

# MARTIN COUNTY

## Water and Wastewater System Ten-Year Financial Forecast

Final Report / January 6, 2021





January 6, 2021

Mr. Samuel T. Amerson, P.E.  
Utilities and Solid Waste Director  
Martin County – Utilities and Solid Waste Dept.  
2378 S.E. Ocean Blvd.  
Stuart, FL 34996-3310

**Subject: Water and Wastewater System Ten-Year Financial Forecast**

Dear Sam:

Raftelis Financial Management, Inc. ("Raftelis") is pleased to submit this report for your review and consideration regarding the update of the ten (10) year financial forecast (the "Financial Forecast") for the water and wastewater utility system (the "System") operations on behalf of Martin County (the "County"). The primary purpose of the development of the Financial Forecast was to identify the ability of the System operating revenues (derived primarily from monthly rates for service and other miscellaneous services charges) to adequately fund the expenditure requirements of the System, including the ten-year capital improvement plan as identified by the County. Specifically, the Financial Forecast focuses on the ability of the existing rate revenues to fund the expenditures of the System with emphasis placed on the capital improvement plan in order to provide additional information to the County with respect to the anticipated sources of available funding (i.e., capital facility charges, anticipated indebtedness, etc.) for the projects required for service area development and capacity needs for the Fiscal Years 2020 through 2029 (the "Forecast Period"). Due to the timing of the initiation of this study, which began prior to the close of the Fiscal Year 2020, such amounts are estimated and may be subject to change.

The report includes: i) a discussion of the significant assumptions used in the development of the Financial Forecast; ii) an analysis of the ability of revenues of the System to meet the estimated operating, capital expenditure, and reserve requirements; and iii) the presentation of the identified financing plan for the current ten-year capital program. The analysis is based on detailed financial information provided by County staff, including but not limited to, customer statistical data, annual financial and budgetary data, information regarding the extension of service to developed and un-served areas and potential development of the System service area, as well as, other information provided by the County relative to the development of the capital program.

The Board of County Commissioners (the "BOCC") adopted annual rate indexing of monthly utility rates provision (the "Price Index") through Rate Resolution No. 16-3.15 (the "Rate Resolution"). The purpose of the annual Price Index is to provide an ongoing hedge against the effects of inflation on the cost of providing service and funding the ongoing capital needs by adjusting the rates annually for an inflation adjustment (i.e., by the application of the index). The annual Price Index is tied to the Florida Public Service Commission (the "FPSC") annually published price index adjustment. Pursuant to the Rate Resolution, the annual Price Index cannot exceed 2.5%. The Price Index is currently scheduled to sunset

after October 1, 2024 (i.e., rates for the Fiscal Year 2025). Based on the assumptions and analyses reflected in this report, which should be read in its entirety, we are of the opinion that the current rates of the System will be sufficient to meet the projected revenue requirements of the System with the continuation of the index beyond the sunset year. It is recommended that the Price Index adjustment be extended for an additional five (5) or ten (10) year period subsequent to the sunset of the index in the Fiscal Year 2025 to help the System to continue to provide operating margins to allow for continued capital re-investment to fund future capital needs and utility extension programs.

Finally, recognizing that the FPSC index is not a perfect measure of the actual increase in the utility's operating expenses and to more closely track the index to the projected increases in the County's operating expenses it is recommended that the County consider revising the Price Index to: i) increase the index adjustment ceiling from 2.5% to 4.0%; and ii) implement an index adjustment floor equal to 2.0%. Since 2010 the County observed average annual increases in operating expenses, excluding non-cash depreciation and pension / other post-employment liabilities, of 2.0% per year, which was greater than the average index as published by the FPSC of 1.5% due to a low inflationary environment. By raising the index ceiling and implementing an index floor the County could minimize the potential need for adoption of additional rate increase that may be required above the adopted Price Index if operating expense growth is greater than the current ceiling at 2.5% a year or if a low inflationary environment persists and the index continues to track below actual cost increases. For purposes of this study the financial projections contained herein have not reflected the implementation of the Price Index floor; however, should the County consider implementation of such changes it would result in improved financial operating results and greater bill impacts than presented in this report. The table below provides a summary of the assumed index adjustments:

<b>Summary of Projected and Identified Rate Adjustments</b>										
Projected Fiscal Year Ending September 30,										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Price Index [1]	0.00%	1.79%	0.70%	1.65%	1.50%	1.50%	Identified [2]			
Rate Adjustments	--	--	--	--	--	--	1.50%	1.50%	1.50%	1.50%
Total Adjustments	<u>0.00%</u>	<u>1.76%</u>	<u>0.70%</u>	<u>1.65%</u>	<u>1.50%</u>	<u>1.50%</u>	<u>1.50%</u>	<u>1.50%</u>	<u>1.50%</u>	<u>1.50%</u>

[1] The Board of County Commissioners (the "BOCC") adopted Resolution No. 09-8.22 providing for annual rate indexing (the "Price Index"), not to exceed 2.50%, based upon the Florida Public Service Commission (the "FPSC") annually published price index. The indexing provision for Resolution No. 16-3.15 is scheduled to sunset subsequent to October 1, 2024.

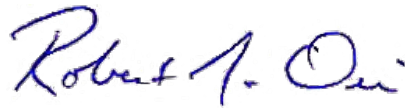
[2] The price index values for the Fiscal Years 2026 through 2030 represent additional assumed price index adjustments beyond the "price index sunset year"; the continuation of the price index adjustments has not been approved by the BOCC. No additional rate adjustments above the annual Price Index adjustments have been assumed to be implemented during the Financial Forecast.

It should be noted that events may occur during this projected period that could have an effect on the financial projections presented in this report and such effects could be material, which may alter the level of the projected future rate adjustments. As such, it is recommended the County continue to annually review the System's financial condition to monitor the potential need for such rate adjustments in the future.

Mr. Samuel T. Amerson, P.E.  
Martin County – Utilities and Solid Waste Dept.  
January 6, 2021  
Page 3

As always, we appreciate the assistance provided by County staff with respect to the preparation of this report and the opportunity to be of service to the County.

Very truly yours,  
**Raftelis Financial Management, Inc.**



Robert J. Ori  
Executive Vice President



Thierry A. Boveri, CGFM  
Senior Manager



Matthew N. Ori  
Senior Consultant

RJO/dlc  
Attachments



# MARTIN COUNTY, FLORIDA

## Water and Wastewater System Ten-Year Financial Forecast

### TABLE OF CONTENTS

Title	Page No.
Letter of Transmittal	
Table of Contents .....	i
List of Tables .....	iii
List of Figures .....	iv
Executive Summary .....	ES-1
General.....	ES-1
Recent Trends .....	ES-1
Observations and Recommendations Summary.....	ES-3
Water and Wastewater System Ten-Year Financial Forecast .....	1
Introduction .....	1
Financial Forecast Analysis Methodology.....	1
Water and Wastewater System Rates and Charges .....	2
Monthly User Rates.....	2
Reclaimed Water Service .....	3
Capital Facility Charges.....	4
Service Availability Charge .....	4
Miscellaneous Service Charges .....	4
Customer Deposits.....	4
Water Meter Installation and Service Connect Charges.....	5
Other Miscellaneous Service Charges.....	6



# MARTIN COUNTY, FLORIDA

## Water and Wastewater System

### Ten-Year Financial Forecast

---

#### TABLE OF CONTENTS (cont'd.)

Title	Page No.
Historical and Projected System Sales and Customer Usage Statistics.....	6
Water System.....	7
Wastewater System.....	10
Projections of Utility System Operating Results.....	12
Principal Considerations and Assumptions Regarding Projected Operating Results .....	13
Net Revenue Requirements/Identified Rate Adjustments .....	23
Customer Impact.....	25
Debt Service Coverage and Covenant Compliance .....	27
Debt Service Covenant Compliance.....	27
Rate Covenant Compliance.....	28
Revenue Fund .....	28
Sinking Fund.....	28
Reserve Account.....	28
Renewal and Replacement Fund .....	29
Other Financial Considerations and Performance.....	29
Rate Recommendations.....	37



# MARTIN COUNTY, FLORIDA

## Water and Wastewater System Ten-Year Financial Forecast

---

### LIST OF TABLES

Table No.	Title
1	Summary of Historical Customer Statistics
2	Summary of Projected Customer Statistics
3	Summary of Projected System Operating Revenues
4	Summary of Projected Capital Facility Charge (CFC) Revenue
5	Summary of the Forecasted Ten-Year Capital Improvements Program
6	Summary of Combined Water and Wastewater System Revenue Requirements and Revenue Sufficiency
7	Projected Debt Service Coverage Analysis
8	Projected Fund Balances and Interest Income Determination
9	Comparison of Typical Monthly Residential Bills for Water Service
10	Comparison of Typical Monthly Residential Bills for Wastewater Service
11	Comparison of Typical Monthly Residential Bills for Combined Service



# MARTIN COUNTY, FLORIDA

## Water and Wastewater System Ten-Year Financial Forecast

---

### LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	<u>Page No.</u>
1A	Existing and Proposed Debt Payments – Principal and Interest	30
1B	All-In Debt Service Coverage	31
2	Operating Reserves Ending Cash Balance	32
3	Renewal and Replacement Fund Balance	33
4	Capital Improvement Program Funding	34
5	Net Revenue Margin	35
6	Outstanding Debt per ERC Ratio	36
7	Debt Outstanding to Net Plant Investment	37



# EXECUTIVE SUMMARY

## General

The Martin County (the "County") water and wastewater utility system (the "System") is accounted for as a utility enterprise fund (the "Utility Fund"). As such, the Utility Fund must have revenues equal to the cost of services provided by the System and the County must establish rates sufficient to cover the cost of operating, maintaining, repairing and financing the System. According to the Governmental Accounting Standards Board, "Enterprise Funds should be used to account for operations that are financed and operated in a manner similar to private business enterprises – where the intent of the governing body is that costs of providing services to the general public on a continuing basis be financed or recovered primarily through user charges."

In order to evaluate the sufficiency of existing rate revenues, a financial projection was prepared recognizing recent historical trends, anticipated future customer growth / demand and increases in the cost of providing service for the Fiscal Years 2020 through 2029 (the "Forecast Period"). The following report provides: i) a discussion of the significant assumptions used in the development of the Financial Forecast; ii) an analysis of the ability of revenues of the System to meet the operating and capital expenditure requirements and funding needs; and iii) the presentation of the identified financing plan for the current ten-year capital program.

## Recent Trends

The Utility and Solid Waste Department (the "Department") has historically maintained a positive financial position relative to: i) the stabilization of rates; ii) the quality of facilities and service; iii) the maintenance of adequate reserves; and iv) the continued compliance of the rate covenants as delineated in Bond Resolution No. 94-9.2, as amended, which authorized the issuance of the outstanding senior lien bonds (the "Bond Resolution").

Besides the improving economy resulting in increased development, the County's utility customer base also continues to grow with regional water and wastewater service as a result of the County's water and wastewater line extension program to retrofit existing residential communities (i.e., funded through assessments to benefitting properties) to provide regional water and wastewater service within the County. Since the Fiscal Year 2002, the County has recognized the addition of approximately 13,704 water and 10,304 wastewater total accounts, as shown in the following table, resulting in an average growth rate of approximately 3.0% annually. The growth in accounts and equivalent residential connections ("ERC") has been the result of new development and re-development, extension of service to existing developments, and the acquisition of privately-owned (and regulated) utility systems to promote the regionalization of water and wastewater services. Acquisition of privately-owned utility systems accounted for approximately 2,186 water customers and 2,067 wastewater customers since 2002. In contrast, the County has reported population growth over the same period of approximately 1.6% annually.

**(Remainder of page intentionally left blank)**

Fiscal Year Ending September 30,	Water System		Wastewater System	
	Average Annual Accounts	Average Annual ERCs	Average Annual Accounts	Average Annual ERCs
2002	21,162	28,409	14,533	18,386
2003	22,714	30,158	15,714	19,917
2004	24,530	32,808	17,575	22,045
2005	25,585	34,378	18,347	23,024
2006	26,779	36,133	19,385	24,494
2007	27,709	37,479	20,145	25,448
2008	28,074	38,219	20,203	25,608
2009	28,379	38,981	20,333	25,979
2010	29,984	41,445	21,627	27,903
2011	30,594	42,861	22,162	28,821
2012	31,048	43,363	22,637	29,449
2013	31,563	43,973	23,061	30,018
2014	32,267	44,820	23,468	30,503
2015	32,874	45,562	23,840	30,856
2016	33,392	46,215	24,148	31,230
2017	33,817	46,817	24,427	31,581
2018	34,310	47,675	24,585	31,816
2019	34,866	48,663	24,837	32,269
Average Annual Historical Growth Rate	<u>2.98%</u>	<u>3.22%</u>	<u>3.20%</u>	<u>3.36%</u>

The gross revenue requirements represent the total expenditures of the System and are primarily comprised of i) operating expenses; ii) annual debt service payments associated with the financing of capital improvements associated with the expansion of the System and utility acquisitions; and iii) transfers to capital accounts to fund the capital improvements associated with the renewal, replacement, upgrades and betterments to the System (referred to as pay-as-you-go or "Pay-Go" capital). The cost of operations represents approximately 60% of the gross revenue requirements of the System and has increased on average by approximately 3% annually from the Fiscal Year 2004 through 2019. The increased cost of operating expenses is related to a variety of factors, including inflation, increases in fuel, energy, and chemical prices, higher salary and other related costs such as health insurance, the need to continue maintenance on the System, and System growth. Annual debt service payments currently reflect approximately 25.5% of the total gross revenue requirements of the System and were issued by the County to fund capital improvements of the System, utility acquisitions, and line extensions that are part of the County's regionalization program. The County also annually deposits funds into the Renewal and Replacement Fund to support ongoing Pay-Go asset improvements (collectively referenced as the "capital improvements"). The annual deposits to the fund account for approximately 11.5% of total revenue requirements.

**(Remainder of page intentionally left blank)**

# Observations and Recommendations Summary

Based on the analyses and assumptions as documented in the attached report, the following are our observations and recommendations for consideration by the County:

1. Based on the findings of our analyses, the existing rate revenues are not anticipated to be sufficient during the Forecast Period to fully fund the identified revenue requirements and will require the continued implementation of the price index in future years as shown below:

Summary of Projected and Identified Rate Adjustments										
Projected Fiscal Year Ending September 30,										
	2020	2021	2022	2023	2024	2025	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
Price Index [1][2]	0.00%	1.79%	0.70%	1.65%	1.50%	1.50%	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>
Rate Adjustments [2]	--	--	--	--	--	--	--	--	--	--
Total Adjustments	<b>0.00%</b>	<b>1.76%</b>	<b>0.70%</b>	<b>1.65%</b>	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>

[1] The Board of County Commissioners (the "BOCC") adopted Resolution No. 09-8.22 providing for annual rate indexing (the "Price Index"), not to exceed 2.50%, based upon the Florida Public Service Commission (the "FPSC") annually published price index. The indexing provision for Resolution No. 16-3.15 is scheduled to sunset subsequent to October 1, 2024.

