 40.97 50.65 55.49 55.49 Palm Beach County [2] 55.49 Seacoast Utility Authority [2] 25 32.25 34.47 35.95 37.43 38.91 39.65 39.65 39.65 26 City of West Palm Beach [2] 14.32 26.98 35.42 43.86 52.30 60.74 77.62 81.84 \$20.91 \$32.80 \$42.44 \$52.20 27 Other Florida Utilities' Average \$61.78 \$70.47 \$84.86 \$96.40

Footnotes:

<sup>[1]</sup> Unless otherwise noted, amounts shown reflect residential rates in effect on April 1, 2021 and are exclusive of taxes or franchise fees, if any, and reflects rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

<sup>[2]</sup> Utility is currently involved in a rate study, is planning to conduct a rate study, or will implement a rate revision within the next twelve months.

#### City of Sunrise, Florida Water and Wastewater System

#### Comparison of Typical Monthly Residential Bills For Water and Wastewater Service

Residential Service for a 5/8" or 3/4" Meter Line 0 3,000 5,000 7,000 9,000 11,000 15,000 20,000 Gallons Gallons No. Description Gallons Gallons Gallons Gallons Gallons Gallons City of Sunrise Fiscal Year 2021 Rates - Inside City Customers \$50.55 \$75.30 \$91.80 1 \$108.30 \$124.80 \$141.30 \$174.30 \$198.91 2 Fiscal Year 2021 Rates - Proposed Rates 70.14 46.71 87.03 105.19 124.08 143.70 175.29 218.87 Other Utilities Located In Broward County: 3 **Broward County** \$37.67 \$55.31 \$69.65 \$87.90 \$132.22 \$180.83 \$222.08 \$110.06 4 Collier County [2] 39.46 58.06 70.46 83.86 97.26 108.62 127.26 150.56 5 City of Coral Springs [2] 38.29 57.34 71.01 119.10 160.18 214.13 85.65 101.68 City of Dania Beach 36.07 70.72 93.82 121.82 149.82 177.82 235.45 6 313.60 7 Town of Davie 62.06 94.58 116.26 141.54 166.82 193.93 251.81 288.31 8 City of Fort Lauderdale [2] 19.13 40.10 70.96 101.82 134.09 167.77 242.48 338.93 67.34 9 City of Hallandale Beach 40.56 56.46 79.32 91.30 104.65 134.09 170.89 City of Hollywood [2] 15.65 44.93 64.45 88.97 113.49 138.01 187.05 237.00 44.52 11 City of Margate [2] 55.80 63.32 71.78 81.18 90.58 109.38 137.63 12 City of Miramar 34.58 59.54 76.18 94.38 112.58 130.78 167.18 218.13 41.05 64.15 79.55 110.35 128.22 13 City of North Lauderdale 94.95 168.90 219.75 100.71 City of Oakland Park [2] 33.21 72.75 128.67 157.70 187.80 249.04 14 296.79 15 City of Pembroke Pines [2] 40.81 40.81 68.61 152.01 277.11 96.41 124.21 207.61 City of Plantation 32.89 54.58 69.04 85.53 104.05 122.57 222.07 16 165.67 17 City of Pompano Beach 27.62 44.33 55.47 66.61 77.75 86.80 100.72 124.92 18 City of Tamarac 30.52 50.23 64.55 80.07 96.79 113.51 140.56 171.71 Other Utilities Located Outside Broward County: 19 City of Boynton Beach [2] 31.85 43.55 51.36 62.60 68.78 81.14 96.59 59.16 30.94 78.79 20 Fort Pierce Utilities Authority [2] 59.65 97.93 117.07 131.42 150.54 179.19 21 City of Lake Worth 36.80 61.25 79.39 99.37 121.21 144.91 194.08 256.28 22 Martin County [2] 36.73 57.37 71.13 84.89 98.65 108.81 121.93 142.88 23 Miami-Dade County [2] 30.73 30.73 50.48 128.46 186.70 235.54 70.23 99.35 24 34.58 45.32 57.11 73.53 89.95 183.06 Palm Beach County [2] 106.65 140.61 25 Seacoast Utility Authority [2] 54.33 59.91 70.64 80.94 90.50 63.63 108.14 130.19 26 City of West Palm Beach [2] 37.98 58.86 72.78 86.70 101.31 116.61 147.21 171.02 \$71.92 27 Other Florida Utilities' Average \$36.17 \$55.68 \$89.66 \$108.34 \$127.11 \$164.94 \$208.26

Footnotes:

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<sup>[2]</sup> Utility is currently involved in a rate study, is planning to conduct a rate study, or will implement a rate revision within the next twelve months.

## Appendix A City of Sunrise, Florida Summary of Existing and Proposed Rates

Description	Existing Tier Range	Proposed Tier Range		W	iter	Inside C	ity Ra		Out Sewer Water			Outside City Rates er Sewer			South Broward Utilities (be Water			tilities (be	before outside City Surcharge Sewer		urcharge)				
	riei Range	Her Kange		***	itei			36	•••			•••	atei			361	wei		***	tei		_	30		
Residential Service Base Charge			E	xisting	Pro	posed		Existing	Pr	roposed		Existing	Pı	roposed	E	cisting	Proposed		Existing	Pre	oposed	Е	xisting	Pr	oposed
5/8 - inch			\$	20.87	\$	22.11	\$	29.68	\$	24.60	\$	26.09	\$	27.64	\$	37.10	\$ 30.75	\$	22.05	\$	27.64	\$	25.04	\$	30.75
3/4 - inch				N/A		22.11		N/A		24.60		N/A		27.64		N/A	30.75		32.98		27.64		25.04		30.75
1 - inch				20.87		22.11		29.68		24.60		26.09		27.64		37.10	30.75		54.96		27.64		25.04		30.75
1 1/2 - inch 2 - inch				20.87		22.11 22.11		29.68 29.68		24.60 24.60		26.09 26.09		27.64 27.64		37.10 37.10	30.75 30.75		109.93 175.93		27.64 27.64		25.04 25.04		30.75 30.75
3 - inch				20.87		22.11		29.68		24.60		26.09		27.64		37.10	30.75		351.85		27.64		25.04		30.75
4 - inch				20.87		22.11		29.68		24.60		26.09		27.64		37.10	30.75		549.76		27.64		25.04		30.75
Volumetric	Existing	Proposed																							
Water Tier 1	0-30,000	0 - 4,000	Ś	4.09	\$	3.45		N/A		N/A	Ś	5.11	\$	4.31		N/A	N/A	Ś	5.44	\$	4.31		N/A		N/A
Water Tier 2	Above 30,000	4,000 - 8,000	1	5.18	*	4.72		N/A		N/A	1	6.48	7	5.90		N/A	N/A	1	5.44	-	5.90		N/A		N/A
Water Tier 3		8,000 - 12,000		N/A		5.45		N/A		N/A		N/A		6.81		N/A	N/A		N/A		6.81		N/A		N/A
Water Tier 4		12,000 - 16,000		N/A		7.26		N/A		N/A		N/A		9.08		N/A	N/A		N/A		9.08		N/A		N/A
Water Tier 5		Above 16,000		N/A		9.08		N/A		N/A		N/A		11.35		N/A	N/A		N/A		11.35		N/A		N/A
	Fulation City	Proposed City /																							
Sewer	Existing City Cap @ 16,000	SBU Existing Cap @ 12,000		N/A		N/A	\$	4.16	Ś	4.36		N/A		N/A	Ś	5.20	\$ 5.45		N/A		N/A	\$	8.26	\$	5.45
	cup @ 10,000	Cup @ 12,000		.,,,,		,,,	,		,	4.50		,		,	7	5.20	ŷ 5.45		.,,,,		,	7	0.20	7	3.43
General Service																									
Base Charge 5/8 - inch			\$	29.22	Ś	30.95	\$	41.56	Ś	34.44	\$	36.53	\$	38.69	\$	51.95	\$ 43.05	Ś	22.05	\$	38.69	\$	25.04	Ś	43.05
3/4 - inch			Ť	N/A	7	46.43	,	N/A	,	51.66	,	N/A	Ÿ	58.04	7	N/A	64.58	Ť	32.98	,	58.04	~	37.58	,	64.58
1 - inch				73.02		77.39		103.90		86.10		91.28		96.74		129.88	107.63		54.96		96.74		62.60		107.63
1 1/2 - inch				162.71		154.77		231.55		172.20		203.39		193.46		289.44	215.25		109.93		193.46		125.23		215.25
2 - inch				264.90 542.44		247.63		377.02 771.83		275.52		331.13		309.54 580.39		471.28	344.40		175.93		309.54 580.39		200.41 400.71		344.40 645.75
3 - inch 4 - inch				632.15		464.31 773.85		771.83 899.47		516.60 861.00		678.05 790.19		967.31		964.79 ,124.34	645.75 1,076.25		351.85 549.76		967.31		626.18		1,076.25
6 - inch (Per EF	RC)			29.22		-		41.56		-		36.53		-	-	51.95	-		22.05		-		25.04		-
8 - inch (Per EF				29.22		-		41.56		-		36.53		-		51.95	-		22.05		-		25.04		-
Volumetric Water Tier 1	Existing All Consumption	Proposed All Consumption	\$	4.32	Ś	4.86		N/A		N/A	\$	5.40	Ś	6.08		N/A	N/A	Ś	5.44	Ś	6.08		N/A		N/A
	Existing	Proposed	1							•							·								
Sewer	All Consumption	All Consumption		N/A		N/A	\$	4.16	\$	4.36		N/A		N/A	\$	5.20	\$ 5.45		N/A		N/A	\$	9.98	\$	5.45
Multi-Family Service																									
Base Charge			_	44.54	,	45.40	,	20.70		47.22	_	40.26	_	40.25		25.00	ć 24.52		**/*		21/2				
Per Unit			\$	14.61	\$	15.48	\$	20.78	\$	17.22	\$	18.26	\$	19.35	\$	25.98	\$ 21.53		N/A		N/A		N/A		N/A
Volumetric	Existing	Proposed																							
Water Tier 1	All Consumption	All Consumption	\$	4.32	\$	4.86		N/A		N/A	\$	5.40	\$	6.08		N/A	N/A		N/A		N/A		N/A		N/A
	Existing	Proposed																							
Sewer	Cap @ 11,000	Cap @ 12,000		N/A		N/A	\$	4.16	\$	4.36		N/A		N/A	\$	5.20	\$ 5.45		N/A		N/A		N/A		N/A
Government Service Base Charge																									
Per ERC			\$	38.17	\$	39.80	Ś	49.61	\$	34.44	Ś	47.71	\$	49.75	Ś	62.01	\$ 43.05	Ś	32.90	\$	49.75	Ś	25.04	\$	43.05
			ľ								- 1														
Volumetric Water Tier 1	Existing All Consumption	Proposed All Consumption	\$	4.32	\$	4.86		N/A		N/A	\$	5.40	\$	6.08		N/A	N/A	\$	5.44	\$	6.08		N/A		N/A
Sewer	Existing All Consumption	Proposed All Consumption		N/A		N/A	\$	4.16	\$	4.36		N/A		N/A	\$	5.20	\$ 5.45		N/A		N/A	\$	12.46	\$	5.45
Irrigation Service																									
Base Charge																									
5/8 - inch			\$	29.22	\$	30.95		N/A		N/A	\$		\$	38.69		N/A	N/A	\$		\$	38.69		N/A		N/A
3/4 - inch 1 - inch				N/A 73.02		30.95 30.95		N/A N/A		N/A N/A		N/A 91.28		38.69 38.69		N/A N/A	N/A N/A		32.98 54.96		38.69 38.69		N/A N/A		N/A N/A
1 - Inch 1 1/2 - inch				162.71		30.95		N/A N/A		N/A N/A		203.39		38.69		N/A N/A	N/A N/A		109.93		38.69		N/A N/A		N/A N/A
2 - inch				264.90		30.95		N/A		N/A		331.13		38.69		N/A	N/A		175.93		38.69		N/A		N/A
3 - inch				542.44		30.95		N/A		N/A		678.05		38.69		N/A	N/A		351.85		38.69		N/A		N/A
4 - inch				632.15		30.95		N/A		N/A		790.19		38.69		N/A	N/A		549.76		38.69		N/A		N/A
6 - inch (Per EF 8 - inch (Per EF				29.22 29.22		-		N/A N/A		N/A N/A		36.53 36.53		-		N/A N/A	N/A N/A		22.05 22.05		-		N/A N/A		N/A N/A
				23.22				,.		,		50.55				,	.,,		22.03				, ^		.,,
Volumetric	Existing	Proposed	_	4.00	,	4.00				N1/A		F 44	,	6.00		N: / A		1		_	6.00		***		
Tier 1 Tier 2	All Consumption	0 - 9,000 Above 9,000	\$	4.09 N/A	\$	4.86 8.24		N/A N/A		N/A N/A	\$	5.11 N/A	\$	6.08 10.30		N/A N/A	N/A N/A	\$	5.44 N/A	\$	6.08 10.30		N/A N/A		N/A N/A
Tier 3		N/A		N/A		- 0.24		N/A		N/A		N/A		-		N/A	N/A		N/A		-		N/A		N/A N/A
Tier 4		N/A		N/A		-		N/A		N/A		N/A		-		N/A	N/A		N/A		-		N/A		N/A
Tier 5		N/A		N/A				N/A		N/A	L	N/A				N/A	N/A	L					N/A		N/A

