



BOARD OF COUNTY COMMISSIONERS

Utility Services Department

2725 Judge Fran Jamieson Way
Building A, Room 213
Viera, Florida 32940

Inter-Office Memo

TO: Frank Abbate, County Manager

THRU: John Denninghoff, Assistant County Manager

FROM: Edward Fontanin, Utility Services Director

DATE: January 12, 2022

SUBJECT: Utility Services – Rate Resolution for the Countywide and San Sebastian
Additional Information Referenced in Agenda Report

The information contained in this memo is also referenced in the agenda report under section “Summary Explanation and Background”. This memo provides more in-depth analysis of the rationale and requirements mentioned in the Agenda Report on the need of the water and sewer rate adjustment.

As mentioned in the Agenda Report, the proposed rate adjustment will provide the funds necessary in order: (1) to provide investments to comply with Sections 403.064 and 403.086, Florida Statutes, , (2) to replace treatment plant facilities that are beyond their useful life and increase capacity for future development in Mims, Port St John and South Brevard, (3) to contribute funding for future septic-to-sewer projects, and (4) to increase the operations and maintenance effort to continue reliability throughout the County’s utility system.

Provided below is the rationale of the needs for the rate adjustments along with this Department’s approach to achieving the objectives and estimated cost to do so:

(1) to provide investments to comply with Sections 403.064 and 403.086, Florida Statutes

In 2021, the State of Florida passed Section 403.064, Florida Statutes – Reuse of Reclaimed Water. The purpose of the legislation is for “wastewater treatment plants permitted and operated under an approved reuse program by the Florida Department of Environmental Protection (FDEP), the reclaim water shall be considered environmentally acceptable and not a threat to the public health and safety.”

Section 17 of the Statute states “by November 1, 2021, domestic wastewater utilities that dispose of effluent, reclaimed water, or reuse water by surface water discharge shall submit to the department for review and approval a plan for eliminating nonbeneficial surface water discharge by January 1,

2032, subject to the requirements of this section. The plan must include the average gallons per day of effluent, reclaimed water, or reuse water that will no longer be discharged into surface waters and the date of such elimination, the average gallons per day of surface water discharge which will continue in accordance with the alternatives provided for in subparagraphs (a)2. and 3., and the level of treatment that the effluent, reclaimed water, or reuse water will receive before being discharged into a surface water by each alternative.”

The FDEP has identified the South Central Water Reclamation Facility and the South Beaches Facility within the Countywide utility system as needing to meet the requirements of this law. This Department, through the support of our engineering consultant, has submitted a plan prior to the November 1st deadline. Permission to submit the plan was approved by the Board at the October 12, 2021 Board of County Commissioners meeting.

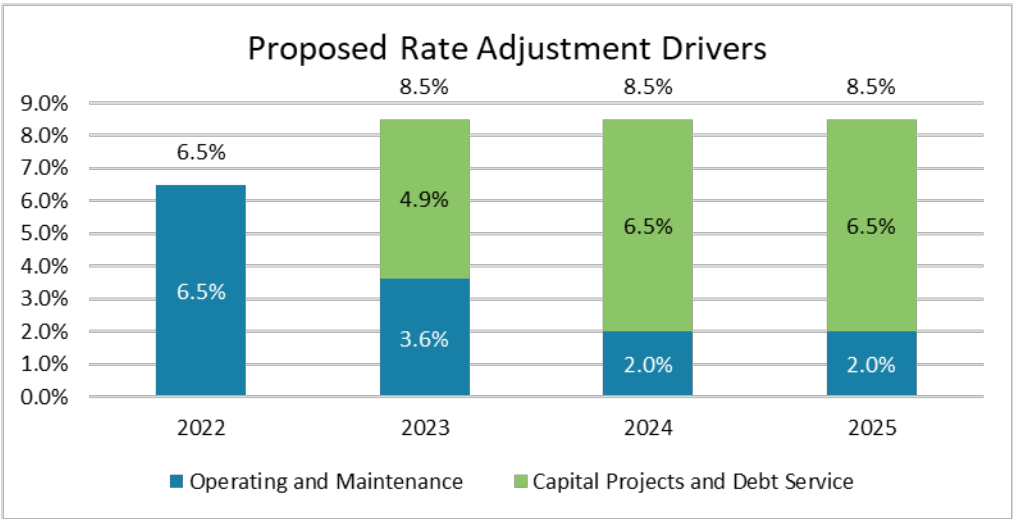
Per the two plans submitted to the FDEP for the Countywide system as follows: (1) South Central Water Reclamation Facility includes improvements to the water quality aspect of the wetlands and improvements to the treatment process. Estimated project cost is \$5M. (2) South Beaches Water Reclamation Facility includes either converting the 6 MGD treatment process to Advanced Wastewater Treatment requirements or the installation of a second deep injection well. Either project is estimated to cost approximately \$16M.