[2] The price index values that are bolded represent additional assumed price index adjustments beyond the "price index sunset year"; the continuation of the price index adjustments has not been approved by the BOCC. No additional rate adjustments above the annual Price Index adjustments have been assumed to be implemented during the Financial Forecast.

For the purposes of this analysis and as mentioned in the table above, the price index was assumed to be reinstated beginning in Fiscal Year 2026; the BOCC has not approved this action. Based on the forecast of the revenue requirements and in order to continue to maintain adequate operating margins and limit financial risk, it is recommended by Raftelis that the price index application be extended beyond the "price index sunset year."

2. The continued application of the Price Index during the financial forecast is projected to result in:
  - a. Unrestricted cash reserve balances equal to or greater than 120 days of operating expenses (the minimum target assumed for the fiscal analysis in this report), which is considered favorable by credit rating agencies.
  - b. Total or "All-In" debt coverage<sup>[1]</sup> equal to or greater than 150% (the minimum target assumed for the fiscal analysis in this report) for the majority of the Forecast Period. The County is projected fall below the minimum target from the Fiscal Year 2023 through 2026 due to recognition of assumed debt planned as part of the County's septic tank elimination and line extension programs. It should be noted that debt issued as part of the line extension program would be financed from assumed property assessments and, therefore, would not contribute debt coverage above 100% of the debt service payments. Excluding proposed new line extension debt service funded from assessment revenues

[1] Debt coverage is a principle financial ratio used by credit rating agencies to assess the financial strength of a utility. Total or "All-In" debt coverage refers to the percentage of Gross Revenues less Operating Expenses (i.e., Net Revenues) divided by the total annual senior and subordinate debt service payments funded from System revenues calculated for a given fiscal year.

during the Forecast Period results in coverage that is generally at or above the County's financial targets as indicated in the following table:

		<b>Comparison of All-In Debt Coverage</b>									
		Projected Fiscal Year Ending September 30,									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Extension Program Model		211%	179%	180%	153%	148%	144%	142%	173%	172%	179%
No-Extension Programs Model		207%	177%	178%	146%	147%	152%	153%	195%	197%	205%

- c. Maintaining compliance with all rate covenants of the Bond Resolution, which authorized the issuance of the outstanding senior lien bonds; and
  - d. Moderate increases in the Net Revenue Margin<sup>[2]</sup> within the outer years of the Forecast Period since existing and projected debt service payments are expected to decline over time.
3. It is recommended that the County adopt a minimum inflationary index factor, or "floor", such that the Price Index equal to 2.0% in any year. By maintaining the application of a minimum index, this will help ensure that the price index keeps pace with observed historical trends in the growth of operating expenses during periods of low inflation. Since 2010 inflation in the utility's operating expenses (excluding non-cash depreciation and pension / other post-employment liabilities) has averaged approximately 2.0% a year as compared to the price index which has averaged approximately 1.5% a year. While inflation is expected to rise above 2.0% over the Forecast Period pursuant to forecasts by the Congressional Budget Office, implementing such a floor may help ensure that the price index stays in closer relationship with the actual rate of operating expense should the County experience potential periods of low inflation. It should be noted that for purposes of this study the financial projections contained herein have not reflected the implementation of the Price Index floor; however, should the County consider implementation of such change would improve financial operating results and increase projected bill increases.

Additionally, the current Price Index also has a rate application cap of 2.5% which may restrict the ability of the County to raise rates during higher periods of inflation. Since a minimum or "floor" is being recommended, it is also recommended that the cap on the Price Index be increased to 4.0% to allow for a range in rates if inflation becomes more volatile.

- 4. As of the Fiscal Year 2019, the System provided service to approximately 34,866 water accounts / 48,663 water equivalent residential connections ("ERC") and 24,837 wastewater accounts / 32,269 wastewater ERCs on average. An ERC represents the average capacity for a single-family residential account (served by a 5/8" x 3/4" meter) and is used to evaluate the total customer base on an equivalent basis (how many total equivalent households are being served) since many

---

[2] Net Revenue Margin is calculated by dividing Net Revenues by Gross Revenues. Provides an indication of the amount of Net Revenues available to fund System debt and capital requirements / re-investment.

customers may be a single account that serves a large customer base (e.g., a condominium) or commercial customer (e.g., a hotel).

5. The average monthly water demand or use per ERC has seen a general decline since the Fiscal Year 2006 of approximately 0.72% annually reflecting the effects of water restrictions and mandatory irrigation use periods imposed by the South Florida Water Management District (the "SFWMD"), general water conservation measures being employed by the customers and the industry over time (e.g., low flow showers, water-saving appliances, etc.), and other factors.
6. Based on a review of recent historical trends, anticipated customer growth and assumptions as disclosed hereafter, the estimated increase in the cost of operations and maintenance subsequent to the Fiscal Year 2020 is projected to be approximately 4% a year, reflecting the following assumptions:
  - a. The adopted Fiscal Year 2020 budget and the preliminary Fiscal Year 2021 Budget served as the baseline for the forecast of operating expenses for these two fiscal years. It should be noted that the adopted operating budget for the Fiscal Year 2020 was adjusted for purposes of this financial forecast to reflect reductions in sludge removal, electric and chemical expenses, and changes in decommissioning costs for retired assets based on recent historical trends and discussions with Utility staff.
  - b. Projected inflation escalation factor as applied to general expenses for the forecast of operating expenses ranging from 2.2% to 2.6% as reported by the Congressional Budget Office (the "CBO") in the *Budget and Economic Outlook: Fiscal Years 2020 to 2030* dated January 2020.
  - c. The cost of labor, power, chemicals, and sludge disposal (essentially uncontrolled costs of the System) currently account for approximately 66% of the total operating expenses of the System which is representative in the industry.
    - i. Personnel expenses including wages, health insurance and other benefits were assumed to escalate, in aggregate, by approximately 3.7% per year from Budgeted Fiscal Year 2021 levels and include the addition of 2 full-time employees in Fiscal Year 2022 to support technical and field services; and
    - ii. Variable costs including electric, chemical and sludge expenses are anticipated to increase by approximately 4.4% per year based on recent historical trends and projected water and wastewater flows due to System growth.
  - d. Repair and maintenance expenses are anticipated to increase by approximately 4.0% per year based on recent historical trends and plant additions.
  - e. A contingency allowance of 0.5% of total projected operating expenses was recognized to account for the potential of additional unanticipated incremental cost increases.

The following is a summary of the projected operating expenses recognized in the Financial Forecast:

Description	Fiscal Year Ending September 30,									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Personnel and Benefits	\$8,266	\$8,732	\$9,178	\$9,501	\$9,836	\$10,184	\$10,544	\$10,920	\$11,310	\$11,715
Electricity	2,007	2,207	2,270	2,371	2,476	2,583	2,687	2,785	2,883	3,014
Professional and Contractual Services	3,830	4,274	4,381	4,491	4,599	4,705	4,813	4,919	5,027	5,137
Chemicals	1,226	1,151	1,185	1,230	1,279	1,329	1,376	1,421	1,465	1,522
Repair and Maintenance	2,437	2,406	2,498	2,596	2,699	2,809	2,926	3,050	3,182	3,323
Indirect Cost Allocation	1,441	1,441	1,484	1,528	1,574	1,621	1,670	1,720	1,772	1,825
Other Expenses	1,199	1,122	1,173	1,314	1,378	1,448	1,599	1,982	2,044	2,084
Operating Supplies	479	381	390	400	410	419	429	438	448	458
Sludge Removal	900	1,000	1,044	1,119	1,190	1,263	1,337	1,407	1,479	1,578
Fuel	231	244	248	256	266	277	288	299	311	324
Bulk Purchases	58	59	60	62	63	65	66	68	69	71
Bad Debt	56	58	60	65	68	71	74	76	79	81
Contingency	111	119	120	125	131	135	140	146	151	158
Planned Maintenance [*]	0	520	0	0	200	0	120	60	0	380
<b>Total</b>	<b>\$22,242</b>	<b>\$23,713</b>	<b>\$24,093</b>	<b>\$25,058</b>	<b>\$26,169</b>	<b>\$26,909</b>	<b>\$28,069</b>	<b>\$29,291</b>	<b>\$30,219</b>	<b>\$31,671</b>

[\*] Represents planned maintenance expenses (generally significant, non-recurring expenditures), which are not considered as ongoing routine maintenance, which varies by year similar to the Capital Improvement Program ("CIP").

7. As discussed in greater detail in this report, the capital improvement program ("CIP") is expected to be approximately \$264.7 million during the Forecast Period (which includes adjustments for inflation to estimate the project cost at time of construction initiation). The Department anticipates funding \$99.0 million of the capital improvements from internal sources including existing cash reserves and future operating revenues. It should be noted that approximately \$160.7 or 61% of the Capital Program recognized for the development of the financial forecast includes projects associated with the Septic to Sewer Extension Program and other anticipated water utility extension programs, which may have not yet been formally approved by the Board of County Commissioners (the "Board") but are anticipated by the Department to become a component of the program in the future. All of the extension-related capital projects are to be funded, in part, by additional capital-recovery assessments to be charged to the customers connecting to the System.
  
8. As mentioned above, the County is currently engaged in a water extension program and a septic to sewer conversion program to extend potable water service to developments located in the wastewater extension program that do not have regional potable water service and remove existing septic tank systems along the St. Lucie Estuary and Indian River Lagoon within the County which have failing or outdated septic tanks contributing to environmental pollution. The following table identifies the assumed developments the County anticipates extending service:

Water Developments	ERCs	Wastewater Developments	ERCs
Old Palm City	377	Golden Gate	764
Port Salerno / New Monrovia	454	Old Palm City	1,015
Evergreen / Canoe Creek / Windstone / Rustic Hills	481	Port Salerno / New Monrovia	952
Rocky Point	383	Woodside / Stratford	78
Gaines Avenue	157	Coral Gardens	652
Hideaway Isles	72	Rocky Point	1,198
Beau Rivage	270	Evergreen / Canoe Creek / Windstone / Rustic Hills	620
		Hibiscus Park / The Woodlands / Brownings Minor	475
<b>Total Water ERCs</b>	<b><u>2,194</u></b>	<b>Total Wastewater ERCs</b>	<b><u>5,754</u></b>

9. In order to provide sufficient funding for capital reinvestment of the System, the study assumed direct capital funding and annual deposits to the renewal and replacement ("R&R") Fund and operating reserves available for future capital re-investment to existing utility plant assets ("Pay-Go" funding). As can be seen from the following table, the collective amount of funding available for capital reinvestment relative to forecasted depreciation expense (a measure of the amount of asset value consumed by age or use and a capital reinvestment benchmark) averages approximately 49% for the Forecast Period. While the County may fund capital reinvestment to existing utility plant assets from the issuance of debt, it is recommended that the County target Pay-Go funding above 70% of depreciation to help ensure a more fiscally conservative and sustainable capital funding plan (increased equity financing which maintains financial flexibility and rate sustainability). While no additionally rate increases above the price index rate adjustments are currently identified due to the lower Pay-Go funding ratios observed in the financial projections, the County may require additional rate increases above those currently identified in the future should the County identify greater capital reinvestment funding needs above those contemplated in this study.

<b>Summary of Annual Funding Available for Capital Reinvestment or "Pay-Go" Funding</b>									
Description	2020	2021	2022	2023	2024	2025	2026	2027	2028
Capital Funded from Rates	\$1,692	\$430	\$235	\$241	\$247	\$253	\$260	\$266	\$273
Transfer to R&R Fund	5,250	5,303	5,356	5,410	5,464	5,519	5,574	5,630	5,686
Transfer to Operating Reserves	267	0	518	721	776	1,292	1,553	4,203	4,549
Transfer from Operating Reserves	0	(30)	0	0	0	0	0	0	0
Total Pay-Go Funding	\$7,208	\$5,703	\$6,109	\$6,372	\$6,487	\$7,064	\$7,387	\$10,099	\$10,508
Depreciation Expense	\$12,206	\$12,951	\$13,786	\$14,652	\$15,332	\$16,007	\$16,731	\$17,217	\$17,855
Pay-Go as % of Depreciation	59.1%	44.0%	44.3%	43.5%	42.3%	44.1%	44.1%	58.7%	58.9%

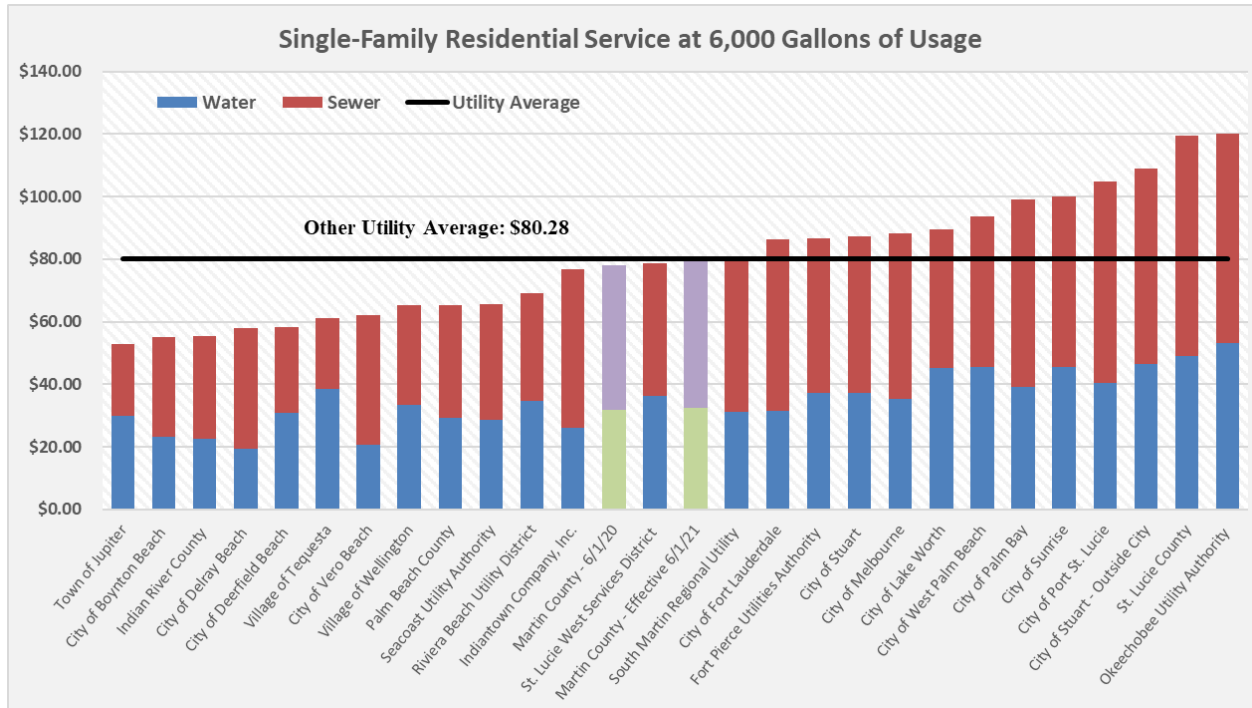
10. The average single-family (individually-metered) residential customer uses approximately 6,000 gallons of monthly water and wastewater service. The indexed Fiscal Year 2022 rates will result in an increase in a monthly increase to the average residential customer as follows:

<b>Single-Family Residential Service – Change in Bills [*]</b>			
	Water Bill	Wastewater Bill	Total Bill
Current Rates (6/1/2020)	\$31.89	\$46.12	\$78.01
Indexed Rates (6/1/2021)[1]	32.45	46.94	79.39
Difference – %	\$0.56	\$0.82	\$1.38
Difference – \$	1.8%	1.8%	1.8%

[1] Rates reflect application of the Board approved FPSC Price Index published during the Fiscal Year 2021 of 1.79%.