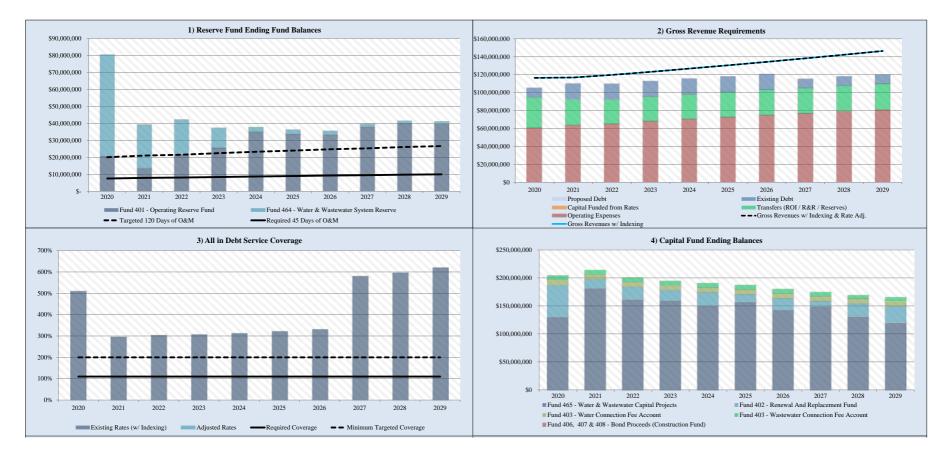
#### City of Sunrise, Florida

#### Financial Model

Appendix B

Dash Board







#### City of Sunrise, Florida

#### Financial Model

Appendix B

Dash Board







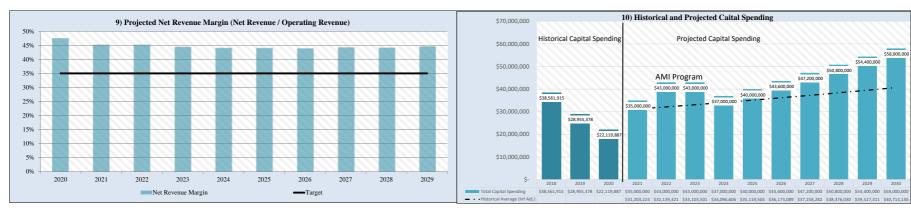
#### City of Sunrise, Florida

#### Financial Model

Appendix B

Dash Board





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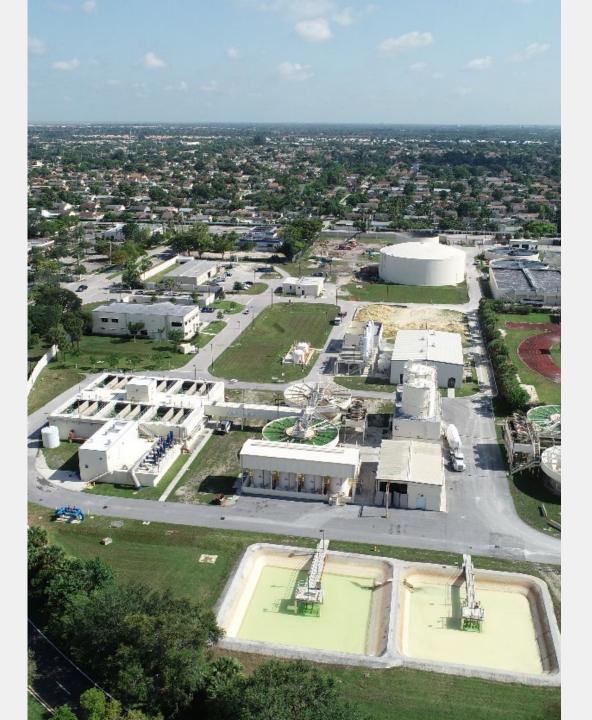


**Comprehensive Utility** 

**Rate Study** 

June 29, 2021





# Agenda

- 1. Study Objectives
- 2. Revenue Sufficiency
- 3. Proposed Rate Design
- 4. Next Steps

## **Study Objectives**



#### **Key Objective 1: Revenue Sufficiency of Existing Rates**

- Ensure Funding for Operating and On-going Capital Needs
- Incorporation and Evaluation of Fiscal Impacts from Master Plan Capital Projects
- Maintain Strong Fiscal Credit Promotes Rate Stability



#### **Key Objective 2: Rate Design**

- Update Conservation Rate Pricing (Tiers to Promote Conservation of Water Resources)
- Rate Consolidation with SBU to address Bond Covenants and Promote Consistency in Rates for All Customer Classes

# Revenue Sufficiency

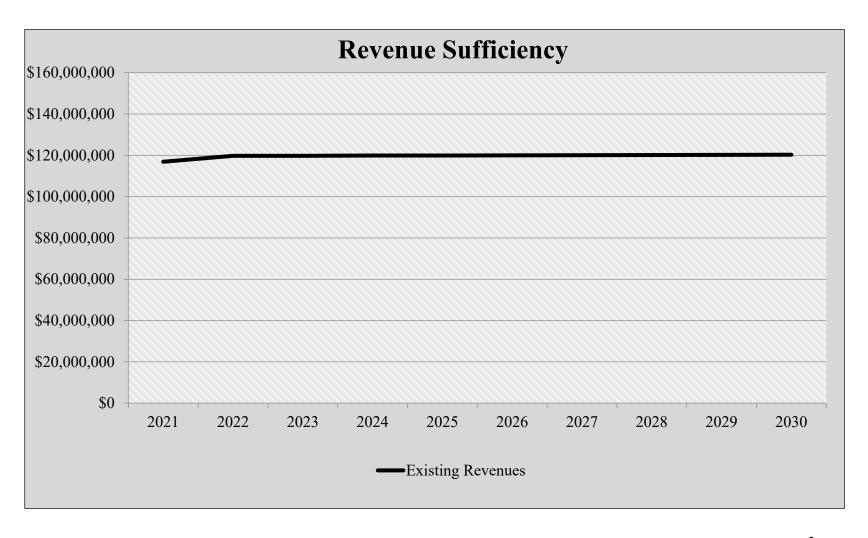


## Revenue Sufficiency Analysis

- Reflects a 10 Year Financial Forecast of System Revenues and Expenses (Revenue Requirements)
- Developed on "Cash Needs" Basis Consistent with City Budget Process / Industry
   Standard
- Considers Key Financial Metrics Used by Credit Rating Agencies and Requirements of City-Adopted Rate Covenants
- Result: Utility Financial Plan

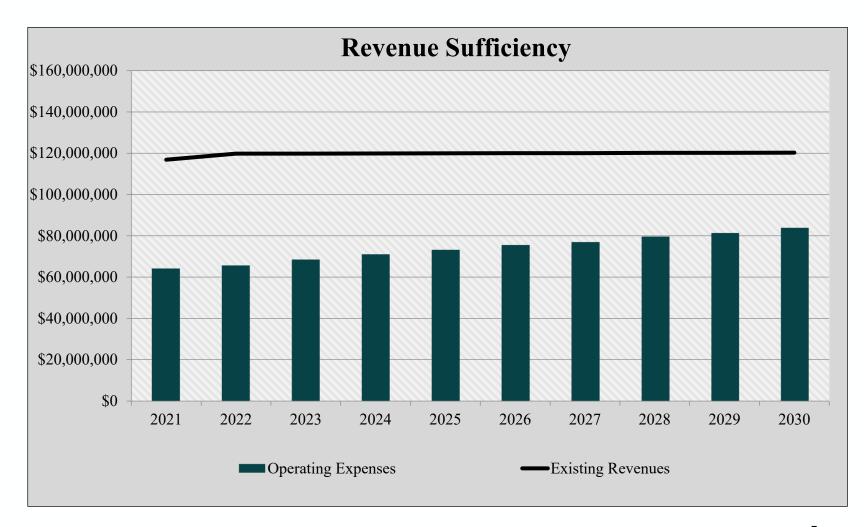
## Revenue Sufficiency – Existing Revenues