In 2021, the State of Florida passed Section 403.086, Florida Statutes – Sewage Disposal facilities; advanced and secondary treatment. The purpose of this law is that beginning July 1, 2025 “... sewage disposal facilities may not dispose of any wastes into the... Indian River Lagoon, or into any river, stream, channel, canal, bay, bayou, sound, or other water tributary thereto, without providing advanced wastewater treatment...”.

To avoid the situation of discharges, the following effort needs to be increased in comparison from previous years:

- Assessment of all sanitary sewers, force mains, sewer laterals and manholes to determine if leaks are present
- Increase in the amount of sewer repair and lining
- Rehabilitation of leaking sanitary manholes
- Repair of leaking sanitary laterals in the road right-of-way
- Increase maintenance to the sanitary lift stations
- Increase maintenance to the existing Wastewater Treatment Plants (WWTP)

The graph below shows how the additional rates would be implemented for the County system:



In addition to the budgeted effort described above, we have programmed 23 additional positions for the Countywide service area to be added over the next 7 years in order to implement the statutory requirements. 23 additional employees equate to approximately \$2.5M in additional expenses including salary, benefits and additional expenditures.

Both Sections 403.064 and 403.086, Florida Statutes, include language that violations are subject to administrative and civil penalties pursuant to Sections 403.121, 403.131 and 403.141, Florida Statute. Investment in the County infrastructure today allows the County to be in compliance with State law and avoid future fines and penalties imposed by the State.

(2) to replace treatment plant facilities that are beyond their useful life and increase capacity for future development in Mims, Port St John and South Brevard

Mims Water and Wastewater Treatment Facilities

Mims has both a water and wastewater treatment plant constructed in the 1960s. In our assessment of the facilities, both need further capital investment to address age and to update treatment processes and technology to assure reliability and compliance for our utility customers.

A population projection study was concluded on March 2020 for this Department using a tool to determine if current treatment capacity can adequately accommodate future treatment demands. For both the Mims water and wastewater treatment facilities, it was determined that additional treatment capacity is necessary to accommodate the future development demands in the area. There is adequate land at both treatment plant locations for future expansion.

The expansion efforts related to the Mims water and wastewater treatment facilities is programmed at \$42.3M.

Port St John Wastewater Treatment Facility

The Port St John Wastewater Treatment Plant was constructed in the 1960s. In our assessment of this facility, this plant has exceeded its useful life. Efforts to modify and provide redundant treatment process is difficult due to the facility being located in a Florida Power and Light easement thus restricting us from expanding the facility footprint. The footprint of the facility is critical because any improvements needed, whether it's replacement of existing or installing redundant process for reliability, requires a footprint for the improvement to be done while keeping the current treatment process active. The Port St John facility's current footprint restricts us for that level of improvements.

A population projection study was concluded on March 2020 for this Department using a tool to determine if current treatment capacity can adequately accommodate future treatment demands. It was determined that the Port St John Wastewater Treatment Facility requires additional treatment capacity in order to accommodate the future development demands in the area.

Programmed costs associated with the expansion of the sewer treatment capacity is \$31.4M.