**(Remainder of page intentionally left blank)**

The anticipated Fiscal Year 2022 rates for the County are considered competitive based on a survey of other neighboring public utilities located in Southeast Florida as shown on the figure below.



**(Remainder of page intentionally left blank)**



# WATER AND WASTEWATER SYSTEM TEN-YEAR FINANCIAL FORECAST

## Introduction

On behalf of the Martin County (the "County") water and wastewater utility system (the "System") through its Utilities and Solid Waste Department (the "Department"), Raftelis Financial Management, Inc. ("Raftelis") was retained to prepare a ten (10) year financial forecast (the "Financial Forecast") of System operations. Specifically, Raftelis was tasked with analyzing the revenue requirements (expenditure needs) of the System, update the capital expenditure funding analysis and the effects on the financial position of the System, evaluate the ability of the System to meet the financial objectives of the County, and to determine the potential need for rate adjustments during the Forecast Period in order to strategically evaluate the System's overall financial position.

The analysis included in this report recognizes a forward-looking projection over the next ten years, comprising the Fiscal Years ending September 30, 2020 to 2029 (the "Forecast Period"). The remainder of this report provides a discussion of the Financial Forecast analysis methodology, the water and wastewater system rates and charges, historical and projected customer statistics, identification of the revenue requirements and estimated sufficiency of the existing rates and provides a summary of the financial trends and position of the System.

## Financial Forecast Analysis Methodology

In order to evaluate the existing and forecasted financial position of the Utility the following methodology was recognized:

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
  - + Debt Service Payments (Senior and Subordinate)
  - + Transfers and Administration Payments
  - + Capital Project Financing
  - + Working Capital Reserve Deposits / Financial Compliance
  - Other Operating Revenue / Interest Income / Working Capital Reserve Use
  - Interest Income / Grants and Other 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 Capital Facility Charges, 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 in order 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 Resolution No. 94-9.2, as amended and as supplemented from time to time that authorized the issuance of the Outstanding Bonds (the "Bond Resolution") 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.

## **Water and Wastewater System Rates and Charges**

### **MONTHLY USER RATES**

The water rates that are currently in effect as reflected in Resolution No. 16-3.15 (the "Rate Resolution"), which was adopted by the Board of County Commissioners ("BOCC") on March 29, 2016 include: i) a constant service charge (readiness-to-serve charge), which varies by meter size; ii) a customer account charge to recover the allocated cost of billing, meter reading, and other customer service needs and, combined with the constant service charge, serves as the minimum bill for water service; and iii) a volumetric flow charge based on metered water consumption, which increases as consumption increases in order to promote water conservation, for the residential class. The rates for the wastewater system as reflected in the Rate Resolution are similar in structure to that of the water system and include: i) a constant service charge (readiness-to-serve charge), which varies by meter size; ii) a customer account charge to recover the allocated cost of billing, meter reading, and other customer service needs and, combined with the constant service charge, serves as the minimum bill for wastewater service; iii) a volumetric flow charge predicated on metered water consumption, which serves as the basis for wastewater use; vi) a maximum residential billing threshold of 10,000 gallons per month per unit for the billing of the volumetric flow charge for this class of customers; and v) a separate monthly base charge (includes an allowance for service charge and volumetric charge) for unmetered wastewater customers (wastewater service customers that do not receive County water service). The Rate Resolution also provides for the application of an annual price index every June 1st based on the Florida Public Service Commission ("FPSC") water and wastewater

price index. The price index provision has been applied annually by the County since the Fiscal Year 2016 and is currently scheduled to sunset after the application in the Fiscal Year 2025.

The following is a summary of the current monthly System rates for service as delineated in the Rate Resolution:

Water System – Monthly Service Charge			Wastewater System – Monthly Service Charge		
Residential Single-Family Service	June 1, 2020 Existing	June 1, 2021 Adopted	Residential Service	June 1, 2020 Existing	June 1, 2021 Adopted
<b>Meter Size:</b>			<b>Meter Size:</b>		
5/8"	\$15.54	\$15.82	5/8"	\$14.81	\$15.08
1"	38.85	39.55	1"	14.81	15.08
1-1/2"	77.71	79.10	1-1/2"	14.81	15.08
2"	124.30	126.52	2"	14.81	15.08
Residential Multi-Family Service (per Unit) [1]	\$7.76	\$7.76	Residential Multi-Family Service (per Unit) [1]	\$7.44	\$7.57
Commercial and Irrigation Service			Commercial Service		
<b>Meter Size:</b>			<b>Meter Size:</b>		
5/8"	\$18.48	\$18.48	5/8"	\$17.62	\$17.94
1"	46.31	46.31	1"	44.13	44.92
1-1/2"	92.44	92.44	1-1/2"	88.16	89.74
2"	147.91	147.91	2"	141.07	143.60
3"	295.85	295.85	3"	282.12	287.17
4"	462.28	462.28	4"	440.81	448.70
6"	924.54	924.54	6"	881.70	897.48
8"	1,644.19	1,644.19	8"	1,587.04	1,615.45
			Wastewater Only Service –per Equivalent Residential Connection		
<b>Customer Account Charge (per Bill)</b>	\$2.49	\$2.53	<b>Customer Account Charge (per Bill)</b>	\$3.89	\$3.96
<b>Consumption Charge (per 1,000 Gallons of Metered Water)</b>			<b>Consumption Charge-All Classes of Customers (per 1,000 Gallons of Metered Water)</b>		
<b>Residential Single-Family Service</b>					
0 – 10,000 Gallons	\$2.31	\$2.35	0 – 10,000 Gallons [2]	\$4.57	\$4.65
10,001 – 15,000 Gallons	3.28	3.34	N/A	---	---
15,001 – 25,000 Gallons	4.19	4.27	N/A	---	---
25,001 and Above	5.11	5.20	N/A	---	---
<b>Residential Multi-Family Service (per Unit)</b>					
5,001 – 7,500 Gallons	3.28	3.34	N/A	---	---
7,501 – 12,500 Gallons	4.19	4.27	N/A	---	---
12,501 and Above	5.11	5.20	N/A	---	---
<b>Commercial Service</b>					
All Consumption	\$2.80	\$2.85	All Consumption	\$4.57	\$4.65
<b>Irrigation Service</b>					
0 – 10,000 Gallons	\$3.28	\$3.34	N/A	N/A	N/A
10,001 – 15,000 Gallons	4.19	4.27	N/A	N/A	N/A
15,001 and Above	5.11	5.20	N/A	N/A	N/A

[1] Residential multi-family monthly service based on number of units served (each dwelling unit equivalent to 0.50 ERCs).

[2] For all individually-metered residential units, the consumption charge shall not apply to monthly usage (metered water sales) in excess of 10,000 gallons per ERC.

## RECLAIMED WATER SERVICE

As reflected in the Rate Resolution, the County currently charges a reclaimed or irrigation quality ("IQ") water charge to large areas receiving service on a low-pressure basis (for redistribution by customer; the County does not provide high pressure service to end use customers) of \$0.51 per 1,000 gallons of reserved

capacity. Customers that receive this service currently include large users such as golf courses and homeowner associations (median or common area irrigation).

## CAPITAL FACILITY CHARGES

In addition to the monthly rates for water and wastewater service, the County currently charges a capital facility charge based upon an equitable and proportionate share of the cost for: i) water production and transmission facilities; and ii) wastewater transmission, treatment and effluent disposal capacity of the System. The purposes of the Capital Facility Charges are for paying or reimbursing the equitable share of the capital costs relating to the construction, expansion, or equipping of excess or unused capacity of the System in order to serve new users. The following table summarizes the current water and wastewater system Capital Facility Charges pursuant to Rate Resolution by utility service type.

	<u>Capital Facility Charge</u>
Water – \$ per ERC	\$1,710
Wastewater – \$ per ERC	2,100

## SERVICE AVAILABILITY CHARGE

Pursuant to the Rate Resolution, the County presently charges a Service Availability Charge ("SAC") to new development after water and/or wastewater service has been approved by the County. Following the County's agreement to reserve service at the water and wastewater system facilities (which includes payment of the Capital Facility Charges), all developer-owned vacant buildable lots (reserved pursuant to a signed developer agreement) shall pay the applicable minimum SAC. The purpose of this charge is to recover the fixed operating, maintenance, and replacement costs of the facilities, which the County has built and must maintain on behalf of those requesting the reservation of service prior to connection. The current SAC for the System as delineated in the Rate Resolution is summarized below:

<u>Monthly Service Availability Charge (per ERC) [*]</u>	
<u>Water</u>	<u>Wastewater</u>
\$15.54	\$14.81

[\*] Monthly rate applied on a "per ERC" of capacity reserved basis where one ERC generally equates to the capacity allocation for a single-family residence on an average daily flow basis.

## MISCELLANEOUS SERVICE CHARGES

The County has also adopted a schedule of fees, charges, and deposits that are applicable to miscellaneous or customer requested services. The fees generally are imposed to recover the cost of specific service such as water and sewer taps and utility turn-on fees or a deposit to defray the risk for nonpayment of System services. The following is a summary of miscellaneous service fees, charges, and deposits, which were adopted and are currently in effect for the System.

### Customer Deposits

The Department requests a deposit at the time of service application by a customer in order to defray the risk of non-payment for utility services. The deposit is estimated on an individual account basis and is

equivalent to two months of the water and wastewater charge for such account as determined by the Department; however, in no event can the deposit be less than \$65.00 for water service and \$130.00 for combined water and wastewater service per account. A refund of the deposit for single-family residential customers will be made if the account is free of delinquency notices for a twenty-five consecutive month period.

### Water Meter Installation and Service Connect Charges

The County has adopted a fee schedule for water meter connection or installation services and service laterals installation in order to recover its cost of physically connecting a water customer to the System. Specifically, the County has adopted the following schedule of fees for this specific service:

Meter Size	Water Service [*]	
	Meter Connection Fee	Service Lateral Fee
3/4" or Less	\$335.00	\$450.00
1"	500.00	900.00
1-1/2"	750.00	1,000.00
2"	900.00	1,000.00
Above 2"	Actual Cost	Actual Cost

[\*] Fees derived from the Rate Resolution; service lateral fees do not include cost of meter connection.

For connections i) requiring a meter 2-inches or greater in diameter; or ii) which require a tap and the installation of a service line, the fee charged will be equal to the actual cost incurred by the System for labor, materials, and overhead.

**(Remainder of page intentionally left blank)**

## Other Miscellaneous Service Charges

In addition to the above-referenced charges, the County also has several other charges that are applicable to miscellaneous or customer-requested services. A summary of other miscellaneous charges imposed by the County, which are common in the utility industry include the following:

Charge / Fee Description	Amount
New Customer Service Application Fee	\$20.00 [1]
Utility Turn-on at Customer Request	20.00
Utility Turn-off at Customer Request	20.00
Utility Turn-on Same Day Service	45.00
Utility Turn-on After Hours Fee	50.00
Special Services Provided in Attempt to Collect Unpaid Bill	50.00
Monthly Fire Sprinkler Service Charge per Meter Size: [2]	
1-1/2-inch	\$10.81
2-inch	14.81
3-inch	27.14
4-inch	41.03
6-inch	79.52
8-inch	141.16
10-inch	202.79
12-inch	333.77
Meter Test Charge for High Bill Complaint	20.00 [3]
Unauthorized Water Meter / Sewer Service Lateral Removal Charge [4]	Actual Cost
Returned Check Charge: [5]	
Check Amount – \$0 to \$50.00	\$25.00
Check Amount – \$50.01 to \$300.00	\$30.00
Check Amount – \$300.01 to \$800	\$40.00

[1] Charge in addition to meter / service installation charge.

[2] Includes addition of account service charge.

[3] Charged only if meter is tested as registering correct. If meter is incorrect, usage or volume charges will be adjusted by County and no fee shall be charged.

[4] Charged due to continued unpaid charges or unauthorized use.

[5] Charge represents general County policy and is based on Florida Statutes and is not included in the Rate Resolution.

## Historical and Projected System Sales and Customer Usage Statistics

A major component in the preparation of a financial forecast of a utility system and the identification of the corresponding utility rate impacts is the evaluation of customer usage (or sales) requirements and the development of a forecast of water and wastewater customers and sales. This is necessary in order to have a proper matching of rate revenues anticipated to be received under existing fee schedules with the projected operating and capital expenditure requirements of the utility system. This is significant since revenues derived from the application of the rates for monthly service (user charges) currently account for over 90% of the total System revenues. For the purposes of this financial analysis and in order to assist the County in its continuing long-term financing efforts, a financial projection period encompassing the ten (10) Fiscal Years 2020 through 2029 (previously defined as the "Forecast Period") was recognized. This analysis period was recognized in order to examine the estimated near-term financial effects of funding the County's capital program through its entire implementation schedule.