- Reflects a 10 Year Financial Forecast
- Limited growth assumed in the forecast (Less than 0.25%)
- Revenues down 5% from FY19 to FY20
  - Due to Weather / COVID
- Projections Based on a Return to Historical Averages in Water Demand (Use)
- Assumes Current Rates / No Rate Indexing



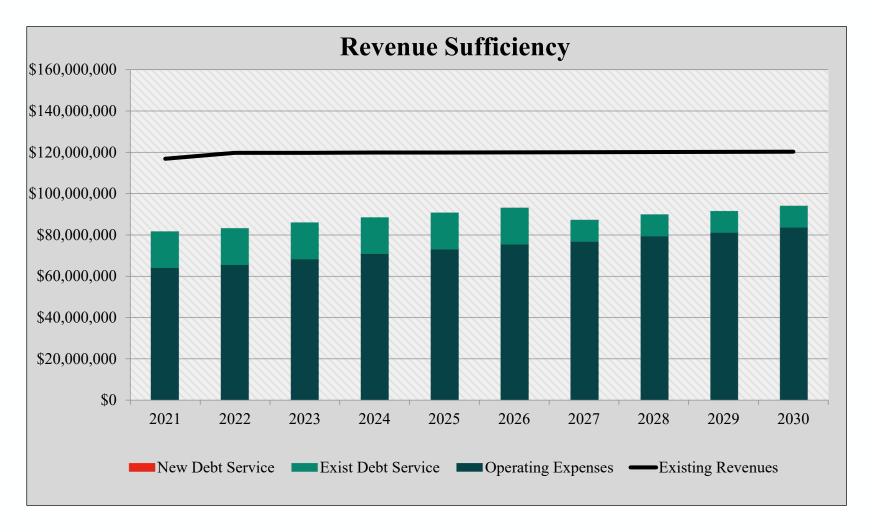
## Revenue Sufficiency – Operating Expenses

- Based on FY 2021 Budget
- Annual Growth Rate of 3.2%/yr
  - Continued Inflation on Costs of Operations
  - Consistent with Inflation Adjustment of Price Index Formula
  - Consistent with Other Utility / National Trends
  - Accounts for 63% of Total Revenue Requirements
- Assumed Additional Full Time Employees After FY21 Budget:
  - 5 Project Managers for CIP
  - 6 Field Staff for Maint, / R&R
  - 2 Utility Billing Specialists
  - 1 Inventory Clerk



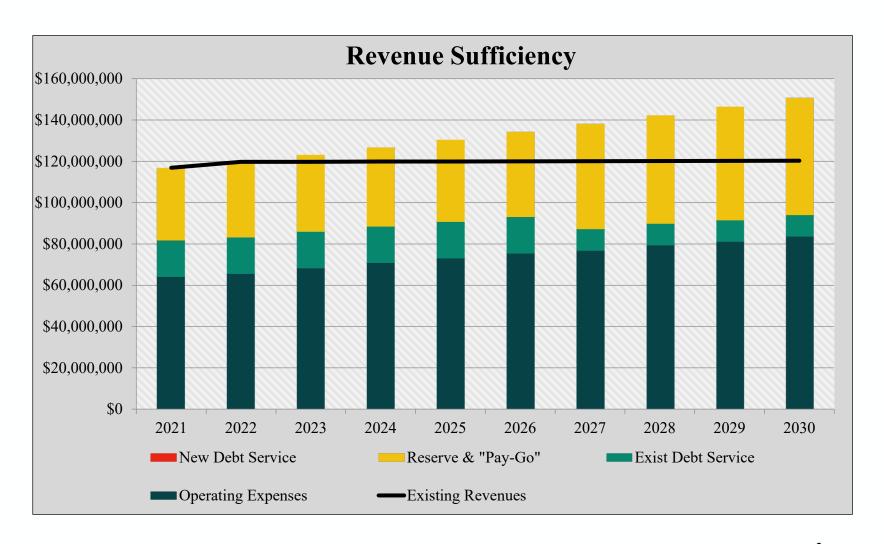
## Revenue Sufficiency – Debt Service

- Existing Debt
  - 2018 Refunding Bonds &
     2020 Refunding Bonds
  - FY27 \$4.5m reduction in Debt Payments
- Capital Improvement Plan & Advanced Meter Infrastructure (AMI) Program Funded from Internal Sources and Future Rate Revenues
- No New Debt Recognized
- Accounts for 13% of Revenue Requirements



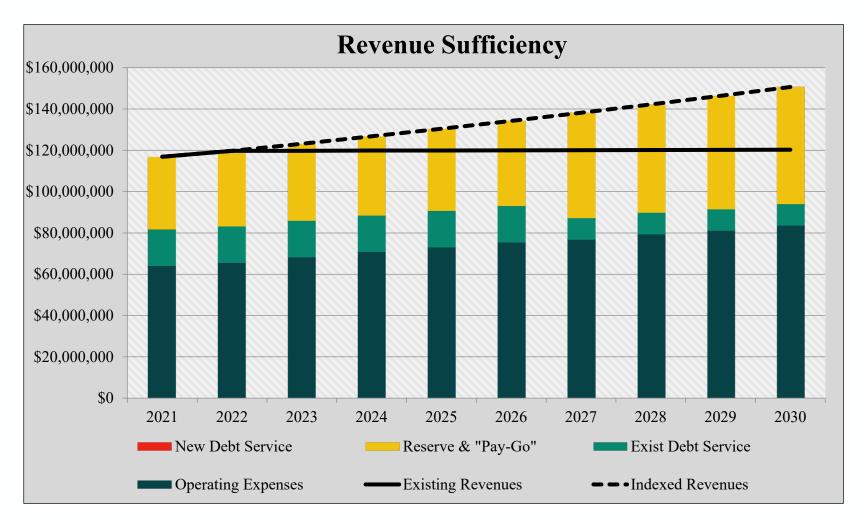
## Revenue Sufficiency – Reserves / "Pay-Go"

- Reflects Transfers for:
  - ROI at ~\$5.3m/yr
  - "Pay-Go" / Future CIP at average of ~\$45m/yr
  - Maintain Min. Cash
     Reserve & Fiscal Targets
- Represents 24% of Total Funding Needs
- Growth in Revenue
   Requirements to Outpace
   Revenues without Indexing
  - \$30m shortfall by FY30



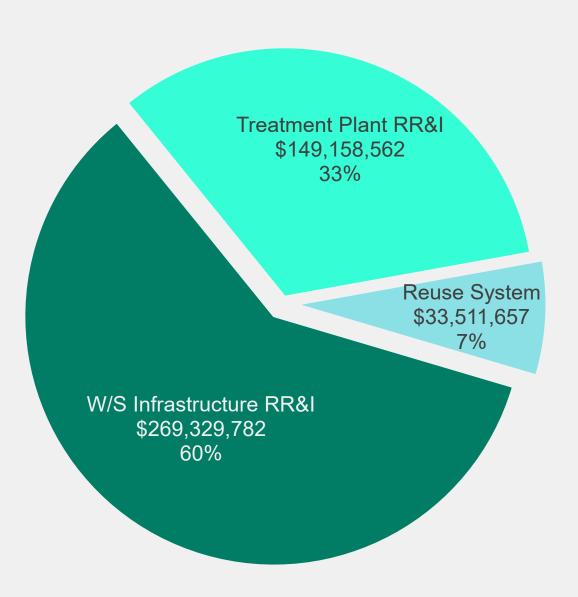
## Revenue Sufficiency – Rate Revenue Adj.

- Recommend Holding Rates
   Constant through FY22
- Restart Annual Price Index Application in FY23
  - Index Assumes 3.0% Per Year
  - Contingent Upon
     Demonstration of Increase
     in Capital Spending



## Revenue Sufficiency – 10 Year Capital Needs

- \$452m in Capital Funding
  - \$366m FY21-FY30 CIP + Master Plan
  - \$70m Previously Appropriated CIP +
     Budgetary Capital Outlays
  - \$16m AMI Program
- Represents Significant Capital Reinvestment Plan
- Recognizes Master Plan Projects
- Majority of Spending for:
  - Redundancy of Water Lines / Fire Protection
  - Sewer Line Replacements
  - Plant Renewals Replacements and Improvements (RR&I)
  - AMI Program



## Revenue Sufficiency – Capital Appropriations

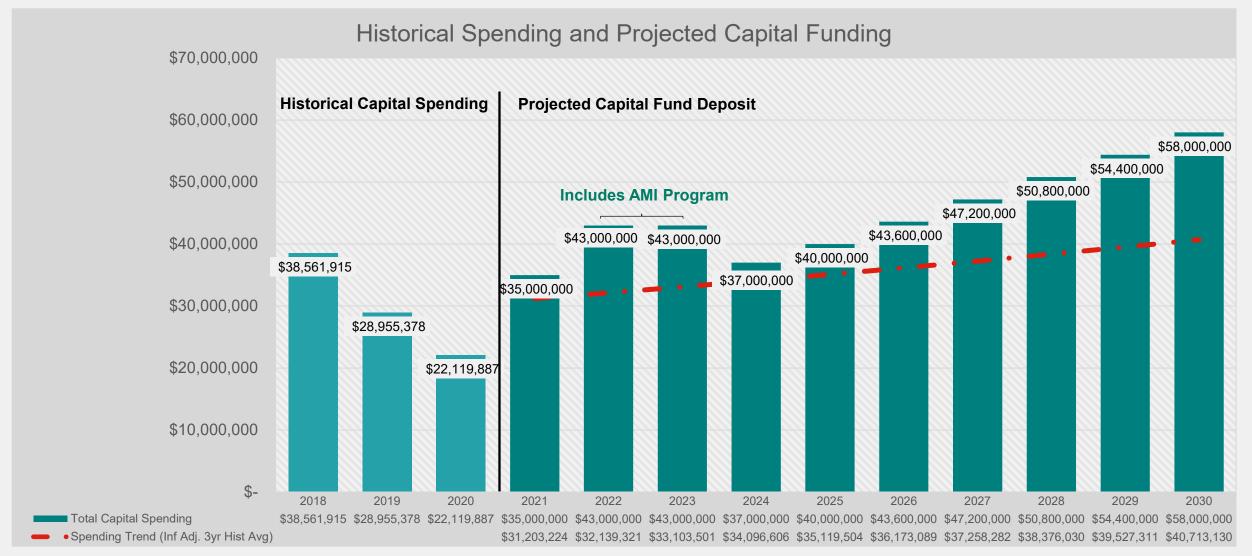
## **Key Assumptions / Findings:**

- CIP is Frontloaded due to Appropriated Carry Forward Projects from Prior Years
- Majority of Spending Identified in Near-term
- Rate Development Forecast
   Recognized Programmed CIP
   Funding (Deposits)
   "Smoothing" of Revenue
   Requirements