South Brevard Water & Wastewater Treatment Facility

Currently not a part of the County Water and Wastewater System, the Barefoot Bay Water and Wastewater Treatment plants were constructed in the 1970s by a private developer. When the County took over the facilities in early 2002 the condition of the facilities was unsatisfactory in terms of overall condition and in its ability to maintain reliable and continuous treatment process. Over the years, the County has made investments to upgrade the condition of the existing facilities, however that effort has been limited since the Barefoot Bay facilities are part of a Special District and not the Utility Services Countywide system. That is, the availability of funds in the District are limited due to what the District as a stand-alone can provide.

The County is obligated by Section 403.064, Florida Statute, to relocate the Barefoot Bay Wastewater Treatment Facility. The plan, submitted to the FDEP, per the Board approval at the October 12, 2021 Board meeting, involves relocating the wastewater facility outside of the Barefoot Bay Water & Sewer District. Doing so will allow this Department to create the new South Brevard Water & Wastewater Treatment Facilities. This approach is advantageous for the following reasons: (1) relocation of the treatment facilities outside of the District will allow properties outside of the District to have access to water and sewer service without having to annex into the District boundaries, (2) since the District does not have adequate funding sources or debt service capacity to fund new treatment facilities within the District, this approach will assist in providing adequate funding going forward, (3) the new facility will address the possibility of any future accidental discharge due to deteriorating equipment,

and (4) location of the treatment plants outside of the District will allow the project to be funded by the Countywide system. To ensure that the Barefoot Bay Water & Sewer District will pay their portion of the project, an agreement will be established between the County and Water & Sewer District in which the District will pay the County the debt service portion related to the water and wastewater treatment capacity needed to serve the District.

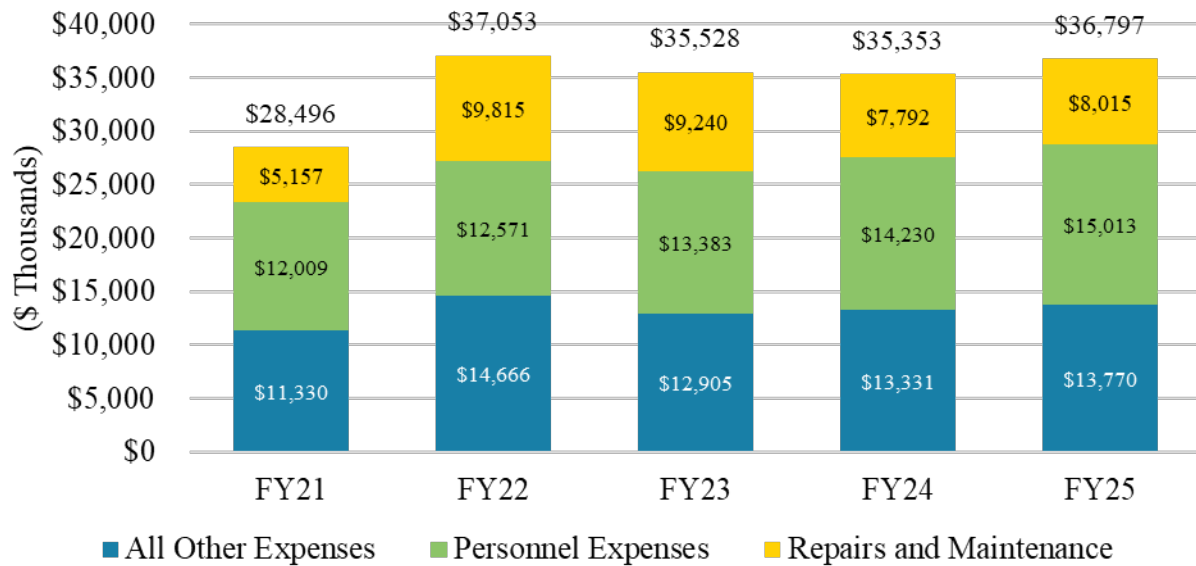
(3) contribute funding for future septic-to-sewer projects

Currently, there are 21 septic-to-sewer projects that are either in design phase or are awaiting design. The SOIRL program has allocated \$89M per their formula of cost per nitrogen reduction. Department estimation to fully fund the 21 mentioned septic-to-sewer projects is approximately \$131M. As part of the rate adjustment, the Department is including \$40M in additional debt service to fully fund the septic-to-sewer projects.