## WATER SYSTEM

The development of a forecast of future water sales or usage and customers is necessary in the evaluation of water system requirements. The forecast is essential for the determination of revenues from existing rates, for the escalation of certain water production related expenses, and the identification of potential adjustments to rates for monthly service.

With respect to recent historical growth levels, the water system from Fiscal Years 2007 through 2010 has experienced a reduction or slowing in customer growth and reduced water sales (in total and on a "per account" basis) when compared to prior historical years, which have affected the financial position of the System. However, since 2010, the System has recognized an increase in customers due to an improved economy and continued development in the service area. The increase in customers for the Fiscal Years 2009 to 2019 (the "Historical Period") has been due to: i) the continued development located within the System service area; ii) acquisition of certain investor-owned utility systems, which effectively increased the customer base of the water system; and iii) the extension of utility services to existing developed properties where water services were previously not available. Table 1 at the end of this report provides a "by customer class" presentation of the water customers served and corresponding usage (sales) requirements. The following is a summary of the average annual water accounts and corresponding water sales since the Fiscal Year 2009.

**Water System – Historical [1]**

Fiscal Year Ended September 30, (Historical)	Average Annual Water Accounts	Average Annual ERCs [2]	Water Sales (000s of Gallons)	Average Monthly Water Use per ERC
2009	28,379	38,981	2,933,876	6,272
2010	29,984	41,445	2,985,069	6,002
2011	30,594	42,861	3,124,418	6,075
2012	31,048	43,363	3,037,137	5,837
2013	31,563	43,973	2,880,572	5,459
2014	32,267	44,820	3,049,797	5,670
2015	32,874	45,562	3,187,640	5,830
2016	33,392	46,215	3,251,293	5,863
2017	33,817	46,817	3,450,555	6,142
2018	34,310	47,675	3,253,470	5,687
2019	34,866	48,663	3,456,626	5,919
Average Annual Historical Growth Rate	2.08%	2.24%	1.65%	(0.58%)

[1] Amounts shown derived from Table 1 at the end of this report.

[2] ERCs determined based on i) an application of meter equivalency factors to active accounts served for the residential and commercial class and ii) number of units served for the multi-family class (0.5 ERCs per unit served).

As can be seen above and as detailed on Table 1 at the end of this report, the water system has experienced a historical growth rate in the average number of accounts served of approximately 2.1% per year. The rate of growth in customer accounts has outpaced the rate of growth in water demand, which reflects, among other things, i) the imposition of watering restrictions by the South Florida Water Management District (previously defined as the "SFWMD") beginning during the Fiscal Year 2007; ii) continued water conservation awareness within the service area by the County's water customers; and iii) reduction in water demands associated with reduced construction activity (e.g., lawn establishment).

The growth in the number of accounts served is primarily due to the in-fill of existing developments, the extension of utility service to previously unserved neighborhoods, as well as the acquisition of several investor-owned utilities (privately-owned utilities regulated on the basis of rates by the FPSC) during the Historical Period. The purchase of these utilities was made to further promote the regionalization of the utility system, assist in water resource planning, eliminate small wastewater package plants, and improve levels of service to those customers served by the investor-owned utilities. Specifically, the historical growth rate includes the acquisition of the Miles Grant and Hutchinson Island utility systems in September 2009 that increased the water and wastewater customer base by approximately 1,264 and 1,150 customers, respectively.

The projection of water customer growth and water sales, which serves as the basis for water rate revenue projections during the Forecast Period, is based on recent historical trends, information regarding future development (either has reserved capacity or is in the development planning or review process), the ongoing water service extension programs that are currently underway, and discussions with Department staff. A summary of these projections is shown on Table 2 and are summarized as follows:

<b>Water System – Projected [1]</b>				
Fiscal Year Ending September 30, (Projected)	Average Annual Water Accounts	Average Annual Water ERCs	Water Sales (000s of Gallons)	Average Monthly Water Use per ERC
2019 (Actual)	34,866	48,663	3,456,626	5,919
2020 (Estimated) [2]	35,533	49,408	3,402,184	5,738
2021	36,098	50,058	3,446,254	5,737
2022	36,881	50,925	3,505,544	5,736
2023	37,552	51,674	3,556,766	5,736
2024	38,153	52,337	3,602,128	5,735
2025	38,717	52,968	3,645,064	5,735
2026	39,127	53,422	3,675,763	5,734
2027	39,438	53,780	3,700,026	5,733
2028	39,696	54,070	3,719,672	5,733
2029	39,910	54,323	3,736,608	5,732
Average Annual Projected Growth Rate [3]	1.36%	1.11%	0.78%	(0.32%)

[1] Amounts shown derived from Table 2.

[2] Estimated Fiscal Year 2020 statistics based on 6 months of actual data (through March 2020).

[3] Reflects average annual projected compounded growth from the Fiscal Year 2019.

As can be seen above, the customer and water sales growth are anticipated to be less than recent historical trends. These projections assume no future utility acquisitions[3] and only minor growth from water line extensions. The forecast of customer growth can be categorized in two segments: i) normal customer growth representing baseline growth projections taking into consideration historical trends and population growth forecasts (continued in-fill development); and ii) incremental growth representative of construction of new developments identified by staff or the extension of water service to existing unserved developments.

[3] All of the FPSC-regulated utilities that were located within the County Service territory or contiguous to the County system have now been purchased by the County. The Indiantown Company, Inc. utility system, the last remaining private utility in the County has now been purchased by the recently incorporated City of Indiantown and is now a component unit of the City.



For the new or recent water extension programs, the incremental ERC growth assumes the addition of the following ERCs:

	<b>Total Water ERCs</b>	<b>Estimated Connected ERCs as of 10/1/19</b>	<b>Remaining ERCs to Connect</b>	<b>Initial Connection Year</b>
Palm Lake Estates	29	0	29	2019
Hibiscus / Paramount	380	0	380	2019
James Villas	61	0	61	2019
Old Palm City	377	0	377	2024
Port Salerno / New Monrovia	454	0	454	2023
Rocky Point	383	0	383	2025
Evergreen / Canoe Creek / Windstone / Rustic Hills	481	0	481	2022
Gaines Avenue	157		157	2022
Hideaway Isles	72		72	2022
Beau Rivage	270	0	270	2022
<b>Total</b>	<b>2,664</b>	<b>0</b>	<b>2,664</b>	

ERC = Equivalent Residential Connection.

Water sales were projected based on usage trends experienced by each class of customer over the historical period previously discussed and current fiscal year-to-date statistics, with emphasis being placed on the most recent trends in average use that have been affected by the changes in the improving economy. The Fiscal Year 2013 represented the lowest year in terms of water use per account, which continued through Fiscal Year 2014 (partly due to increased rainfall events). However, water usage has slowly been increasing from Fiscal Years 2015 through 2017 with a small decrease in 2018 that rebounded in 2019. For purposes of forecasting future water use for the Financial Forecast and to have a conservative forecast in the development of revenues, the estimated level of usage required per equivalent residential connection (ERC, which equates to the equivalent use or capacity of a single-family residential account) for the Fiscal Year 2020 was set at the average usage levels from Fiscal Years 2015 through Year-to-Date 2020 for the Forecast Period to recognize the effects of continuing general water use restrictions and corresponding water conservation efforts by the County on long-term water use despite the increased usage levels in 2017 and 2019.

**(Remainder of page intentionally left blank)**

## WASTEWATER SYSTEM

The historical customer (account) statistics for the wastewater system as illustrated on Table 1 at the end of this report are summarized as follows:

<b>Wastewater System – Historical [1]</b>				
Fiscal Year Ended September 30, (Historical)	Average Annual Wastewater Accounts	Average Annual Wastewater ERCs	Billed Wastewater Flow (000s of Gallons) [2][3]	Average Monthly Wastewater Gallons Billed per ERC
2009	20,333	25,979	1,562,719	5,013
2010	21,627	27,903	1,641,260	4,902
2011	22,162	28,821	1,676,788	4,848
2012	22,637	29,449	1,650,840	4,671
2013	23,061	30,018	1,632,532	4,532
2014	23,468	30,503	1,713,314	4,681
2015	23,840	30,856	1,745,272	4,714
2016	24,148	31,230	1,783,556	4,759
2017	24,427	31,581	1,839,045	4,853
2018	24,585	31,816	1,780,027	4,662
2019	24,837	32,269	1,822,423	4,706
Average Annual Historical Growth Rate	<u>2.02%</u>	<u>2.19%</u>	<u>1.55%</u>	<u>(0.63%)</u>

[1] Amounts shown derived from Table 1 at the end of this report.

[2] ERCs determined based on i) an application of meter equivalency factors to active accounts served for the residential and commercial class; and ii) number of units served for the multi-family class (0.5 ERCs per unit served).

[3] Amounts shown do not include any implied wastewater flow for wastewater-only customers where no water service is provided (customers have individual on-site potable water wells).

As shown above, the wastewater customers of the System have experienced an average compound growth rate of approximately 2.0% since the Fiscal Year 2009, which is consistent with that reported for the Water System. The rate of growth in customer accounts has outpaced the rate of growth in billed wastewater flows, which is calculated based upon metered water flows. As previously discussed the Water System has experienced declines in average water demand per customer, which reflects, among other things, i) water use restrictions from the SFWMD beginning during the Fiscal Year 2007; ii) the impacts associated with the negative economic conditions during the Historic Period (which has been improving beginning with 2017); and iii) continued water conservation awareness within the service area by the County's water customers. These trends and factors have also had an effect on billed wastewater flows since the flows are based on metered water use for rate application or billing purposes (the effects are somewhat mitigated by the residential wastewater billing cap as previously discussed in the section entitled "Water and Wastewater System Rates and Charges").

**(Remainder of page intentionally left blank)**

The following is a summary of the projected customer statistics and billed wastewater flow assumed for the Forecast Period reflected in this report.

<b>Wastewater System – Projected [1]</b>				
<b>Fiscal Year Ending September 30, (Projected)</b>	<b>Average Annual Wastewater Accounts</b>	<b>Average Annual Wastewater ERCs [2]</b>	<b>Billed Wastewater Flow (000s of Gallons) [3]</b>	<b>Average Monthly Wastewater Gallons Billed per ERC</b>
2019(Actual)	24,837	32,269	1,822,423	4,706
2020 (Estimated) [4]	25,205	32,661	1,823,782	4,653
2021	25,785	33,279	1,855,140	4,645
2022	26,225	33,744	1,878,815	4,640
2023	27,596	35,164	1,949,280	4,619
2024	28,721	36,322	2,006,822	4,604
2025	29,835	37,481	2,064,581	4,590
2026	30,868	38,546	2,117,574	4,578
2027	31,680	39,399	2,160,402	4,569
2028	32,483	40,231	2,202,024	4,561
2029	33,087	40,874	2,234,568	4,556
<b>Average Annual Projected Growth Rate [5]</b>	<b>2.91%</b>	<b>2.39%</b>	<b>2.06%</b>	<b>(0.32%)</b>

[1] Amounts shown derived from Table 2 at the end of this report.

[2] ERCs determined based on i) an application of meter equivalency factors to active accounts served for the residential and commercial class; and ii) number of units served for the multi-family class (0.5 ERCs per unit served).

[3] Amounts shown do not include any implied wastewater flow for wastewater-only customers when no water service is provided (customers have individual on-site potable water wells).

[4] Estimated Fiscal Year 2020 statistics based on 6 months of actual data (through March 2020).

[5] Reflects average annual projected compounded growth rate from the Fiscal Year 2019.

The growth in average annual customers has been assumed to increase at an annual compound rate of approximately 2.9% annually from Fiscal Year 2019 levels for the Forecast Period. As with the Water System, this has been based on data provided by the County regarding historical trends, building activity experienced by the Wastewater System, connection of existing developments that have agreed to accept service from the County and is generally consistent with the forecast trends of customer account growth projected for the Water System. The customer growth for the Wastewater System also reflects incorporation of several existing developments / systems that are now or are projected to be connected with the County’s regional Wastewater System (considered as incremental growth). As previously identified for the Water System, the Fiscal Year 2013 represents the lowest average use (billed flows) per ERC in recent history. The Financial Forecast assumes an increase in average billed flows per ERC for Fiscal Year 2020, which is based on six (6) months of actual information and the forecast assumed for the Water System. After Fiscal Year 2020, the average billed flow per customer was assumed to decrease consistent with the assumptions for the Water System (e.g., increased conservation awareness) and to provide a reasonable and attainable forecast associated with the projection of rate revenues, which is based on the statistical forecast. For the new or recent wastewater extension programs, the incremental ERC growth assumes the addition of the following ERCs:

**(Remainder of page intentionally left blank)**

	<u>Total Wastewater ERCs</u>	<u>Estimated Connected ERCs [*]</u>	<u>Remaining ERCs to Connect</u>	<u>Initial Connection Year</u>
Golden Gate	764	0	764	2023
Old Palm City	1,015	0	1,015	2023
Port Salerno / New Monrovia	952	0	952	2023
Woodside / Stratford	78	0	78	2023
Coral Gardens	652	0	652	2024
Rocky Point	1,198	0	1,198	2025
Evergreen / Canoe Creek / Windstone / Rustic Hills	620	0	620	2026
Hibiscus Park / The Woodlands / Brownings Minor	475	0	475	2027
Stuart Yacht and County Club	504	0	504	2028
<b>Total</b>	<b><u>6,258</u></b>	<b><u>0</u></b>	<b><u>6,258</u></b>	

ERC = Equivalent Residential Connection.

[\*] Represents the estimated number of customer accounts anticipated to connect to the wastewater system adjusted to reflect any connections assumed to occur during Fiscal Year 2020.

## Projections of Utility System Operating Results

For the purpose of this Financial Forecast and as previously mentioned, a projected ten-year study period has been utilized for the determination of the Water and Wastewater System revenue requirements. The objective of using this Forecast Period is to determine the potential rate levels that will ensure continuing and adequate service to meet future period requirements. It was determined that the revenue requirements for this analysis would be predicated on the projected utility costs for the ten fiscal year period ending September 30, 2029. This forecast of utility operations was prepared in order to provide a general surety to the County that the utility rates would be adequate in the future to meet all of the estimated System expenditure needs, satisfy any bond / loan rate covenant requirements associated with any outstanding bonds or loans during the Forecast Period and to fully fund the capital improvement program as identified by the County.