## Appropriations Based CIP Needs



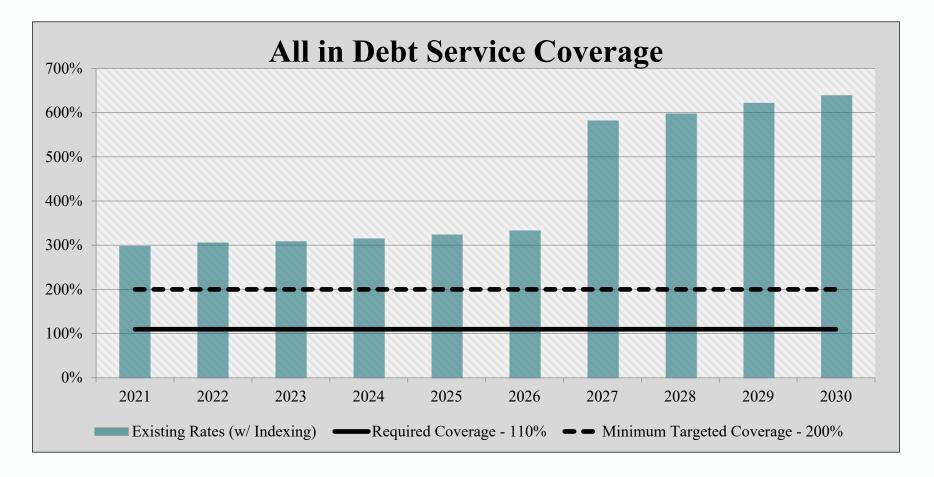
## Revenue Sufficiency - Historical and Projected Capital on Cashflow Basis



## Revenue Sufficiency - Results

## **Key Findings:**

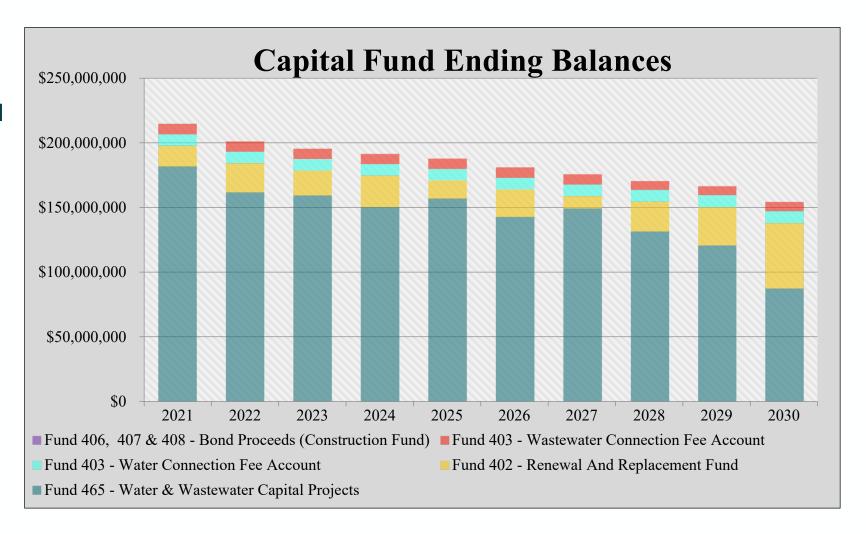
- Strong Debt Service Coverage
- AAA Rated Level



## Revenue Sufficiency - Results

## **Key Findings:**

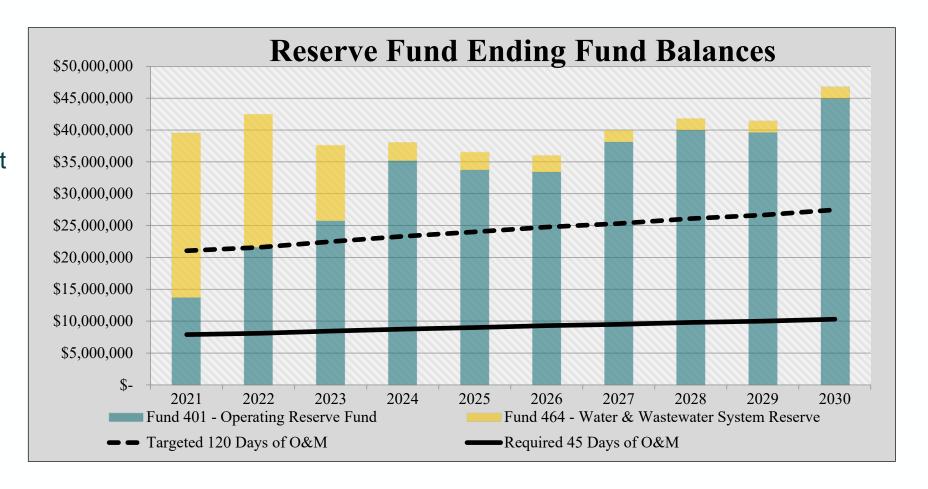
 Projected decline to Capital Reserves to Fund CIP



## Revenue Sufficiency - Results

## **Key Findings:**

- Projected Increases in Operating Reserves Offset Declines to Capital Reserves
- Plan Maintains a Strong Level of Cash Reserves



## Revenue Sufficiency Conclusions

- Recommend No Price Index Application in FY 2022
- Recommend Restarting Annual Price Index Application in FY 2023
  - Continued use of Index Helps Offset Increases in Operations and Capital
  - If Capital Plan Spending less than Financial Plan Forecast, Delay in Index for Such Years
- System Maintains Strong Debt Coverage
- No Additional Debt Needed to Fund Capital Plan with Indexing
- Remains Financially Strong for Future Needs
- Utility in Favorable Financial Position

# Rate Restructure & Consolidation



## **Key Rate Restructure Objectives**

- Promote Increased Water Conservation Pricing Incentives
- Compliance with SFWMD Consumptive Use Permit Requirements
- Unify South Broward Utilities (SBU) Rates with that of the City's Outside City Rates
  - Bond Resolution: Uniform Rates per Customer Class
- Minimize Rate Fluctuations Where Possible
- Structure Rates to be "Revenue Neutral" on System Basis

## **Customer Statistics**

	Ave	rage Monthly Custom	ners	
Water Accounts	Inside City	Outside City	South Broward Utilities	<u>Total</u>
Residential	21,885	32,320	2,990	57,194
Multi-Family	878	459	0	1,337
All Others	<u>1,890</u>	<u>1,737</u>	<u>459</u>	<u>5,423</u>
Total	24,652	34,516	3,449	62,617
Residential % of Total	88.78%	93.64%	86.70%	91.34%
	Yearly V	Vater Sales (000's of 0	Gallons)	
Residential	1,323,960	3,071,157	229,896	4,625,013
Multi-Family	818,288	482,663	0	1,300,951
All Others	<u>702,585</u>	<u>627,963</u>	<u>60,268</u>	<u>1,691,767</u>
Total	2,844,833	4,181,783	290,164	6,316,780
Residential % of Total	46.54%	73.44%	79.23%	73.22%
	Residential I	Monthly Average Use	Per Account	
Monthly Average Use	5,041	7,919	6,407	6,739

## **How Are Rates Structured**

- Base Charge:
  - Recovers Portion of Fixed Costs (Plant, Salaries, Debt, etc)
  - > Promotes Revenue Stability
  - Does Not Vary by Use/Sale
  - > 49.27% of Revenue Recovered in Base Charge
- Volume Charge:
  - Recovers All Expenses Not in Base Charge
  - Variable since Sales can Change
  - Water Minor Conservation Incentive
  - Wastewater Residential and Multi-Family has Billing Cap
  - > 50.73% of Revenue Recovered in Volumetric Charge

## **Existing Rate Structure**

Existing Residential Customer Class Rate Structure [1]

					Existing ite	Sidential of	astonner elass n	ate of actare [1]	<u> </u>					
	Water Sys	tem		SB	U Water Sys	stem		Wastewater 9	System		SBU Wastewater System			
Base Charg	ge:	<u>Inside</u> \$ 20.87	<u>Outside</u> \$ 26.09	Base Cha	rge:	\$ 22.05	Base Charge	:	<u>Inside</u> \$ 29.68	<u>Outside</u> \$ 37.10	Base Charge	:	\$ 25.04	
Volume Ch	arge:			Volume C	harge:		Volume Char	ge:			Volume Char	rge:		
Tiers	Range	Rate	<u>Rate</u>	<u>Tiers</u>	Range	Rate	<u>Tiers</u>	Range	Rate	Rate	<u>Tiers</u>	Range	Rate	
Tier 1	0-30,000	\$ 4.09	\$ 5.11	Tier 1	All Usage	\$ 5.44	Tier 1	0-16,000	\$ 4.16	\$ 5.20	Tier 1	0-12,000	\$ 8.26	
Tier 2	Above 30,000	5.18	6.48				Tier 2 [2]	Above 16,000	-	-	Tier 2 [2]	Above 12,000	-	

<sup>[1]</sup> Outside City and South Broward Customers have a 25% Outside City Surcharge applied to their bill.

<sup>[2]</sup> Anything above the usage in Tier 1 is not be charged a volume charge.