(4) to increase the operations and maintenance effort to continue reliability throughout the Countywide utility system.

Along with the additional operations and maintenance efforts required by Section 403.086, Florida Statutes – Sewage Disposal facilities, additional efforts are needed for the water and reuse distribution assets. The County utility assets are approximately 60 years old. At this age, water mains and any apparatuses require maintenance and replacement. Performing this effort will improve water quality, reliability and functionality. Since Mims water service customers have no other water utility in the area for an emergency connect, it is critical to maintain the water assets. Failure at the treatment plant, pump stations or distribution lines cause a concern for fire prevention and public access to water.

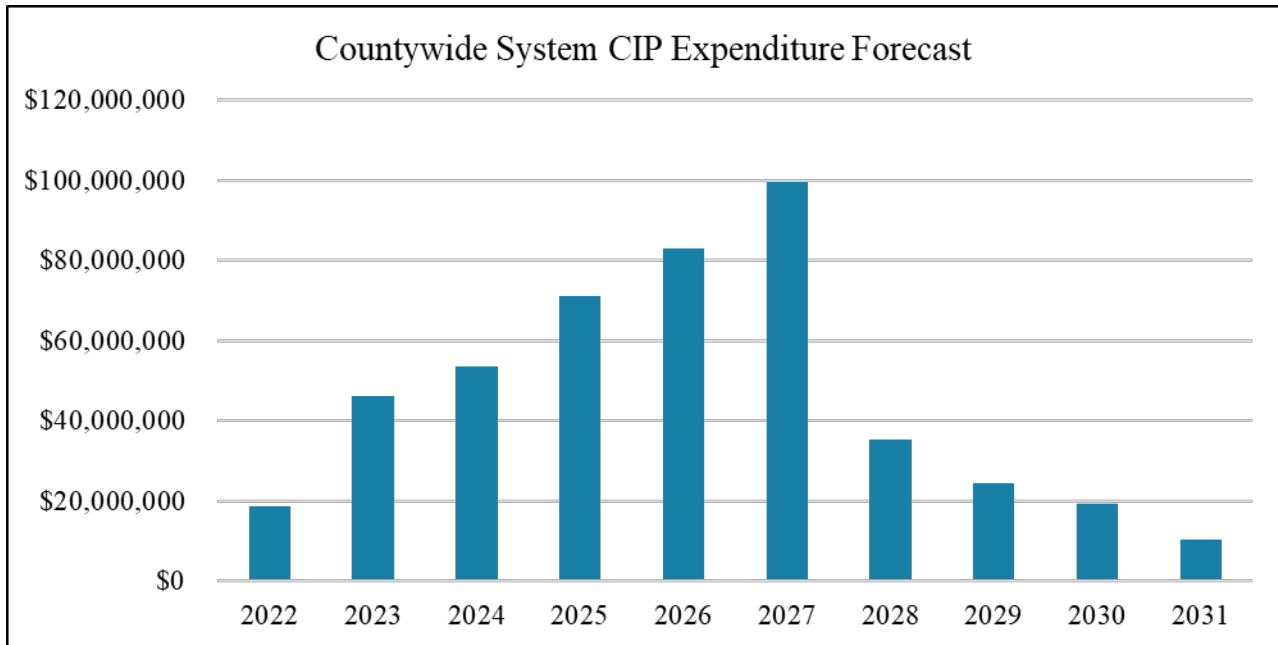
Countywide Utility System Operating and Maintenance Expense Forecast



As part of the proposed rate increase, we propose to increase the operations and maintenance budget for water by 30%. Please note, all other expenses include: FP&L, treatment chemicals, indirect cost allocation.

10-Year Capital Improvement Projects (CIP)

As a result of additional rates needed plus this Department's current 5-year CIP, the proposed 10-year CIP program for this Department is scheduled to be approximately \$460M. This includes the needs of the new treatment facilities along with all of the other described efforts.