The classification of revenue requirements can be organized into five main categories: i) operation and maintenance expenses (adjusted to exclude depreciation and amortization expenses); ii) annual principal and interest payments on existing and future debt / loans / notes; iii) funding of capital re-investment program from rates; iv) transfers to other departments / cost centers of the County; and v) deposits to working capital reserves and other funds to maintain or meet management objectives / policies regarding financial position (reduce financial risk and promote creditworthiness of System). The sum of these payments represents the gross revenue requirements of the System that are to be recovered from the available financial resources of the System, including rate and other operating revenues, investment income, grants and contributions, available cash reserves, and/or proceeds from debt proceeds.

The development of the estimated revenue requirements for the County's water and wastewater systems required several assumptions and considerations and the preparation of certain analyses relative to utility operations. The actual Fiscal Year 2019 results and Fiscal Year 2020 and preliminary Fiscal Year 2021 budgets served as the base years for revenue requirement projection purposes. For Fiscal Year 2020, the County provided Raftelis with a copy of the adopted budget, which after certain adjustments to reflect year-to-date results and known or anticipated changes and assumptions. With respect to the Fiscal Year 2021, the County provided Raftelis with a copy of the preliminary budget which served as the basis for the Fiscal

Year 2021 revenue requirement forecast and, coupled with the Fiscal Year 2020 results, served as the basis of the projection of the revenue requirements for the remainder of the Forecast Period. Based on the forecast of sales for the water and wastewater system, the assumptions and considerations set forth below with respect to the determination of projected water and wastewater system expenditures, the rate revenue surplus / (deficiencies) are anticipated to be as follows:

<b>Combined Water and Wastewater System [1]</b>				
Fiscal Year	Price Index [2]	Anticipated System Revenues [3]	Total Net Revenue Requirements [4]	Annual Surplus / (Deficiency)
2020	0.00%	\$34,580,907	\$34,580,907	\$0
2021	1.79%	35,853,452	35,853,452	0
2022	0.70%	36,936,898	36,936,898	0
2023	1.65%	38,267,802	38,267,802	0
2024	1.50%	39,687,658	39,687,658	0
2025	1.50%	41,098,070	41,098,070	0
2026	1.50%	42,424,346	42,424,346	0
2027	1.50%	43,633,028	43,633,028	0
2028	1.50%	44,840,550	44,840,550	0
2029	1.50%	45,965,276	45,965,276	0

[1] Amounts shown derived from Table 6 at the end of this report.

[2] Amounts shown reflect recognized Price Index as applied to existing rates and included within the forecast of anticipated System revenues. Pursuant to the Rate Resolution, the automatic price index is scheduled to sunset after October 1, 2024 (i.e., Fiscal Year 2025); the forecast assumes the continuation of the price index adjustment beyond the "price index sunset year". No additional future rate adjustments above the continuation of the price index adjustment were assumed to be implemented during the Forecast Period.

[3] Anticipated System revenue includes effects of the application of the annual Price Index Adjustment.

[4] Net revenue requirements represent the amount of gross revenue requirements of the System, less income and funds from other sources, which are identified as being funded from rate revenues. Amounts shown include deposits to the operating and capital reserves to the extent available to be used for funding the capital improvement program.

As illustrated in the above table, with the inclusion of the continued application of the Price Index through Fiscal Year 2025, it is anticipated that the System will have sufficient rate revenues to fund the identified net revenue requirements for the Forecast Period. It is recommended and assumed after discussions with County staff the annual Price Index Adjustment should be continued beyond Fiscal Year 2025 (which is consistent with prior BOCC actions when the index was scheduled to sunset) for the purposes of developing the Financial Forecast. It should be noted that if the index is not continued this would have a material impact in the latter years of the Financial Forecast.

## **PRINCIPAL CONSIDERATIONS AND ASSUMPTIONS REGARDING PROJECTED OPERATING RESULTS**

In making the projections and estimates summarized in this report, the principal considerations and assumptions made by us and the principal information and assumptions provided to us, or prepared by others, include the following:

1. The Adopted Fiscal Year 2020 and preliminary Fiscal Year 2021 Budgets served as the basis for the financial forecast of operating expenses. Based on discussions with Department staff and a detailed review of actual reported operating expenses for the recent historical period, the Fiscal Year 2020 Budget was reduced by approximately \$397,000 or 1.75% of total expenses. To illustrate the composition of the operating expenses, the primary costs of personnel, repairs,

electric, chemical and sludge expenses account for approximately 67% of the total operating expenses.

2. Projected revenues from current rates and charges for the County's water and wastewater systems are based on the schedule of existing rates and charges as adopted by the Board on March 26, 2016 through Resolution No. 16-3.15 (previously defined as the "Rate Resolution"). Such rates and charges were also adjusted for the application of the annual Price Index which was assumed to be applied to the forecast of water and wastewater customers and sales forecast for the individual utility systems as previously discussed in each year of the Forecast Period. A summary of projected sales revenues under existing and Price Index adjusted rates for monthly service is shown on Table 3 at the end of this report.
3. Service availability charge revenues for the Forecast Period, which are based on a monthly fee charged to owners of undeveloped buildable lots that have reserved capacity through the Department for water and / or wastewater service, were estimated by applying the existing service availability charge for water and wastewater service to the projection of applicable ERCs of reserved capacity allocable to the buildable lots through the Forecast Period. This forecast of service availability charges was based on: i) the schedule of properties currently paying the service availability charge as provided by the Department; ii) the forecast of customer growth, which recognizes that as customers connect to the System, they would no longer be charged service availability charges (connected customers assessed to be those previously reserved through development process); iii) projected increases in undeveloped buildable lots based on estimates provided by the Department relative to the future development; iv) the current rates for service; and v) discussions with Department staff. The forecast assumes that as the service area approaches a built-out condition, the projected revenues from service availability fees will decline.
4. Included in the financial projections are other operating revenues associated with service initiation and discontinuance fees, meter installation charges, late payment fees, developer review fees and other related customer requested services revenues. For the purposes of this report, other operating revenues were based on: i) the Fiscal Year 2020 adjusted and Fiscal Year 2021 budgeted revenues; ii) a review of historical amounts received from such charges; and iii) discussions with the Department. Based on a review of such sources, it was assumed that such revenues would fluctuate in relation to anticipated new connections to the System or remain constant at current budget levels during the Forecast Period.
5. The County provides Irrigation Quality reclaimed (previously defined as "IQ") water service to large users such as golf courses, and homeowner's association, which include irrigation service to common areas within large residential developments. Revenues from this service are anticipated to increase during the course of the Forecast Period due to: i) the recognition of several existing large users will now begin to pay for service per previously executed contractual agreements; ii) the recognition of new large users requesting service as a result of service area development, if any; iii) no excess IQ water sales being made to uses above the customer total contracted flows (as referenced in each customers IQ water agreement); and iv) application of the annual Price Index to the existing reclaimed water rates. Based on these factors, the projected revenues resulting from the provision of reclaimed water service assumed for the Financial Forecast are as follows:

<b>Fiscal Year</b>	<b>Rate per 1,000 Gallons [*]</b>	<b>Revenue</b>
2020	\$0.51	\$714,405
2021	0.52	742,494
2022	0.52	747,691
2023	0.53	760,028
2024	0.54	771,428
2025	0.55	783,000
2026	0.56	794,745
2027	0.56	806,666
2028	0.57	818,766
2029	0.58	831,048

[\*] Assumes application of approved and identified rate adjustments as previously discussed.

6. The County has implemented several assessment programs in order to recover the capital costs associated with the extension of water and /or wastewater service to certain properties benefiting from such improvements. In order to bill and collect such assessments, the County has adopted the Uniform Method (non-ad valorem assessment collected via the property tax collection process) as allowed by Florida Statutes, Chapter 197. The County has assessed each benefiting unit with the option to pay the assessment in full at the outset of the assessment period (or any time during the repayment period) or in annual installments collected over ten (10) to twenty (20) year time frames (based on the terms of the specific assessment program). As of the date of this report the County had approximately 30 active capital extension assessment programs in effect, with the capital costs for the service extensions being primarily funded internally from available operating or cash reserves. Based on information provided by the County, annual assessment revenues for the existing assessment programs were estimated based on: i) the current assessment repayment schedules for each assessment program based on the terms and conditions of each program; ii) no future prepayments of any outstanding assessment principal balances by a property owner during the remaining assessment term; and iii) no change in the overall terms and conditions of the assessment program.

The County is also expecting to implement new assessment programs for the extension of water and /or wastewater service to existing but unserved developments. The assessments recognized during the Forecast Period for these new programs represent only those programs for which the property owners have expressed an interest (through a majority vote of such property owners within the specific service area) in receiving service and paying the assessment. Based on discussions with the Department, the same assessment process that has been used for the other System assessment programs previously implemented by the County will continue for the new assessment programs as well. With the exception of the septic-to-sewer extension program (which represent areas associated with improving the water quality of the St. Lucie Estuary and Indian River Lagoon referred to as the "Extension Program") of the programs are assumed to be internally funded by the County and all assessment proceeds have been recognized as a financial resource of the System.

For these programs associated with the Extension Program and due to the estimated magnitude of the capital costs associated with these specific extensions, the expenditures were assumed to be debt financed using subordinate and senior loans. This financing strategy also recognized that

during the period of construction i) interest would be capitalized for the financings that were considered to be additional parity bonds (senior lien debt), and ii) subordinate debt financings would assume interest-only periods for until construction was completed and then level debt service payments thereafter until maturity. Based on these assumptions, the projected assessment revenues are estimated as follows:

<b>System Assessment Revenues</b>			
Fiscal Year	Existing Assessment Programs [1]	Extension Assessment Program	Total Assessment Revenue Recognized [2]
2020	\$1,625,487	\$0	\$1,625,487
2021	1,574,126	0	1,574,126
2022	1,354,006	718,678	2,072,684
2023	1,329,652	3,126,451	4,456,103
2024	1,233,899	4,012,906	5,246,805
2025	847,943	5,304,923	6,152,866
2026	659,985	5,805,009	6,464,994
2027	610,106	6,191,687	6,801,793
2028	610,106	6,609,569	7,219,674
2029	569,395	6,609,569	7,178,964

[1] Reason for decline in existing assessment revenues is due to specific assessment program repayment periods maturing during the Forecast Period.

[2] Assessment revenue includes principal and interest payments.

- Projected operations and maintenance expenses associated with operation of the System have been escalated from Fiscal Year 2021 estimated levels based upon several assumptions and the nature of the expense. The Fiscal Year 2021 preliminary budget represents the County's current annual financial plan for the System and based on a comparison of such projections to recent reported amounts, it was determined that the underlying assumptions used by the County in the development of such budgets were considered reasonable and reflect the estimated costs for anticipated operations of the System. Such amounts were projected for the remainder of the Forecast Period based on a variety of escalation parameters respective of the specific cost to provide service.

Table 6 at the end of this report delineates the projection of the operation and maintenance expenses and a summary of the projected operating expenses is shown below:

<b>Summary of Forecasted Water and Wastewater Operating Expenses (\$000s)</b>										
Description	Fiscal Year Ending September 30,									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Personnel	\$8,266	\$8,732	\$9,178	\$9,501	\$9,836	\$10,184	\$10,544	\$10,920	\$11,310	\$11,715
Electricity	2,007	2,207	2,270	2,371	2,476	2,583	2,687	2,785	2,883	3,014
Professional and Contractual	3,830	4,274	4,381	4,491	4,599	4,705	4,813	4,919	5,027	5,137
Chemicals	1,226	1,151	1,185	1,230	1,279	1,329	1,376	1,421	1,465	1,522
Repairs and Maintenance	2,437	2,406	2,498	2,596	2,699	2,809	2,926	3,050	3,182	3,323
Indirect Cost Allocation	1,441	1,441	1,484	1,528	1,574	1,621	1,670	1,720	1,772	1,825
Other Expenses	1,199	1,122	1,173	1,314	1,378	1,448	1,599	1,982	2,044	2,084
Operating Supplies	479	381	390	400	410	419	429	438	448	458
Sludge Removal	900	1,000	1,044	1,119	1,190	1,263	1,337	1,407	1,479	1,578
Fuel	231	244	248	256	266	277	288	299	311	324
Bulk Purchases	58	59	60	62	63	65	66	68	69	71
Contingency at 0.5% of Expenses	111	119	120	125	131	135	140	146	151	158
Bad Debt at 0.15% of Rate Revenue	56	58	60	65	68	71	74	76	79	81
Planned Maintenance [*]	-	520	-	-	200	-	120	60	-	380
<b>Total</b>	<b>\$22,242</b>	<b>\$23,713</b>	<b>\$24,093</b>	<b>\$25,058</b>	<b>\$26,169</b>	<b>\$26,909</b>	<b>\$28,069</b>	<b>\$29,291</b>	<b>\$30,219</b>	<b>\$31,671</b>

[\*] Represents planned maintenance expenses that are non-routine in nature vary by year similar to the Capital Improvement Program ("CIP").



8. The projected operation and maintenance expenses as summarized above were escalated for the Forecast Period as follows:

- a. Materials and supplies expenses, other contractual services expenses, repair and maintenance expenses, and certain other operating expenses have been projected to increase in general from historical and current budgetary levels at an annual rate equal to inflation based on the nature of the expenditure. These escalation factors were based on the Consumer Price Index forecasts prepared by the Congressional Budget Office as contained in the *Economic and Budget Outlook* dated January 2020. Additionally, these escalators were compared to historical price indices used by many utilities for financial forecasting and rate review purposes. These indices included: i) the gross national product implicit price deflator index, which is used by the Florida Public Service Commission in the establishment of price indices for operating costs as required pursuant to Section 367.081(4)(a), Florida Statutes, in the regulation of private or investor-owned utilities; and ii) the consumer price index for recent historical periods.
- b. Based on discussions with the County, the escalation of wages and salaries above budgeted amounts is assumed at 3.0% for the Forecast Period. The increase in personnel costs reflect allowances for cost of living and inflationary adjustments. With respect to the forecast of personnel benefits (i.e., health insurance) is projected to increase by approximately 6.0% annually based on discussions with staff and a review of recent historical trends. Overall personnel expenses, including benefits, are projected to increase by approximately 4.5% above Fiscal Year 2021 budgeted amounts.

The financial projections of the utility operating expenses as reflected on Table 6 includes the recognition of additional employees that are anticipated to be required to meet the increased service level needs / requirements of the utility system. The recognition of the additional personnel was based on discussions with County staff and is primarily due to serving the increased growth of the utility system service area (i.e., increases in the number of customers served that pose a greater demand on the existing employee availability). As shown below, the costs associated with additional employees gradually increases as more employees are added.