## **Rate Restructure – Water Conservation**

- Benefits of Water Conservation
  - Reduces Cost of Water Supply and Treatment, Including the Building of Future for Water Treatment Plant Capacity, due to Less Use Per Customer
  - Assists in Preserving Water Supply for Benefit of Region, Including Minimizing the Effects of Droughts and Water Shortages
  - Provides Positive Effects on Saltwater Intrusion Due to Reduced Groundwater Water Pumping
  - Increases Availability of Water Supply to Region and for Recreational and Esthetic Purposes and Public Safety (Firefighting, Medical, etc.)
- Water Conservation Pricing Required by SFWMD for Consumptive Use Permit
  - Most Utilities Surveyed have a Water Conservation Rate Structure
- Pricing Generally Targeted Towards:
  - Individually Metered Residential Class
  - Essential Use (Indoor Use Cooking, Bathing, Sanitary, Washing)
  - Discretionary Use (Optional Use Limited Irrigation, Car Washing, etc.)
  - Excessive Use (Optional Use Excessive Irrigation, Leaks, etc.)
- City's Existing Rates do not Provide Favorable Conservation Incentives

## **Conservation Tier Comparison - Usage**

				Averag	e Conser	/ation Rat Florida	e Block Ti Utilities	er Size fo	or Other
Block Tiers	FL Utilities Surveyed	Percent of Utilities Surveyed	Recommended City Conservation Usage	2 Tiers	3 Tiers	4 Tiers	5 Tiers	6 Tiers	All Tiers
1 <sup>st</sup>	0	0%	4,000	12,000	6,000	6,000	4,000	5,000	6,000
2 <sup>nd</sup>	4	9%	8,000	Above	16,000	13,000	11,000	11,000	13,000
3 <sup>rd</sup>	7	16%	12,000		Above	22,000	18,000	22,000	21,000
4 <sup>th</sup>	21	48%	16,000			Above	30,000	37,000	32,000
5 <sup>th</sup>	8	18%	Above				Above	75,000	75,000
6 <sup>th</sup>	7	9%	N/A					Above	Above

## **Conservation Tier Comparison - Rates**

		Average Tiered Rate for Other Florida Utilities													
Block Tiers	Recommended City Conservation Rates	2 Tiers	3 Tiers	4 Tiers	5 Tiers	6 Tiers	All Tiers								
1 <sup>st</sup>	\$3.45	\$3.01	\$2.80	\$2.92	\$3.39	\$2.92	\$2.88								
2 <sup>nd</sup>	\$4.72	\$6.19	\$4.24	\$4.47	\$5.01	\$4.47	\$4.58								
3 <sup>rd</sup>	\$5.45		\$7.12	\$5.98	\$6.57	\$5.98	\$6.35								
4 <sup>th</sup>	\$7.26			\$7.53	\$8.68	\$7.53	\$8.08								
5 <sup>th</sup>	\$9.08				\$10.86	\$9.08	\$9.58								
6 <sup>th</sup>	N/A					\$11.03	\$11.03								

## South Broward Utility (SBU) Area Rate Consolidation

- Rate Differences Exist as a Result of System Evolution (SBU Acquired)
- Customers in Same Class Must have Same Rates per Master Bond Resolution

 Since Implementing Water Conservation Rates, Best to Consolidate Rates into a Uniform Structure

#### **Proposed Rate Structure**

Proposed Residential Customer Class Rate Structure [1]

	Water System			Waterwater System							
Base Charge:		\$	22.11	Base Charge	:	\$	24.60				
Volume Cl	narge:			Volume Char	ge:						
Tiers	Range	_	Rate	<u>Tiers</u>	Range		Rate				
Tier 1	0 - 4,000	\$	3.45	Tier 1	0-12,000	\$	4.36				
Tier 2	4,000 - 8,000		4.72	Tier 2 [2]	Above 12,000		-				
Tier 3	8,000 - 12,000		5.45								
Tier 4	12,000 - 16,000		7.26								
Tier 5	Above 16,000		9.08								

- [1] Outside City customers, as well as SBU customers will see a 25% outside city surcharge on their bill.
- [2] Wastewater will have a cap of 12,000 gallons. Any usage above this cap will not be charged a usage fee.

# Customer Impact Analysis



## Existing Vs. Proposed Rates – System Cost Recovery Change by Customer Class

Chang	Change in Revenue Recovery by Customer Class										
	Revenue Change	% of Total Revenue									
Residential	\$ 367,322	0.32%									
Multi-Family	\$ 77,840	0.07%									
Commercial	\$(144,744)	(0.13%)									
Government	\$(118,125)	(0.10%)									
Irrigation	\$ 332,882	0.29%									

 Proposed Rates on a "By Class" Basis Approaching a "Revenue Neutral" Result

## Existing Vs. Proposed Rate Structure – Residential System Cost Recovery

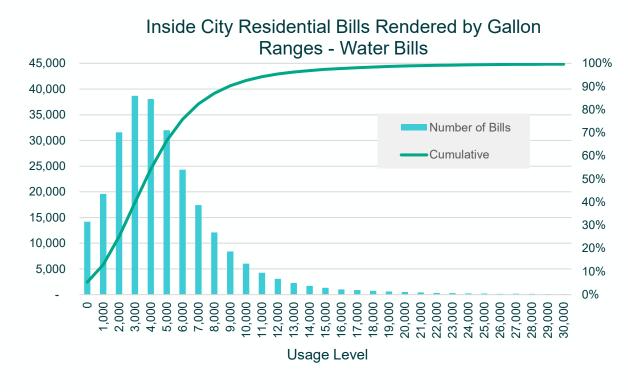
**Change in Residential Revenue Recovery** 

Description	Combined	Water	Sewer
Inside Sunrise			
Existing	\$23,635,627	\$10,694,295	\$12,941,332
Proposed	23,084,097	11,156,022	11,928,074
Difference	\$(551,531)	\$461,727	\$(1,013,258)
Variance	(2.3%)	4.3%	(7.8%)
Outside Sunrise			
Existing	\$41,535,770	\$20,166,740	\$21,369,030
Proposed	42,446,009	23,357,639	19,088,369
Difference	\$910,238	\$3,190,899	\$(2,280,661)
Variance	2.2%	15.8%	(10.7%)
South Broward Utility Area (SBU)			
Existing	\$3,471,734	\$1,613,452	\$1,858,282
Proposed	3,480,349	1,809,084	1,671,264
Difference	\$8,615	\$195,633	\$(187,018)
Variance	0.2%	12.1%	(10.1%)

#### Existing Vs. Proposed Rate Structure – Residential Inside City

- 35% (21,885) of Water Accounts; 18% of Flow
- Approximately 87% of Residential Inside City Customers would see a Reduction in their Bill

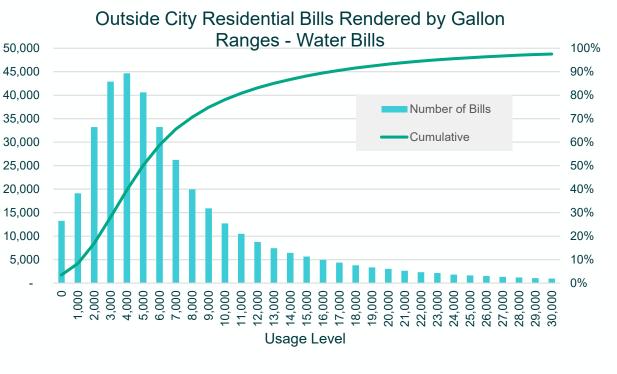
				Levels of	of Customer Usage					
Description	(	) Kgal		l Kgal		3 Kgal	_1	2 Kgal	_1	6 Kgal
Cumulative Bills		~5%		~54%		~87%		~95%		~98%
Current Bill Water	\$	20.87	\$	37.23	\$	53.59	\$		\$	86.31
Wastewater	\$	29.68	ф	46.32	<u> </u>	62.96	<u>_</u>	79.60	ф.	96.24
Total Proposed Bill	·	50.55	\$	83.55		116.55	·	149.55	·	182.55
Water	\$	22.12	\$	35.92	\$	54.80	\$		\$	105.64
Wastewater		24.60		42.04		<u>59.48</u>	_	76.92		76.92
Total	\$	46.72	\$	77.96	\$	114.28	\$	153.52	\$	182.56
Current Bill	\$	50.55	\$	83.55	\$	116.55	\$	149.55	\$	182.55
Proposed Bill		46.72		77.96		<u>114.28</u>	_	153.52		<u> 182.56</u>
Dollar Change	\$	(3.83)	\$	(5.59)	\$	(2.27)	\$	3.97	\$	0.01
Percent Change		(7.6%)		(6.7%)		(1.9%)		2.7%		0.0%



#### Existing Vs. Proposed Rate Structure – Residential <u>Outside City</u>

- 52% (32,375) of Water Accounts; 42% of Flow
- Approximately 70% of Residential Outside City Customers would see a Reduction in their Bill
- Rates Include a 25% Outside City Surcharge

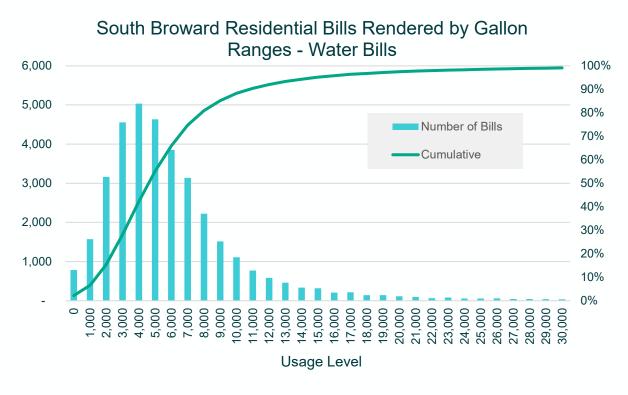
				Levels of	of C	Custome	r U	sage		
Description	_(	) Kgal		4 Kgal	8	3 Kgal	_1	2 Kgal	_1	6 Kgal
Cumulative Bills		~3.4%		~40%		~70%		~83%		~90%
Current Bill										
Water	\$	26.09	\$	46.54	\$	66.99	\$	87.44	\$	107.89
Wastewater		37.10		57.90		78.70		99.50	_	120.30
Total	\$	63.19	\$	104.44	\$	145.69	\$	186.94	\$	228.19
Proposed Bill										
Water	\$	27.65	\$	44.90	\$	68.50	\$	95.75	\$	132.05
Wastewater		30.75	_	<u>52.55</u>		74.35	_	96.1 <u>5</u>	_	<u>96.15</u>
Total	\$	58.40	\$	97.45	\$	142.85	\$	191.90	\$	228.20
Current Bill	\$	63.19	\$	104.44	\$	145.69	\$	186.94	\$	228.19
Proposed Bill	_	58.40	_	97.45	_	142.85	_	<u>191.90</u>	_	228.20
Dollar Change	\$	(4.79)	\$	,	\$	(2.84)	\$		\$	0.01
Percent Change		(7.6%)		(6.7%)		(1.9%)		2.7%		0.0%