Proposed Rate Adjustment

The above provides some further detail on the justification and specifics of the need of the rate adjustment and how the additional revenue would be implemented.

San Sebastian Water System

As proposed, the San Sebastian water rates shall be indexed automatically annually beginning January 1 of each year. San Sebastian Water System was acquired by Brevard County as a court appointed receiver per a Bankruptcy Court ruling and approved by the Board in 2010. Thus, this system is part of the Countywide system but per agreement this system pays a different water rate from what the Mims water customers pay. In comparison, the San Sebastian water customers pay 47% more than the Barefoot Bay water customers.

Countywide System

It is important to understand that although the Board approved on August 2021 the use of the CPI's Water and Sewerage Maintenance Index for annual increases, the annual index will not be added to the below rate recommendations from FY 22 thru 26. The proposed rate adjustment includes the index that was already approved. The rate index that would have been implemented would be 3.0%. Therefore, the rate increases proposed are: 2022 – 6.5%, 2023 – 8.5%, 2024 – 8.5%, 2025 – 8.5%, 2026 – 7.5%, the true additional increase this Department is seeking is 2022 – 3.5%, 2023 – 5.5%, 2024 – 5.5%, 2025 – 5.5%, 2026 – 4.5%, assuming the index each year from 2023 to 2026 is 3.0%.

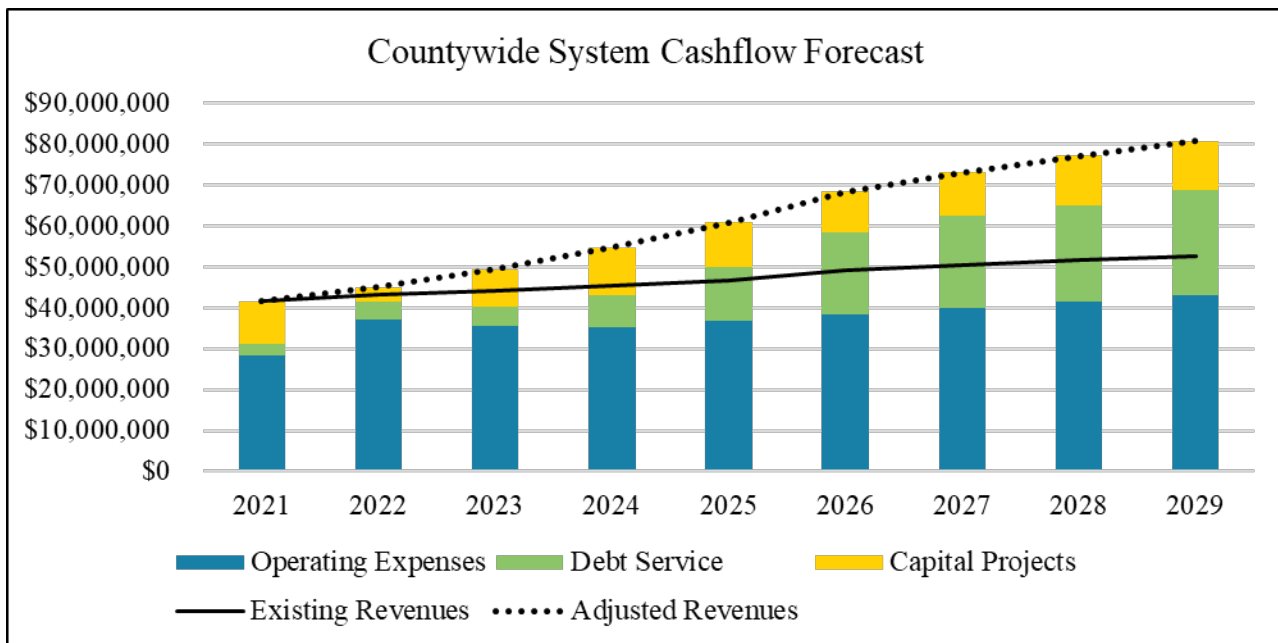
Recommended Revenue Adjustments & Bill Impacts													
Year	Rate Revenue Adjustments	Water Bill ^[1]	Total Increase	Index Increase	Rate Increase	Sewer Bill ^[1]	Total Increase	Index Increase	Rate Increase	Water & Sewer	Total Sewer & Water Increase	Total Index	Total Rate Increase
2022	6.50%	\$30.12	\$1.84	\$0.85	\$0.99	\$49.12	\$2.99	\$1.38	\$1.61	\$79.24	\$4.83	\$2.23	\$2.60
2023	8.50%	\$32.68	\$2.56	\$0.90	\$1.66	\$53.29	\$4.17	\$1.47	\$2.70	\$85.97	\$6.73	\$2.38	\$4.36
2024	8.50%	\$35.46	\$2.78	\$0.98	\$1.80	\$57.82	\$4.53	\$1.60	\$2.93	\$93.28	\$7.31	\$2.58	\$4.73
2025	8.50%	\$38.47	\$3.01	\$1.06	\$1.95	\$62.74	\$4.91	\$1.73	\$3.18	\$101.21	\$7.93	\$2.80	\$5.13
2026	7.50%	\$41.35	\$2.88	\$1.15	\$1.73	\$67.44	\$4.70	\$1.88	\$2.82	\$108.80	\$7.58	\$3.04	\$4.55
2027	3.00%	\$42.60	\$1.24	\$1.24	\$0.00	\$69.47	\$2.02	\$2.02	\$0.00	\$112.06	\$3.26	\$3.26	\$0.00
2028	3.00%	\$43.87	\$1.28	\$1.28	\$0.00	\$71.55	\$2.08	\$2.08	\$0.00	\$115.42	\$3.36	\$3.36	\$0.00
2029	3.00%	\$45.19	\$1.32	\$1.32	\$0.00	\$73.70	\$2.15	\$2.15	\$0.00	\$118.89	\$3.46	\$3.46	\$0.00