Description	Fiscal Year Ending September 30,									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Regular Salaries	\$0	\$0	\$108	\$112	\$115	\$118	\$149	\$152	\$156	\$160
FICA	-	-	7	7	8	8	10	10	10	11
Overtime	-	-	5	6	6	6	8	8	8	8
Medicare	-	-	2	2	2	2	2	2	2	2
Life and Health Insurance	-	-	29	30	31	31	39	40	41	43
Retirement Contributions	-	-	11	11	11	12	15	15	16	16
Training	-	-	1	1	1	1	1	1	1	1
<b>Total Additional Employee Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$163</b>	<b>\$168</b>	<b>\$173</b>	<b>\$178</b>	<b>\$224</b>	<b>\$229</b>	<b>\$235</b>	<b>\$241</b>

[1] Costs are estimates based on discussions with County staff and is based on allocation of personnel benefits as presented in the 2021 Operating Budget.

- c. The projection of variable costs for water and wastewater operations, including the cost of purchased power and chemicals were based on an allowance for inflation and the projection of flow requirements as discussed earlier in this report. Electrical, chemical,

and sludge expenses were escalated over the Forecast Period at factors ranging from 3.0% to 7.2%. The average annual growth rate of electrical, chemical and sludge expenses during the Forecast Period is projected to be approximately 4.4% per year based on recent historical cost increases in energy prices.

- d. A contingency allowance of one-half percent (0.50%) of total operating expenses was recognized in each fiscal year of the Forecast Period. The allowance has been included in order to provide funds for unknown or unplanned expenditures that may occur throughout the fiscal year and to recognize potential changes in the revenues that may occur due to weather, conservation, and other factors. This allowance increases the revenue requirements of the combined utility systems (water and wastewater) by approximately \$134,000 annually and is included as a System operating expense with respect to the determination of total revenue requirements.
- e. An allowance for bad debt expense has been made to recognize a certain amount of revenues that will be considered as uncollectible and written off throughout the year. This expenditure item reflects an incremental adjustment to the Fiscal Year 2020 and 2021 Budgets and was projected based on trends incurred by utilities statewide and discussions with Department personnel. A bad debt ratio estimated at 0.15% of sales revenues was subsequently applied to the level of sales revenues projected for the Forecast Period in the study to estimate the amount of expense to recognize. The average increase in revenue requirements recognizing this expense item for the System is approximately \$69,000 annually.
- f. Repair and maintenance operating expenses were escalated based upon a factor of 4.0% over the Forecast Period, reflecting the observed trend in increased construction materials costs used in the repair and maintenance of existing water and wastewater facilities and that as facilities age, the cost of repair and maintenance tends to increase.
- g. Based on discussions with the County, it has been assumed that the allocation of Administrative Expenses or indirect costs allocable to the Department from the County's General Fund (e.g., costs accounted for in the County's General Fund) are assumed to increase from recent levels during the Forecast Period. Based on information provided by the County, the indirect cost expenditure recognized during the Forecast Period was escalated above the Fiscal Year 2021 budget estimate at the general rate of inflation of approximately 3%. The following forecast of the indirect expense allocation is summarized below:

<u>Fiscal Year</u>	<u>Indirect Cost</u>
2020	\$1,440,585
2021	1,440,585
2022	1,483,803
2023	1,528,317
2024	1,574,166
2025	1,621,391
2026	1,670,033
2027	1,720,134
2028	1,771,738
2029	1,824,890

9. The County originally issued utility revenue bonds in accordance with the Bond Resolution to finance certain capital improvements and utility acquisitions for the water and wastewater utility systems. It is expected that as of October 1, 2020, the System had \$55,185,000 in aggregate principal amount outstanding (the "Outstanding Bonds"), which is summarized as follows:

<u>Issue</u>	<u>Principal Outstanding [*]</u>
Utilities System Improvement Refunding Bonds, Series 2016 (the "Series 2016 Bonds")	<u>\$55,185,000</u>
Total Principal Outstanding (Senior Lien Bonds)	<u>\$55,185,000</u>

[\*] Amount anticipated to be outstanding at October 1, 2020 (after payment of the October 1, 2020 maturity).

The debt service requirements included in this report for the Outstanding Bonds were based on the actual debt service schedules for each issue and are presented on a "gross" basis (i.e., not net of interest earnings on any debt service-related funds or accounts).

10. In addition to the Outstanding Bonds, the County also secured a State Revolving Fund (SRF) loan for the purpose of financing the extension of wastewater service to the Seagate Harbor / Lighthouse Point development located within the County's existing service territory. This loan is considered as being subordinate to the Outstanding Bonds. Based on information provided by Department staff, the County entered into a loan agreement with the Florida Department of Environmental Protection (the administrator for the SRF loan program ("FDEP") which has since been closed (finalized) (SRF Loan WWG12063607P). As was discussed for the Outstanding Bonds, the payment of the loan is presented on a "gross" basis (i.e., not net of interest earnings on any loan repayment amounts held by the County).

The County previously made capital improvements to the biosolids treatment and disposal process. The total cost of the project was approximately \$13.1 million and was funded in equal amounts from available System reserves and a 2014 Interfund Loan provided by the Solid Waste Enterprise Fund. In addition to the Biosolids Interfund Loan, the County received two more Interfund Loans from the Solid Waste Department for the Crane Creek Extension Program (282 water ERCs), the Orchid Bay Extension Program (155 water ERCs), the Palm Lake Estates Extension Program (222 water ERCs), and the James Villas Extension Program (61 water ERCs). The County also received a State Revolving Fund Loan for the Golden Gate Extension Program (764 wastewater ERCs). The Golden Gate SRF loan was a 20-year 0.00% interest loan to help fund the Extension program as well as a forcemain. The loans are subordinate to the Outstanding Bonds of the County outstanding and are considered to also be subordinate to the SRF Loan since the respective loans represent internal borrowings within the County. The following provides a summary of the existing and proposed annual debt service and loan payment requirements for the Forecast Period:

**(Remainder of page intentionally left blank)**

**Summary of Existing Annual Debt / Loan Payments (\$000s)**

Description	Fiscal Year Ending September 30,									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Senior Lien Bonds:										
Series 2016 Bonds	\$6,818	\$6,817	\$6,815	\$6,816	\$6,817	\$6,818	\$6,817	\$3,153	\$3,158	\$3,158
Total	\$6,818	\$6,817	\$6,815	\$6,816	\$6,817	\$6,818	\$6,817	\$3,153	\$3,158	\$3,158
SRF Loans										
WWG12063607P	\$182	\$182	\$182	\$182	\$182	\$99	\$0	\$0	\$0	\$0
Golden Gate Loan	0	0	0	536	536	536	536	536	536	536
Solid Waste Interfund Loans										
Biosolid Interfund Loan	\$540	\$540	\$540	\$540	\$540	\$540	\$540	\$540	\$540	\$0
Crane Creek Interfund Loan	152	152	152	152	152	152	152	152	152	152
Orchid Bay Interfund Loan	80	80	80	80	80	80	80	80	80	80
Palm Lake Estates Interfund Loan	15	15	15	15	15	15	15	15	15	15
James Villas Interfund Loan	49	49	49	49	49	49	49	49	49	49
Total Interfund Loans	\$836	\$836	\$836	\$836	\$836	\$836	\$836	\$836	\$836	\$296
Total Debt Service	\$7,837	\$7,836	\$7,834	\$8,370	\$8,372	\$8,289	\$8,189	\$4,525	\$4,530	\$3,990

The amounts shown are based on the monthly funding requirements of the various sinking funds / loan repayment reserves as required by the Bond Resolution or loan agreement, which authorized the outstanding debt (essentially an accrual basis) as opposed to when the debt service requirements are actually paid.

11. A provision of the Bond Resolution requires the County to establish and i) deposit into a Renewal and Replacement Fund (the "R&R Fund") an amount equal to 5.0% of the Gross Revenues received by the System in the immediately preceding Fiscal Year; or ii) maintain a R&R Fund balance equal to either \$5,000,000, or such other amount as shall be certified by the County's Consulting Engineers (collectively, the "R&R Fund Requirement"). The deposits to the R&R Fund are for the purpose of funding the cost of extraordinary repairs to, extensions, enlargements, or additions to, or the replacement of facilities of the System. The deposit to the R&R Fund as delineated in the Bond Resolution is considered as a minimum funding target to annually finance ongoing capital expenditures; it is recommended that a greater deposit level be established based on the System CIP and the amount of utility plant investment to provide an ongoing / recurring funding source for asset reinvestment in order to maintain the long-term sustainability of the rates for utility service.

For the purposes of developing the revenue requirements from rates and based on the current Department funding policy, the budgeted transfers to the R&R Fund for the Forecast Period were recognized reflecting transfers of approximately \$5.5 million on average to: i) promote Pay-Go funding of these projects (which generally benefits the existing ratepayer); ii) increase the County's equity in the System; iii) preserve the leveraging (debt) capability of the System for large capital projects; and iv) promote the long-term rate stability of the System. It should be noted that this funding amount is greater than the R&R Fund Requirement as reflected in the Bond Resolution. In order to illustrate the level of annual R&R Fund transfer as it relates to the estimated R&R Fund Requirement, an estimate of the annual deposit requirement based on the 5.0% transfer provision for each year of the Forecast Period is as follows:

Projected Renewal and Replacement Fund Deposit from Operations (\$000s)										
Description	Fiscal Year Ending September 30,									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>Renewal and Replacement Fund</b>										
<b>Transfer:</b>										
Min. Deposit – 5% of Prior Year's Gross Revenue	\$1,707	\$1,869	\$1,925	\$1,988	\$2,170	\$2,276	\$2,427	\$2,533	\$2,623	\$2,720
Recommended Additional Deposit	3,543	3,434	3,431	3,422	3,294	3,243	3,147	3,097	3,063	3,023
Total Recognized Deposits [*]	<u>\$5,250</u>	<u>\$5,303</u>	<u>\$5,356</u>	<u>\$5,410</u>	<u>\$5,464</u>	<u>\$5,519</u>	<u>\$5,574</u>	<u>\$5,630</u>	<u>\$5,686</u>	<u>\$5,743</u>

[\*] Amount shown for Fiscal Year 2020 represent the budgeted deposits for the System.

Additional transfers above those based upon 5.0% of prior year's Gross Revenues recognize the capital funding needs for renewals, replacements, and betterments as identified by the Department.

12. The capital outlay expenditures for departmental furniture, fixtures, equipment, vehicles, and other related items were recognized as an additional capital requirement, which is funded annually from System rates. These expenditures were considered to be in addition to the R&R Fund deposits described above (reference Assumption No. 11). These capital expenditures were based on recent expenditure trends and discussions with Department staff.
13. Investment income on funds and accounts created by the Bond Resolution and by the County (e.g., customer deposits) are estimated based on projected average fund balances and assumed investment or interest rates ranging from 1.25% to 1.50% during the Forecast Period based on discussions with the County. The interest rates have been applied to estimated balances, if any, in the debt service Sinking Fund, Debt Service Reserve Account, the Renewal and Replacement Fund, the Meter Deposit Fund, and the Revenue (operating) Fund. We have also assumed that any interest earnings on the Capital Facilities Charge Funds and the Construction Funds, if any, will be deposited in the respective funds and not be available for operating expense or debt service requirements consistent with the provisions of the Bond Resolution. Table 8 provides a summary of the transfers in and out of each fund / account, interest earned on the average cash balances on deposit in such funds, and corresponding ending cash balances for each fund / account maintained by the Department on behalf of the System.
14. The capital improvement program for the water and wastewater system are based on: i) the Fiscal Year 2020 Proposed Ten-Year Capital Budget; and ii) information provided by the Department regarding the status of current and anticipated projects. The primary purpose for the incurrence of the capital projects for the System are to provide for the:
  - a. Renewal and replacement of the existing infrastructure of the System;
  - b. Water Treatment Plant Expansion in outer years of the forecast; and
  - c. Line extensions to provide service to existing developed areas (assessment programs) and infrastructure upgrades for new growth and assessment programs.

Table 5 at the end of this report provides a detailed listing of the capital projects for the water and wastewater system for the ten-year Forecast Period and includes the anticipated funding sources

for each project through the entire ten-year projection period. Included in the capital improvement program is the use of the R&R Fund to finance recurring capital projects (i.e., essentially the betterment or replacement of assets). The recognition of this revenue requirement is necessary in order to allow the County a funding mechanism to continue to provide high quality service (i.e., maintain same level of service) to its customers as the utility system ages.

Based on discussions with Department staff, the Capital Improvement Program (CIP) as provided by Department staff was adjusted for inflation beginning with the Fiscal Year 2021 identified capital projects based on four capital cost escalators ranging from constant (no inflation) to high at 5.00%; The timing, priority, and funding of such capital needs were developed with the guidance of Department staff. The following is a summary of capital expenditures and the corresponding estimated funding sources assumed in the development of the financial forecast:

**Summary of Forecasted Capital Improvement Program – \$000s [1]**

Description	Fiscal Year Ending September 30,										Total
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
<b>Capital Projects:</b>											
Water System	\$14,244	\$3,802	\$9,135	\$2,433	\$4,199	\$2,477	\$3,536	\$20,746	\$4,591	\$3,053	\$68,217
Water Other Recognized Projects [2]	2,029	16,461	4,603	1,028	3,227	0	0	0	0	0	27,348
Wastewater System	10,621	2,444	1,789	2,193	2,281	5,848	1,748	2,121	2,933	3,855	35,834
Wastewater Other Recognized Projects [2]	14,901	9,476	25,050	13,369	27,763	15,233	12,238	13,316	984	1,013	133,342
Vehicles and Equipment	0	0	0	0	0	0	0	0	0	0	0
<b>Total Capital Projects</b>	<b>\$41,795</b>	<b>\$32,183</b>	<b>\$40,577</b>	<b>\$19,022</b>	<b>\$37,470</b>	<b>\$23,559</b>	<b>\$17,522</b>	<b>\$36,183</b>	<b>\$8,508</b>	<b>\$7,922</b>	<b>\$264,740</b>
<b>Estimated Funding Sources:</b>											
Renewal and Replacement – Fund 4105	\$14,267	\$4,866	\$6,105	\$3,694	\$4,375	\$3,176	\$4,735	\$4,660	\$6,944	\$6,312	\$59,135
Capital Facilities Charges – Fund 4103/4	8,018	2,300	4,069	1,114	2,295	5,346	754	776	799	823	26,294
Operating Reserves – Fund 4102 [3]	3,880	925	1,378	424	437	450	464	478	492	507	9,434
State Revenue Sharing	1,430	1,100	2,060	2,122	2,185	2,023	2,319	2,388	0	0	23,927
FPL Franchise Fees	0	0	1,545	1,591	1,639	1,688	1,739	1,791	0	0	9,994
Grant Funding	2,000	0	0	0	0	0	0	0	0	0	2,000
Prior Bond Proceeds	10,509	0	0	0	0	0	0	0	0	0	10,509
Debt Proceeds	0	22,562	25,185	9,835	26,291	10,621	7,253	25,824	0	0	119,271
Operating Rate Revenues	1692	430	235	241	247	253	260	266	273	280	4,177
<b>Total Estimated Funding Sources</b>	<b>\$41,795</b>	<b>\$32,183</b>	<b>\$40,577</b>	<b>\$19,022</b>	<b>\$37,470</b>	<b>\$23,559</b>	<b>\$17,522</b>	<b>\$36,183</b>	<b>\$8,508</b>	<b>\$7,922</b>	<b>\$264,740</b>

[1] Derived from Table 5 at the end of this section.