#### Existing Vs. Proposed Rate Structure – Residential South Broward

- 5% (2,993) of Water Accounts; 3% of Flow
- Approximately 85% of SBU Residential Customers will See a Decrease in their Bill
- Rates Include a 25% Outside City Surcharge

				Levels c	of Customer Usage					
Description	0	Kgal	4	l Kgal		8 Kgal	_1	2 Kgal	_16	∂ Kgal
Cumulative Bills		~7%		~42%		~81%		~92%		~96%
Current Bill										
Water	\$	22.05	\$	43.80	\$	65.55	\$	87.30	\$	109.05
Wastewater		25.04		58.09		91.14		107.66		107.66
Total	\$	47.09	\$	101.89	\$	156.69	\$	194.96	\$ 2	216.71
Proposed Bill Water Wastewater		27.65 30.75	\$	44.90 52.55	\$	74.35	\$	95.75 <u>96.15</u>	_	132.05 96.15
Total	\$	58.40	\$	97.45	\$	142.85	\$	191.90	\$ 2	228.20
Current Bill Proposed Bill	\$	47.09 58.40		101.89 <u>97.45</u>		156.69 142.85	_	194.96 191.90		216.71 228.20
Dollar Change Percent Change	\$	11.31 24.0%	\$	(4.44) (4.4%)	\$	(13.84) (8.8%)	\$	(3.06) (1.6%)	\$	11.49 5.3%
. s. ss onango		, ,		(, ///		(3.370)		( 5 / 6 /		0.070



#### Existing Vs. Proposed Rate Structure – Multi-Family System Cost Recovery

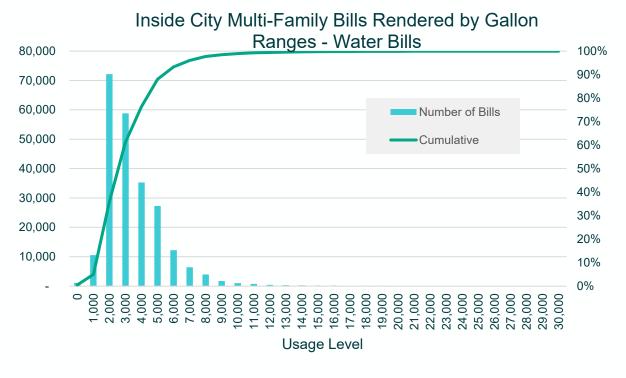
**Change in Multi-Family Revenue Recovery** 

Description	Combined	Water	Sewer
Multi-Family Inside			
Existing	\$14,862,428	\$6,991,490	\$7,870,938
Proposed	14,903,942	7,641,744	7,262,198
Difference	\$41,514	\$650,255	\$(608,740)
Variance	0.3%	9.3%	(7.7%)
Multi-Family Outside			
Existing	\$8,396,147	\$3,873,151	\$4,522,996
Proposed	8,432,472	4,242,374	4,190,099
Difference	\$36,326	\$369,223	\$(332,897)
Variance	0.4%	9.5%	(7.4%)

## Existing Vs. Proposed Rate Structure – Multi-Family Inside City

- 1.4% (878) of Water Accounts; 11% of Flow
- Approximately 61% of Inside Multi-Family Customers will See a Reduction in their Bill

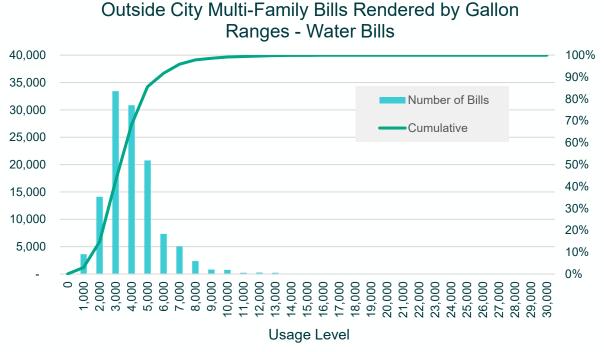
		Levels of Customer Usage – Per Unit								
Description	_	1 Kgal	_2	2 Kgal	_3	3 Kgal		4 Kgal	_{	3 Kgal
Cumulative Bills		~5.0%		~36%		~61%		~76%		~98%
Current Bill Water Wastewater Total	\$	18.93 24.94 43.87	\$ 	23.25 29.10 52.35	\$	27.57 33.26 60.83	\$ 	31.89 37.42 69.31	\$	49.17 54.06 103.23
Proposed Bill Water Wastewater Total	\$	20.34 21.58 41.92	\$	25.20 25.94 51.14	\$	30.06 30.30 60.37	\$     	34.92 34.66 69.58	\$	54.36 52.10 106.46
Current Bill Proposed Bill Dollar Change Percent Change	\$ 	43.87 41.92 (1.95) (4.4%)	\$ <b>\$</b>	52.35 <u>51.14</u> (1.21) (2.3%)	\$ <b>\$</b>	60.83 60.37 (0.47) (0.8%)	\$ 	69.31 69.58 0.27 0.4%		103.23 106.46 3.23 3.1%



#### Existing Vs. Proposed Rate Structure – Multi-Family <u>Outside City</u>

- 0.73% (459) of Water Accounts; 7% of Flow
- Approximately 43% of Outside Multi-Family Customers will See a Reduction in their Bill

Levels of Customer Usage - Per Unit Description 8 Kgal 1 Kgal 2 Kgal 3 Kgal 4 Kgal **Cumulative Bills** ~3% ~15% ~43% ~68% ~98% **Current Bill** Water 23.66 \$ 29.06 \$ 34.46 \$ 39.86 61.46 Wastewater 31.18 36.38 41.58 46.78 67.58 Total \$ 65.44 \$ 76.04 \$ 86.64 \$ 129.04 **Proposed Bill** 25.42 \$ 31.49 \$ 37.57 \$ 43.62 Water 67.92 37.88 Wastewater 32.43 43.33 65.13 \$ 52.40 \$ 63.92 \$ 75.45 \$ 86.97 Total Current Outside Bill \$ 54.84 \$ 65.44 \$ 76.04 \$ 129.04 \$ 86.64 Proposed Outside Bill 52.40 63.92 75.42 86.97 133.07 **Dollar Change \$** (2.44) (1.52)(0.59) \$ 0.33 4.03 Percent Change (4.5%)0.4% 3.1% (2.3%)(0.8%)

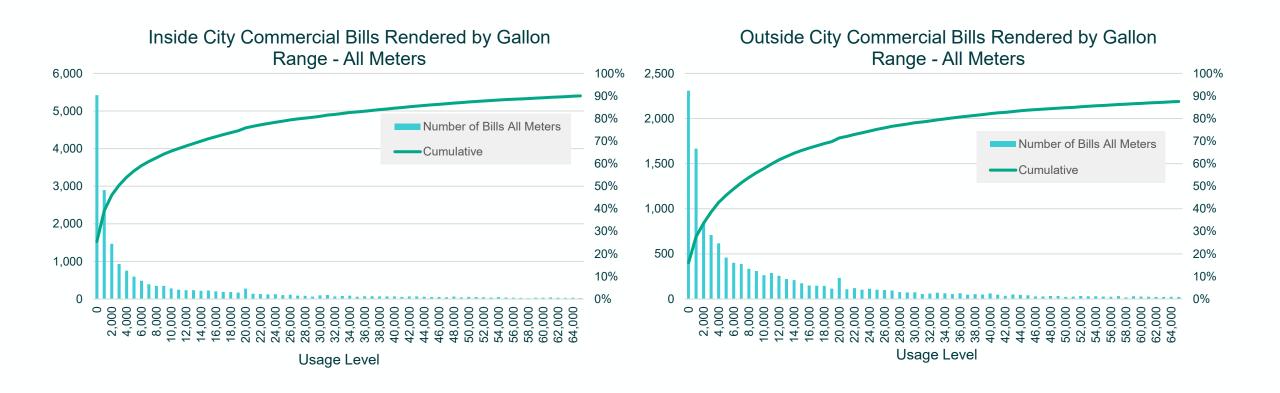


## Existing Vs. Proposed Rate Structure – Commercial System Cost Recovery

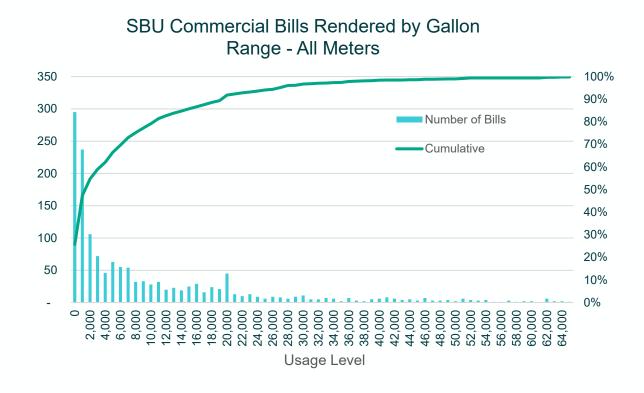
**Change in Revenue Recovery** 

Description	Combined	Water	Sewer
Commercial Inside			
Existing	\$10,203,828	\$4,870,376	\$5,333,453
Proposed	9,999,810	5,183,537	4,816,273
Difference	\$(204,018)	\$314,156	\$(517,179)
Variance	(2.0%)	6.4%	(9.7%)
Commercial Outside			
Existing	\$7,439,349	\$3,531,051	\$3,908,298
Proposed	7,265,309	3,744,303	3,521,006
Difference	(\$174,040)	\$213,252	\$(387,292)
Variance	(2.3%)	6.0%	(9.9%)
Commercial SBU			
Existing	\$588,380	\$246,365	\$342,015
Proposed	819,882	435,431	384,451
Difference	\$231,502	\$189,066	\$42,437
Variance	39.3%	76.7%	12.4%

#### All (in/out) Commercial Bill Frequency



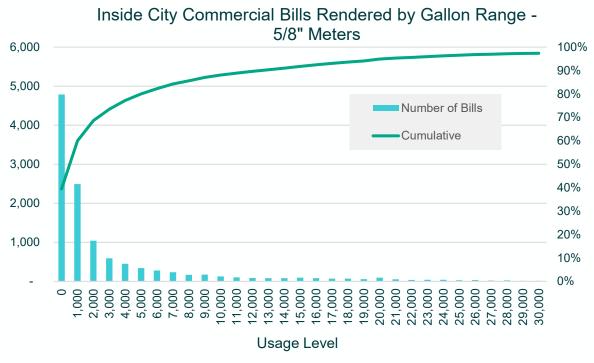
#### All (SBU) Commercial Bill Frequency