[1] Bill Amounts Based on 5,000 Gallons and 2021 Rates

As it related to the Countywide system, the water & sewer rate adjustment would only apply to the Mims service customers since they are the only customers in the Brevard County Service Area that have both water & sewer. The sewer only rate increase would only apply toward Port St John, Sykes Creek (Merritt Island), South Central, and South Beaches. Barefoot Bay service customers also have water & sewer services, but they are under their own separate rate resolution.

Metric Review of the Proposed Rate Adjustments

The graph below shows how the proposed rate increase will provide this Department with sufficient funds to accomplish the goals and expectations described above.



Impact by American Relief Protection Act (ARPA)

On May 2021, the Board of County Commissioners approved projects within each of their District's utilizing ARPA funds. These projects ranged for the benefit of stormwater improvements, water and

sewer, and roadway. The County Commissioners approved a total of \$28M toward water and sewer projects throughout the County. See list below of the projects, cost allocation and District located:

The aid of the ARPA funded water and sewer utility projects enabled the rates to be reduced by 3% for the first year of the proposed rate adjustment. Therefore, the proposed rate adjustment is 6.5% instead of the originally proposed 9.5% for FY 22.

The following are Board approved ARPA funded water and sewer utility projects along with the funding amount:

Mims: Water Main Replacement of Asbestos Cement Pipe Phase 3	\$1,752,000
Mims: Water Main Replacement of Asbestos Cement Pipe Phase 4	\$1,800,000
South Beaches: Lift Stations	
S27	\$720,000
S19	\$1,548,000
S26	\$ 854,000
B03	\$500,000
South Beaches: Sewer and Manhole Lining Installation	\$2,500,000
South Brevard: Construct New WWTP - Land	\$2,000,000
South Brevard: Construct New WTP - Land	\$1,000,000
South Central: Suntree Booster Station Rehabilitation	\$2,028,000
South Central: Viera Wetlands Improvements	\$2,000,000
Sykes: Sykes Creek Parkway Force Main Replacement	\$2,292,000
Sykes: Lift Stations	
V03	\$1,551,000
M16	\$2,124,000
Total for C08,09 and10	\$3,429,000
F04	\$966,000
F01	\$1,355,000