[2] Amounts shown reflect projects associated with water and wastewater extensions to developed but unserved areas of the County, which reflect a continuation of the ongoing extension program and the Septic to Sewer Project, which are anticipated to be constructed by the Department but have not been formally approved by the Board as of the date of this report.

[3] Operating reserves were primarily used to fund the Assessment-related projects of the System and other miscellaneous projects and to maintain a proper balance of monies in the Operating Fund and the R&R Fund during the Forecast Period.

15. As can be seen above, the capital needs of the System are projected to be approximately \$264.7 million for the Forecast Period. The CIP is projected to be primarily funded from available cash reserves and revenues generated during the Forecast Period from operations (rates) and Capital Facilities Charges. It is recommended that the System continue to principally employ the pay-as-you-go funding strategy, where practical for the overall long-term sustainability of the System. This funding methodology is recommended particularly for utilities approaching build-out status for which the majority of projects are identified for existing facilities that generally benefit the existing customers of the System. It should be noted that approximately \$160.7 million or 61% of the Capital Program recognized for the development of the financial forecast includes projects associated with the Septic to Sewer Extension Program and other anticipated water utility extension programs that may have not yet been formally approved by the BOCC but are anticipated by the Department to become a component of the program in the future. All of the

extension-related capital projects are to be funded, in part, by additional capital-recovery assessments to be charged to the customers connecting to the System.

16. For the purpose of this analysis, the Capital Facility Charges and use of such fund balances have been recognized to fund only the expansion projects of the System, thus reducing project funding from utility revenues or future debt service costs. Moreover, no funds from the imposition of Capital Facility Charges were assumed to be used to offset the payment of any debt service requirements even though such revenues are considered a component of Pledged Revenue for bond coverage purposes pursuant to the Bond Resolution.

With respect to the determination of the amount of Capital Facility Charges to be reflected as pledged revenue in the analysis of bond coverage purposes, such amounts were adjusted to recognize only the estimated Capital Facilities Charges debt service component in the calculation. The component was determined by multiplying the aggregate Debt Service Requirement for the Outstanding Bonds by the Expansion Percentage as defined in the Bond Resolution and comparing the amount of Capital Facilities Charges projected to be collected during the Forecast Period. The Expansion Percentage was based on: i) a review of the projects initially funded from the Outstanding Bonds; and ii) estimated capacity utilization relationships coincident with the issuance of the Outstanding Bonds, it was estimated that the Expansion Percentage to determine the Capital Facilities Charges Debt Service Component is on average 77% of the total projected Debt Service Requirement for the Forecast Period. For the projected period shown, the amount of Capital Facilities Charges recognized as a Pledged Revenue of the System were assumed as follows:

<b>Fiscal Year</b>	<b>Total Debt Service</b>	<b>Expansion Percentage</b>	<b>Expansion Debt Service</b>	<b>CFC Collections [*]</b>	<b>Pledged CFC Revenue</b>
2020	\$7,836,566	77.13%	\$6,044,035	\$2,849,985	\$2,849,985
2021	9,034,604	77.13%	6,968,034	2,388,526	2,388,526
2022	9,523,344	77.13%	7,344,981	2,206,714	2,206,714
2023	11,525,800	77.13%	8,889,396	2,346,921	2,346,921
2024	12,272,829	77.13%	9,465,550	2,268,227	2,268,227
2025	13,167,559	77.13%	10,155,620	2,133,520	2,133,520
2026	13,471,476	77.13%	10,390,019	2,036,441	2,036,441
2027	11,129,296	77.13%	8,583,588	1,958,711	1,958,711
2028	11,448,154	77.13%	8,829,510	1,992,267	1,992,267
2029	10,908,186	77.13%	8,413,055	1,974,702	1,974,702

[\*] Amounts shown include estimated interest earnings on Capital Facilities Charges ("CFC") fund balances held by the County.

## NET REVENUE REQUIREMENTS/IDENTIFIED RATE ADJUSTMENTS

The net revenue requirements of the System are presented on Table 6 and are shown below and were based upon i) the customer forecast identified herein; ii) the existing rates for service; iii) the operating expense assumptions as delineated above; iv) the capital improvement plan as identified by the County and funding analysis assumed herein; and v) the rate covenants as defined in the Bond Resolution and loan documents, all as discussed throughout this report. The purpose of the development of the net revenue requirements is to determine the level of revenue from monthly user rates required to meet the financial obligations of the System. The following provides a summary presentation of the projected net revenue requirements and overall recommended rate adjustments for the System:

**Projected Combined Water and Wastewater System Net Revenue Requirements (\$000s) [1]**

Description	Fiscal Year Ending September 30,									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Expenses:	\$22,242	\$23,713	\$24,093	\$25,058	\$26,169	\$26,909	\$28,069	\$29,291	\$30,219	\$31,671
Other Revenue Requirements:										
Existing Debt Service	\$7,837	\$7,836	\$7,834	\$8,370	\$8,372	\$8,289	\$8,189	\$4,525	\$4,530	\$3,990
Proposed Debt Service	0	1,199	1,689	3,156	3,901	4,879	5,283	6,605	6,918	6,918
Capital Funded from Rates	1,692	430	235	241	247	253	260	266	273	280
Transfer to R&R Fund	5,250	5,303	5,356	5,410	5,464	5,519	5,574	5,630	5,686	5,743
Transfer to CFC Fund [2]	0	0	0	0	0	0	0	0	0	0
Transfer to Reserves [3]	267	0	518	721	776	1,292	1,553	4,203	4,549	4,770
Transfer to General Fund – Building Mortgage Payment	196	168	169	169	169	169	169	169	169	169
Municipal Service Benefit Unit - Special Assessment Revenue Note	153	154	153	153	153	153	153	153	153	153
Gross Revenue Requirements	\$37,636	\$38,803	\$40,047	\$43,278	\$45,251	\$47,464	\$49,249	\$50,842	\$52,497	\$53,694
Less Income and Funds from Other Sources:										
Other Revenues [4]	\$2,608	\$2,517	\$2,666	\$4,515	\$5,015	\$5,753	\$6,146	\$6,463	\$6,827	\$6,825
Interest Income	447	403	444	495	548	613	679	746	830	904
Transfers from Reserves	0	29	0	0	0	0	0	0	0	0
Net Revenue Requirements	\$34,581	\$35,853	\$36,937	\$38,268	\$39,688	\$41,098	\$42,424	\$43,633	\$44,841	\$45,965
Price Index [5]	0.00%	1.79%	0.70%	1.65%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Revenue Under Utility Rates [5]	\$34,581	\$35,853	\$36,937	\$38,268	\$39,688	\$41,098	\$42,424	\$43,633	\$44,841	\$45,965
Revenue Surplus / (Deficiency):	0	0	0	0	0	0	0	0	0	0
Percent of Rate Revenue	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

[1] Amounts shown in thousands of dollars (\$1,000s) and derived from Table 6 at the end of this report.

[2] As a part of the County's assessment program, a portion of the total assessment revenues are for CFC charges customers must pay when connecting for new service. Therefore, amounts shown reflect transfers to the CFC allocable portion of assessment revenues anticipated during the Forecast Period.

[3] Transfers to the operating reserves are recognized for use in funding future capital improvements and maintaining adequate cash reserves.

[4] Amount shown include projections of anticipated assessment revenues associated with water and wastewater line extensions.

[5] Revenues under monthly utility rates recognize application of the annual Price Index rate adjustment.

As can be seen above and shown in more detail on Table 6, the existing rate revenues, adjusted to recognize the continued (with re-instatement) application of the annual Price Index through Fiscal Year 2029, is anticipated to be sufficient to adequately fund the identified revenue requirements of the System. The compound annual growth of the net revenue requirements of the System is forecasted to be approximately 3.2% for the Forecast Period.

During the Forecast Period, the rate revenues anticipated to be earned during the Forecast Period are projected to provide additional funds that are available to be transferred to the cash reserves of the System. These reserves are necessary in order to: i) provide funds to maintain adequate working capital target levels to allow for external attraction of funds at lower interest rates and to provide funds in case of extraordinary events (e.g., hurricane); ii) provide additional funding for future capital improvements (Pay-Go funding); iii) to provide funds to allow for any phase-in of future rate increases and to provide future funds for rate stabilization purposes; and iv) fund additional indebtedness. The estimated ending cash balances within the operating fund reserves for the final fiscal year of the Forecast Period is estimated to be approximately \$51.4 million and generally targets a minimum balance of 120 days of operating expenses, which is considered a reasonable and prudent level of working capital reserves. To the extent that the application of the Price Index is discontinued before Fiscal Year 2025 or is not reinstated after Fiscal Year 2025, then the ability of the System revenues to fund the expenditure requirements and maintain the recommended reserve fund balances may be negatively impacted. Accordingly, the County would need to adjust the CIP, expenditures and funding plan in order to maintain the ability to fund the other System costs; such adjustment (amount) could be material. It is anticipated that the County may need to adjust rates at some point (i.e., a formal rate increase) if the Price Index application is not re-instated during the Forecast Period in order to meet the expenditure requirements of the System.



## CUSTOMER IMPACT

In order to provide additional information to the County regarding the effects of the recommended change in monthly rates for service, an analysis to illustrate the impact for the standard 5/8" x 3/4" meter customer was prepared. This meter size was selected since it represents the meter used to serve approximately 99% of all residential single-family accounts served by the County. The effect of the Price Index rate adjustments for Fiscal Year 2019 to the typical or average residential customer using 6,000 gallons of metered water will receive an increase in the monthly water and wastewater bill as follows:

<b>Monthly Bill Increase – Single-Family Residential Customer Using 6,000 Gallons of Service [1][2]</b>	
	Amount
Existing Rates – Effective 6/1/20	\$78.01
Adopted Rates – Effective 6/1/21	\$79.38
Increase in Monthly Bill:	
Amount	\$1.37
Percent	1.8%

[1] Based on application of the Fiscal Year 2021 Price Index to existing rates.

[2] Derived from Table 11 at the end of this section.

**(Remainder of page intentionally left blank)**

In addition, a survey of other neighboring utilities levels of monthly user rates assessed to residential single-family 5/8" x 3/4" metered customers was compiled within Tables 9 through 11 and is summarized below:

<b>Residential Service Assuming 6,000 Gallons of Utility Service [1][2]</b>			
	<u>Water</u>	<u>Wastewater</u>	<u>Total</u>
<b>Martin County:</b>			
Existing Rates – Effective 6/1/2020	\$31.89	\$46.12	\$78.01
Adopted Rates – Effective 6/1/2021	32.45	46.93	79.38
<b>Within Martin County:</b>			
City of Indiantown	\$26.04	\$50.62	\$76.66
South Martin Regional Utilities	31.33	48.36	79.69
City of Stuart	37.15	50.12	87.27
Outside City – City of Stuart [3]	46.44	62.67	109.11
Other Utilities' Average Within Martin County	\$35.24	\$52.94	\$88.18
<b>Other Florida Utilities</b>			
City of Boynton Beach	\$23.23	\$32.03	\$55.26
City of Deerfield Beach	30.90	27.24	58.14
City of Delray Beach	19.47	38.39	57.86
City of Fort Lauderdale [2]	31.43	54.96	86.39
Fort Pierce Utilities Authority	37.14	49.66	86.80
Indian River County	22.69	32.76	55.45
Town of Jupiter [2]	30.07	22.75	52.82
City of Lake Worth [2]	45.28	44.10	89.38
City of Melbourne [2]	35.42	52.93	88.35
Okeechobee Utility Authority	53.27	66.71	119.98
City of Palm Bay	39.32	59.74	99.06
Palm Beach County [2]	29.19	36.13	65.32
City of Port St. Lucie [2]	40.35	64.34	104.69
Riviera Beach Utility District [2]	34.75	34.46	69.21
St. Lucie County [2]	49.11	70.23	119.34
St. Lucie West Services District	36.24	42.45	78.69
Seacoast Utility Authority [2]	28.80	36.69	65.49
City of Sunrise [2]	45.41	54.64	100.05
Village of Tequesta [2]	38.39	22.75	61.14
City of Vero Beach	20.53	41.43	61.96
Village of Wellington [2]	33.57	31.68	65.25
City of West Palm Beach [2]	45.65	48.17	93.82
<b>All Comparable Utilities' Average</b>	<u>\$35.04</u>	<u>\$45.23</u>	<u>\$80.27</u>

[1] Amounts shown are up to date as of October 2020 and are derived from Tables 9 through 11 and assume service through a 5/8" x 3/4" meter; other Florida utilities represent utilities located in the southeast portion of the state in general proximity of the County's utility service area.

[2] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans on implementing a rate revision within the next twelve (12) months.

[3] Utilities shown reflect bills calculated recognizing the respective city's adopted and effective outside city surcharge as applied uniformly to the inside city rates for monthly water and wastewater service. Unless otherwise noted and with exception to the City of Vero Beach, which charges a 10% outside city surcharge, all other municipal-related utilities shown reflect the application of a 25% outside city surcharge to inside city rates.

As can be seen above, the average bills produced from the rates that are identified for the Fiscal Year 2020 are generally competitive with the rates charged by other neighboring jurisdictions to the County. It should be noted that several of the utilities surveyed are anticipating a rate change in the next twelve months (pursuant to a rate evaluation that is underway, an adopted rate-phasing program, or through the application of a price index), which should improve the competitive position of the System rates.