## Existing Vs. Proposed Rate Structure – Commercial Inside City 5/8" Meters

- 1.62% (1,017) of Water Accounts; 0.77% of Flow
- Approximately 77% of Inside City Commercial Customers will See a Reduction in Their Bill

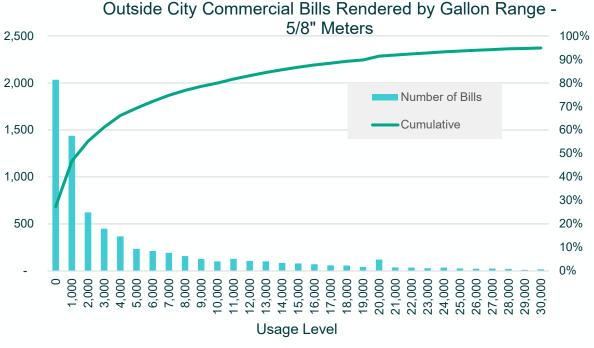
			Levels	of	Custome				
Description	(	) Kgal	 1 Kgal		8 Kgal	_1	2 Kgal	_1	6 Kgal
Cumulative Bills		~40%	~77%		~86%		~90%		~93%
Current Bill									
Water	\$	29.22	\$ 46.50	\$	63.78	\$	81.06	\$	98.34
Wastewater		41.56	 58.20		74.84		91.48		108.12
Total	\$	70.78	\$ 104.70	\$	138.62	\$	172.54	\$	206.46
Proposed Bill									
Water	\$	30.97	\$ 50.41	\$	69.85	\$	89.29	\$	108.73
Wastewater		34.44	 <u>51.88</u>		69.32		86.76		104.20
Total	\$	65.41	\$ 102.29	\$	139.17	\$	176.05	\$	212.93
	_			_		_		_	
Current Bill	\$	70.78	\$ 104.70	\$	138.62	\$	172.54	\$	206.46
Proposed Bill		<u>65.41</u>	<u> 102.29</u>		<u> 139.17</u>		<u> 176.05</u>		212.93
Dollar Change	\$	(5.37)	\$ (2.41)	\$	0.55	\$	3.51	\$	6.47
Percent Change		(7.6%)	(2.3%)		0.4%		2.0%		3.1%



## Existing Vs. Proposed Rate Structure – Commercial <u>Outside City</u> 5/8" Meters

- 1% (626) of Water Accounts; 0.78% of Flow
- Includes Outside City Surcharge
- Approximately 66% of Outside City Commercial Customers will See a Reduction in Their Bill

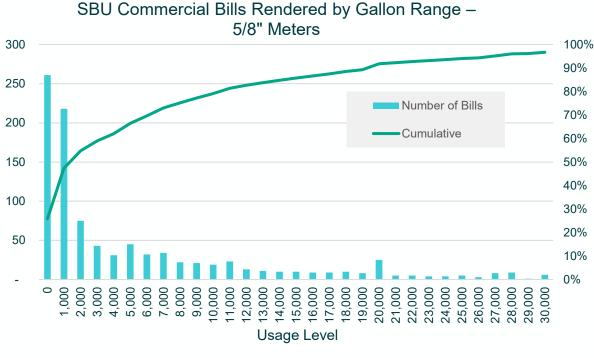
		Levels of Customer Usage										
Description	_(	) Kgal		1 Kgal		8 Kgal	_1	2 Kgal	1	6 Kgal		
Cumulative Bills		~27%		~66%		~77%		~83%		~88%		
Current Bill												
Water	\$	36.53	\$	58.13	\$	79.73	\$	101.33	\$	122.93		
Wastewater		51.95		72.75		93.55		114.35		135.15		
Total	\$	88.48	\$	130.88	\$	173.28	\$	215.68	\$	258.08		
Proposed Bill												
Water	\$	38.71	\$	63.01	\$	87.31	\$	111.61	\$	135.91		
Wastewater		43.05		64.85		86.65		<u> 108.45</u>		130.2 <u>5</u>		
Total	\$	81.76	\$	127.86	\$	173.96	\$	220.06	\$	266.16		
Current Bill Proposed Bill	\$	88.48 81.76	\$	130.88 127.86	\$	173.28 173.96	\$	215.68 220.06	\$	258.08 266.16		
Dollar Change	\$	(6.72)	\$	(3.02)	\$	0.68	\$	4.38	\$	8.08		
Percent Change		(7.6%)		(2.3%)		0.4%		2.0%		3.1%		



## Existing Vs. Proposed Rate Structure – Commercial <u>SBU</u> 5/8" Meters

- 0.14% (85) of Water Accounts: 0.09% of Flow
- Includes Outside City Surcharge
- Approximately 75% of SBU Commercial Customer will See an Increase in Their Bill

		Levels of Customer Usage									
Description	0 Kgal			4 Kgal		8 Kgal		12 Kgal		16	
Cumulative Bills		~26%		~62%		~75%		~83%		~87%	
Current Bill											
Water	\$	22.05	\$	43.81	\$	65.57	\$	87.33	\$	109.09	
Wastewater		25.04		64.92		104.80		144.68		184.56	
Total	\$	47.09	\$	108.73	\$	170.37	\$	232.01	\$	293.65	
Proposed Bill											
Water	\$	38.69	\$	62.99	\$	87.29	\$	111.59	\$	135.89	
Wastewater		43.05		64.85		86.65		108.45		130.25	
Total	\$	81.74	\$	127.84	\$	173.94	\$	220.04	\$	266.14	
Current Bill	\$	47.09	\$	108.73	\$	170.37	\$	232.01	\$	293.65	
Proposed Bill		81.74		127.84		173.94		220.04		266.14	
Dollar Change	\$	34.65	\$	19.11	\$	3.57	\$	(11.97)	\$	(27.51)	
Percent Change		73.6%		17.6%		2.1%		(5.2%)		(9.4%)	



## Existing Vs. Proposed Rate Structure – Commercial Inside City 1" Meters

0.44% (276) of Water Accounts; 0.85% of Flow

Levels of Customer Usage

Approximately 10% of Inside City Commercial Customers will See a Reduction in Their Bill

Description	0 Kgal		6 Kgal		12 Kgal		24 Kgal		_36 Kgal	
Cumulative Bills	~10%	)	~48%		~62%		~78%		~86%	
Current Bill										
Water	\$ 73.02	\$	98.94	\$	124.86	\$	176.70	\$	228.54	
Wastewater	103.90		128.86		153.82		203.74		253.66	
Total	\$ 176.92	\$	227.80	\$	278.68	\$	380.44	\$	482.20	
Proposed Bill										
Water	\$ 77.42	\$	102.18	\$	131.34	\$	189.66	\$	247.98	
Wastewater	86.10		130.06		156.22		208.54		260.86	
Total	\$ 163.52	\$	232.24	\$	287.56	\$	398.20	\$	508.84	
Occurs of Dill	ф 4 <b>7</b> 0 00	Φ	007.00	Φ	070.00	Φ	200 44	Φ	400.00	
Current Bill	\$ 176.92	\$	227.80	\$	278.68	\$	380.44	\$	482.20	
Proposed Bill	<u>163.52</u>		232.24		<u> 287.56</u>		398.20		508.84	
Dollar Change	\$ (13.40)	\$	4.44	\$	8.88	\$	17.76	\$	26.64	

1.9%

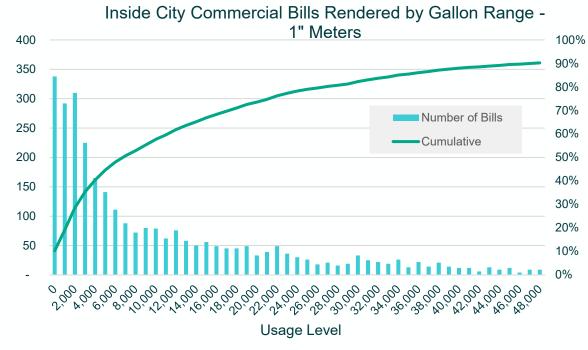
(7.6%)

3.2%

4.7%

5.5%

Percent Change



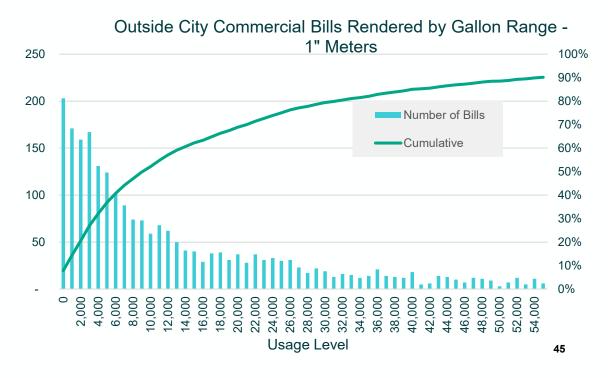
#### Existing Vs. Proposed Rate Structure – Commercial <u>Outside City</u> 1" Meters

0.35% (219) of Water Accounts; 0.74% of Flow

Levels of Customer Usage

- Includes Outside City Surcharge
- Approximately 8% of Outside City Commercial Customers will See a Reduction in Their Bill

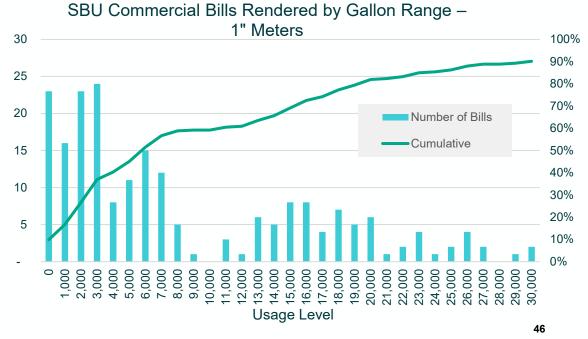
	Levels of Customer Osage									
Description	_0 Kgal	(	6 Kgal	_1	2 Kgal	_2	4 Kgal	_3	6 Kgal	
Cumulative Bills	~8%		~41%		~57%		~74%		~83%	
Current Bill										
Water	\$ 91.28	\$	123.68	\$	156.08	\$	220.88	\$	285.68	
Wastewater	129.88		161.08		192.28		254.68		317.08	
Total	\$ 221.16	\$	284.76	\$	348.36	\$	475.56	\$	602.76	
Proposed Bill										
Water	\$ 96.78	\$	127.73	\$	164.18	\$	237.08	\$	309.98	
Wastewater	107.63		162.58		195.28		260.68		326.08	
Total	\$ 204.41	\$	290.31	\$	359.46	\$	497.76	\$	636.06	
Current Bill	\$ 221.16	\$	284.76	\$	348.36	\$	475.56	\$	602.76	
Proposed Bill	204.41		290.31		359.46		497.76		636.06	
Dollar Change	\$ (16.75)	\$	5.55	\$	11.10	\$	22.20	\$	33.30	
Percent Change	(7.6%)		1.9%		3.2%		4.7%		5.5%	



#### Existing Vs. Proposed Rate Structure – Commercial <u>SBU</u> 1" Meters

- 0.03% (19) of Water Accounts: 0.06% of Flow
- Includes Outside City Surcharge
- Approximately 85% of SBU Commercial Customer will See an Increase in Their Bill

	Levels of Customer Usage									
Description	0 Kgal		6 Kgal	1	2 Kgal	2	24 Kgal	3	6 Kgal	
Cumulative Bills	~10%		~52%		~61%		~85%		~91%	
Current Bill										
Water	\$ 54.96	\$	87.60	\$	120.24	\$	185.52	\$	250.80	
Wastewater	62.60		122.42		182.24		301.88		421.52	
Total	\$ 117.56	\$	210.02	\$	302.48	\$	487.40	\$	672.32	
Proposed Bill										
Water	\$ 96.74	\$	127.73	\$	164.18	\$	237.08	\$	309.98	
Wastewater	<u> 107.63</u>		162.58		<u> 195.28</u>		260.68		326.08	
Total	\$ 204.37	\$	290.31	\$	359.46	\$	497.76	\$	636.06	
Current Bill	\$ 117.56	\$	210.02	\$	302.48	\$	487.40	\$	672.32	
Proposed Bill	204.37		290.31		359.46		497.76		636.06	
Dollar Change	\$ 86.81	\$	80.29	\$	56.98	\$	10.36	\$	(36.26)	
Percent Change	73.8%		38.2%		18.8%		2.1%		(5.4%)	



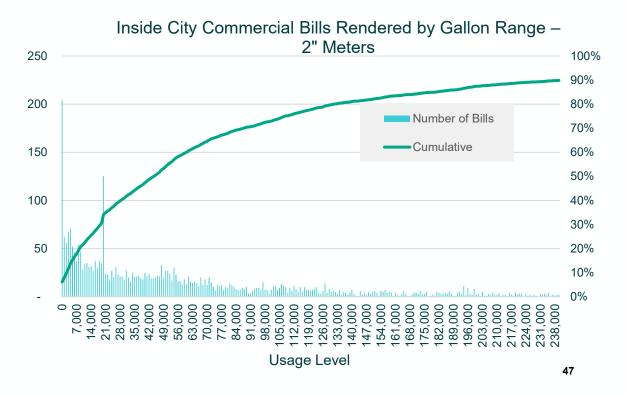
## Existing Vs. Proposed Rate Structure – Commercial Inside City 2" Meters

0.45% (283) of Water Accounts; 3.89% of Flow

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Approximately 75% of Inside City Commercial Customers will See a Reduction in Their Bill

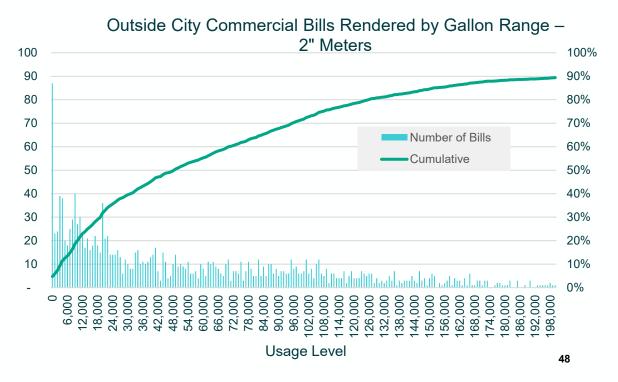
	Levels of Customer Usage											
Description	_0 Kgal	_2	5 Kgal	(	60 Kgal	_1	10 Kgal	_20	00 Kgal			
Cumulative Bills	~6%		~38%		~60%		~75%		~87%			
Current Bill												
Water	\$ 264.90	\$	372.90	\$	524.10	\$	740.10	\$ 1	,128.90			
Wastewater	377.02		481.02		626.62		834.62	1	,209.02			
Total	\$ 641.92	\$	853.92	\$	1,150.72	\$	1,574.72	\$ 2	2,337.92			
Proposed Bill Water Wastewater Total	\$ 247.74 <u>275.52</u> \$ 523.26	\$	369.24 384.52 753.76	_	539.34 537.12 1,076.46	_	755.12	1	,219.74 ,147.52 2,367.26			
Current Bill	\$ 641.92	\$	853.92	\$	1,150.72	\$	1,574.72	\$ 2	2,337.92			
Proposed Bill	523.26		753.76	_	1,076.46	_	1,537.46	2	2,367.26			
Dollar Change Percent Change	\$(118.66) (18.5%)	\$ (	(100.16) (11.7%)	\$	(74.26) (6.5%)	\$	(37.26) (2.4%)	\$	29.34 1.3%			



#### Existing Vs. Proposed Rate Structure – Commercial <u>Outside City</u> 2" Meters

- 0.25% (155) of Water Accounts; 2.61% of Flow
- Includes Outside City Surcharge
- Approximately 76% of Outside City Commercial Customers will See a Reduction in Their Bill

	Levels of Customer Usage										
Description	0 Kgal	_25 Kgal	_60 Kgal	_110 Kgal	200 Kgal						
Cumulative Bills	~5%	~36%	~55%	~76%	~89%						
Current Bill											
Water	\$ 331.13	\$ 466.13	\$ 655.13	\$ 925.13	\$ 1,411.13						
Wastewater	471.28	601.28	783.28	1,043.28	<u>1,511.28</u>						
Total	\$ 802.41	\$ 1,067.41	\$ 1,438.41	\$ 1,968.41	\$ 2,922.41						
Proposed Bill Water	\$ 309.68	\$ 461.55	\$ 674.18	\$ 977.93	\$ 1,524.68						
Wastewater	344.40	480.65	671.40	943.90	1,434.40						
Total	\$ 654.08	\$ 942.20	\$ 1,345.58	\$ 1,921.83	\$ 2,959.08						
Current Bill	\$ 802.41	\$ 1,067.41	\$ 1,438.41	\$ 1,968.41	\$ 2,922.41						
Proposed Bill	654.08 (44.0.22)	942.20	1,345.58	1,921.83	2,959.08						
Dollar Change Percent Change	\$(148.33) (18.5%)	\$ (125.21) (11.7%)	\$ (92.83) (6.5%)	\$ (46.58) (2.4%)	\$ 36.67 1.3%						



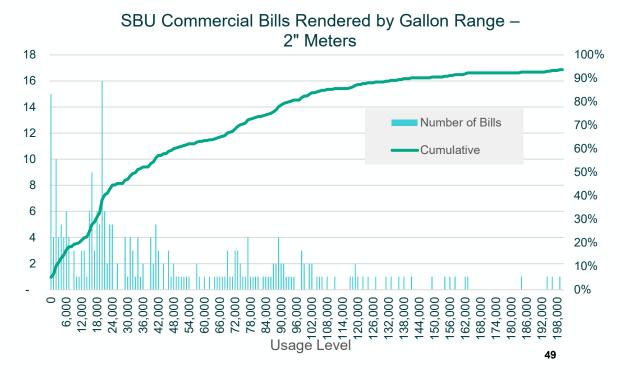
#### Existing Vs. Proposed Rate Structure – Commercial SBU 2" Meters

0.04% (24) of Water Accounts: 0.24% of Flow

Lavala of Customeral Island

- Includes Outside City Surcharge
- Approximately 64% of SBU Commercial Customer will See an Increase in Their Bill

	Levels of Customer Usage									
Description	_0 Kgal	0 Kgal2		6	0 Kgal	_110 Kgal	200 Kgal			
Cumulative Bills	~5%		~45%		~64%	~85%	~94%			
Current Bill										
Water	\$ 175.92	\$	311.92	\$	502.32	\$ 774.32	\$ 1,263.92			
Wastewater	200.41		449.66		798.61	1,297.11	2,194.41			
Total	\$ 376.33	\$	761.58	\$ ^	1,300.93	\$ 2,071.43	\$ 3,458.33			
Proposed Bill										
Water	\$ 309.54	\$	461.41	\$	674.04	\$ 977.79	\$ 1,524.54			
Wastewater	344.40		<u>480.65</u>		<u>671.40</u>	943.90	1,434.40			
Total	\$ 653.94	\$	942.06	\$ ^	1,345.44	\$ 1,921.69	\$ 2,958.94			
Current Bill	\$ 376.33	\$	761.58	\$ ^	1,300.93	\$ 2,071.43	\$ 3,458.33			
Proposed Bill	<u>653.94</u>		942.06		<u>1,345.44</u>	<u>1,921.69</u>	<u>2,958.94</u>			
Dollar Change	\$ 277.61	\$	180.48	\$	44.51	\$ (149.74)	\$ (499.39)			
Percent Change	73.8%		23.7%		3.4%	(7.2%)	(14.4%)			



#### **Conclusions**

- Consider Implementation of Water Conservation Rates and SBU Rate Consolidation
  - Best to Adjust Structure during Non-Rate Increase Year (Limits Impacts to Certain Customers)
  - Consider Rate Phasing for SBU Commercial Consolidation

- Benefits Received:
  - Promote Increased Conservation Pricing to Reduce Long-Term Costs
  - Comply with SFWMD Water Use Permit Provisions
  - Provide Rate Uniformity All Customers Within a Rate Class Pay Same Rate
  - Complies with Bond Resolution Covenants

#### **Next Steps**

- Schedule a Public Meeting to Adopt Rates
  - FS, Chapter 180.136 Must Notice Customers per Utility Billing Process of Date, Time, and Place to Hear Resolution
  - 60 Day Notification Requirements for Bonaventure Service Area
  - Recommendation is to Consider Implementation in FY22 or as Possible Thereafter
    - Allows Customers to Adjust Usage Habits if Needed Due to Consolidation
    - Allows City to Monitor Rates to Address any Unintended Consequences