# Debt Service Coverage and Covenant Compliance

## DEBT SERVICE COVENANT COMPLIANCE

An important component in the development of the Financial Forecast is the determination of whether the rate covenants as outlined in the prevailing Bond Resolution authorizing the issuance of the System's Outstanding and additional parity bonds, if any, will be met. Generally, these covenants are in the form of certain debt service coverage ratios, which are applicable to the level of rates both currently and projected to be in place. The County's Bond Resolution contains specific covenants under which the County will fix, establish, and maintain rates that will provide Net Revenues in each fiscal year to meet:

*"...(a) one hundred twenty percent (120%) of the Bond Service Requirement on the Bonds in the corresponding Bond Year, plus (b) one hundred percent (100%) of the required deposits into (i) the Reserve Account...and (ii) the Renewal, Replacement, and Improvement Fund in such Bond Year.*

In addition to the terms of the Bond Resolution, the County must also set rates to meet the terms and conditions of the State Revolving Loan Fund Agreement between the County and the FDEP (the "Loan Agreement"); the SRF Loan is subordinate to the Outstanding (Senior Lien) Bonds. Under terms of the Loan Agreement, the County has adopted the following covenant:

*"shall maintain rates and charges for the services furnished by the Water and Sewer Systems which together with Special Assessments will be sufficient to provide, in each Fiscal Year, Pledged Revenues equal to or exceeding 1.15 times the sum of the Semiannual Loan Payments due in such Fiscal Year. In addition, the Local Government [County] shall satisfy the coverage requirements of all senior and parity debt obligations."*

As summarized on Table 7 at the end of this report, the anticipated revenue for the Water and Wastewater System, assuming that the County continues to implement the adopted and the proposed price index rate adjustments as identified in this report for the Forecast Period, should be adequate for the Forecast Period presented in this study to meet the rate covenant requirements defined in the County's Bond Resolution and the Loan Agreement. The projected debt service coverage requirements for the revenue bond indebtedness are summarized below:

Description	Fiscal Year Ending September 30,									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Senior Lien Coverage – Rate Revenue:										
Coverage Ratio – Calculated	242%	202%	201%	203%	201%	207%	209%	295%	301%	298%
Coverage Ratio – Required [2]	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Subordinate Lien Coverage – Rate Revenue:										
Coverage Ratio – Calculated	3856%	2885%	3053%	382%	333%	297%	289%	360%	350%	344%
Coverage Ratio – Required [3]	115%	115%	115%	115%	115%	115%	115%	115%	115%	115%
All-In Debt Coverage: [4]										
Coverage Ratio – Rate Revenues	211%	179%	180%	153%	148%	144%	142%	173%	172%	179%
Coverage Ratio – Minimum Target [5]	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%

[1] Amounts shown derived from Table 7 at the end of this report.

[2] Represents minimum rate covenant requirement of the Bond Resolution.

[3] Represents minimum rate covenant requirement of the SRF Loan Agreement WWG12063607P.

[4] Represents the sum of annual debt service payments made on all outstanding and anticipated bonds / loans allocable to the System ("All-In Coverage").

[5] Although the Bond Resolution or SRF Loan Agreement does not require maintaining a minimum "All-In" debt coverage ratio; a target equal to or greater than 150% is recommended and was based on published debt coverage medians for AA-rated utilities pursuant to leading credit agency reports.

As can be seen above and assuming the implementation of the price index adjustments as identified in this report, it is anticipated that i) the Net Revenues of the System will exceed the 1.20 debt service coverage requirement on the Outstanding Bonds and any additional parity Bonds as required by the Bond Resolution; and ii) the Net Revenues after the payment of the Senior Lien Bonds will exceed the 1.15 loan coverage requirement as required by the Loan Agreement executed with the FDEP during the Forecast Period.

It should be noted that, beginning with Fiscal Year 2027, the projected debt service coverage ratios are currently projected to increase (improve). This improvement is due to a significant reduction in the annual debt service payments for the Series 2016 Bonds (refunding bonds structured based on prior actual refunded bond repayment attributes).

## **RATE COVENANT COMPLIANCE**

The Bond Resolution also requires that certain funds be established and maintained and that revenues from utility operations be applied to the funds in a particular order or sequence. With respect to the flow of funds, we have assumed or recognized the following for the preparation of the rate study.

### **Revenue Fund**

Except as noted below, all funds received from the application of rates, fees, and charges were assumed to be available to the County to meet the expenditure requirements of the System. We have not recognized as a revenue to the System, which would subsequently be deposited in the Revenue Account moneys received from: i) the application of Capital Facilities Charges; or ii) interest income on Construction Fund, or the Capital Facilities Charge Accounts. Based on our analysis of rates, we assumed that moneys held in the Revenue Fund would first be applied to the payment of Operating Expenses.

### **Sinking Fund**

For the purposes of this report, we have recognized the funding of the Sinking Fund (for the payment of the principal and interest on outstanding bonds) on an accrual basis as opposed to an "as paid or cash" basis consistent with the flow of funds requirements of the Bond Resolution; this would also provide a better match to the evolution of the sufficiency of rates since it links the cash funding needs for their revenue requirement. Additionally, for ease of presentation, we have presented the funding of the Sinking Fund without the recognition of a credit for interest earnings (i.e., on a "gross funding" basis) to be consistent with the schedule of bond service payments. All earnings accrued to the utility system from the Sinking Fund Account have been recognized separately as revenue to the System.

### **Reserve Account**

Pursuant to the Bond Resolution, the County must maintain a balance in the Reserve Account (defined as the Reserve Account Requirement) as a surety to the bondholders, the Reserve Account Requirement may be either cash-funded or secured, in whole or in part, by a Reserve Account Credit Facility in lieu of fully funding a Reserve Account. For the Forecast Period for the Series 2016 Bonds, no Reserve Fund Requirement was required due to the strong fiscal position of the Utility; it was assumed that the System would not be required to fund a debt service reserve or its equivalent during the Forecast Period. Accordingly, no deposits have been recognized in the determination of monthly service rates or in the

determination of the coverage test on the outstanding bonds for the Forecast Period as required by the Bond Resolution.

### **Renewal and Replacement Fund**

Based on the funding requirements for the Renewal and Replacement Fund as specified in the Bond Resolution, a minimum annual payment to the Renewal and Replacement Fund in the amount equal to five percent of the previous year's Gross Revenues is required unless the County's Consulting Engineers certify an amount necessary for the purposes of the Renewal and Replacement Fund (defined as the Renewal and Replacement Fund Requirement). Based upon these funding requirements, the estimated capital improvement plans of the System, and discussions with the management of the Utilities Department, an annual transfer to the Renewal and Replacement Fund of \$5.5 million on average was recognized during the Forecast Period.

It should be noted that the proposed rates are anticipated to produce sufficient revenues to fund anticipated departmental capital needs such as vehicle and equipment purchases in addition to the funding of the Renewal and Replacement Fund. Such amounts could be deposited in the Renewal and Replacement Fund or be maintained in the General Reserve Fund.

### **Other Financial Considerations and Performance**

Included as part of the development of Ten-Year Financial Forecast and the review of the overall sufficiency of System revenues is an evaluation of the financial position of the System. This evaluation includes the development of certain ratios and the review of financial performance indicators to evaluate "where the System will be financially." The analysis includes a series of charts and figures prepared to provide the County a visual representation of the financial and statistical trends in the selected financial ratios or benchmarks anticipated for the System over the Forecast Period. The following is a brief description of financial ratio evaluated by Raftelis on behalf of the System.

#### **Figure 1 – All-In Debt Service Coverage**

The following Figure 1A presents the annual total debt service payments for outstanding and projected bonds and loans for the Forecast Period. The Financial Forecast does recognize additional parity Bonds and the issuance of additional subordinate debt associated with Extension Program, which will be funded primarily from assessment revenues.

**(Remainder of page intentionally left blank)**

### 1A) Existing and Proposed Debt Payments - Principal and Interest

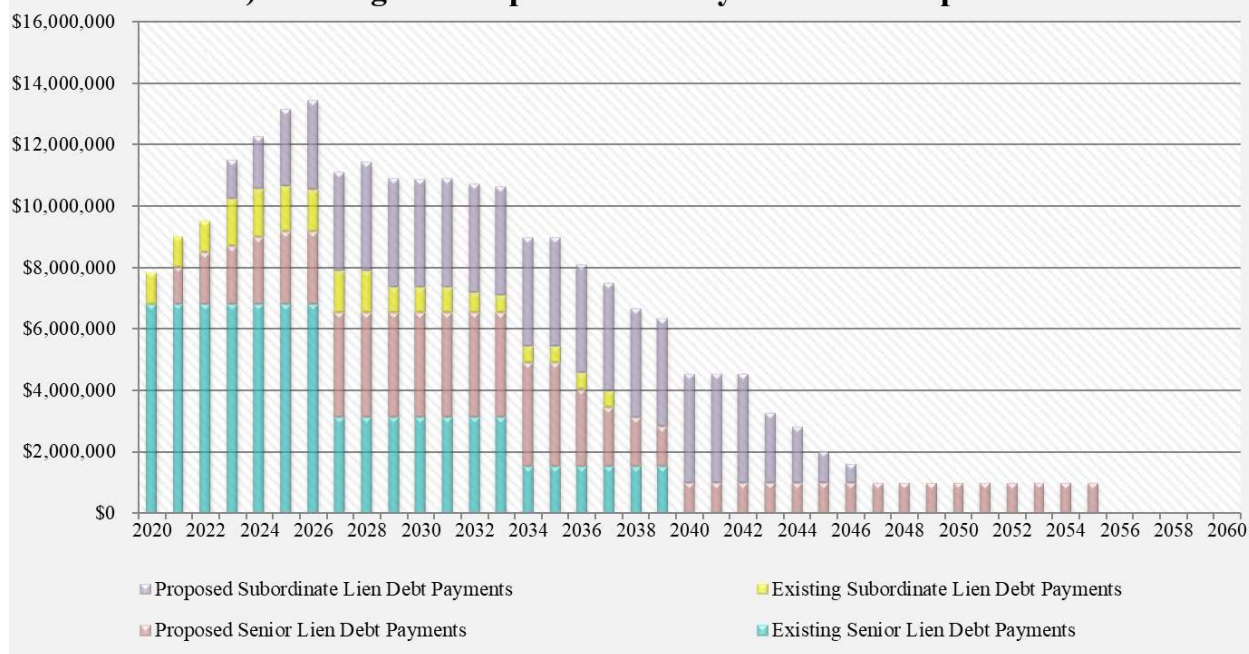
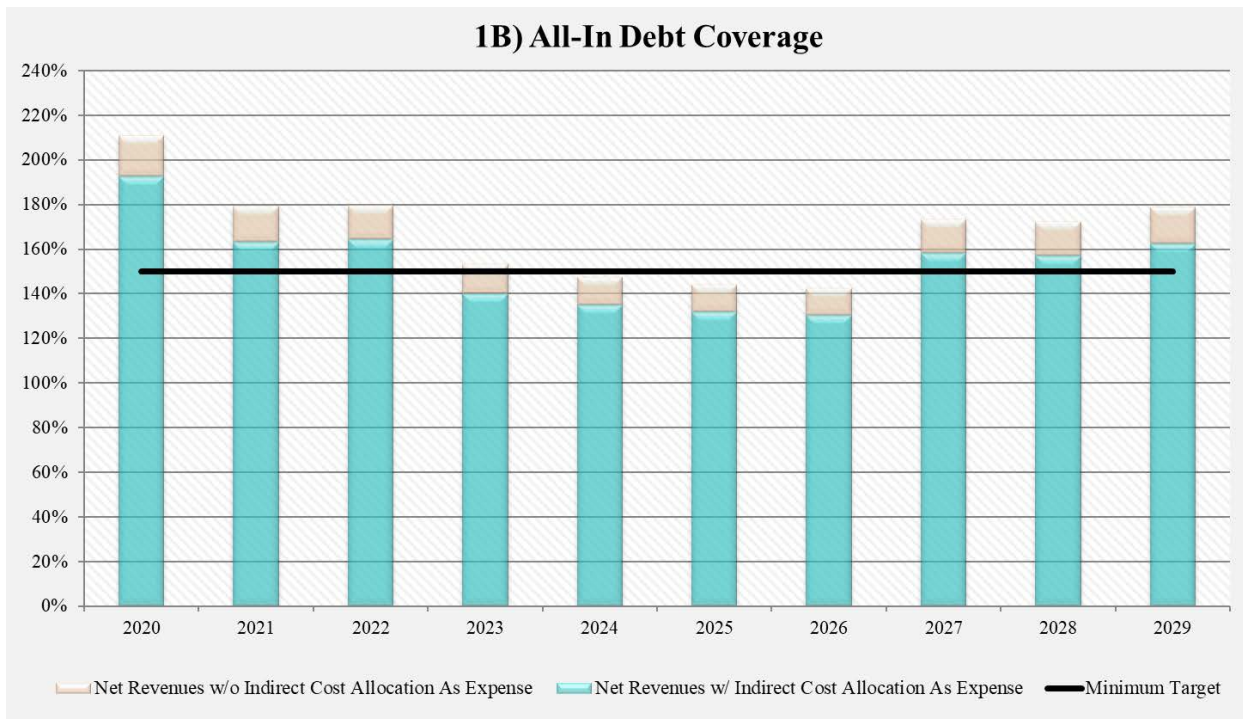


Figure 1B below presents the debt service coverage for the aggregate of all System debt and loans paid from System revenues, which more accurately reflects the ability to fund the debt requirements from rates. The ratio only includes the Net Revenues of the System since Capital Facilities Charges (although considered as a pledged revenue) are one-time fees and not considered as a recurring revenue for debt repayment purposes. Additionally, the rating agencies rely on this ratio in the review of utility credits since it links to the total ability to pay debt from ongoing revenues of the utility and presents the overall leveraging capability of such utility. The All-In Debt Service Coverage ratio is presented below:

**(Remainder of page intentionally left blank)**



The minimum debt service coverage ratio target was set at 1.50 based on medians as reported by the leading credit rating agencies. It is worth noting that the financial target serves as broad indicator and any significant deviation is not necessarily an indicator of credit quality. The debt service coverage ratios are considered by Raftelis to be favorable, especially in a utility with a high degree of investment due to stringent treatment and alternative water supply standards such as the County's. It should be noted that the debt coverage percent (above 100%) provides: i) ongoing funds for capital re-investment and ii) future debt leveraging capacity to the extent significant capital projects are required in the future, which limits the need for future rate increases above the assumed price index adjustments.

#### Figure 2 – Available Working Capital and Cash Balances

Another important component of the evaluation of the System is the resulting ending cash balance or cash position of the Utility. The estimated cash flow (deposits and withdrawals) are shown in detail on Table 8 at the end of this report. Below is a summary of the estimated ending cash balances by specific fund for the Forecast Period.

**(Remainder of page intentionally left blank)**

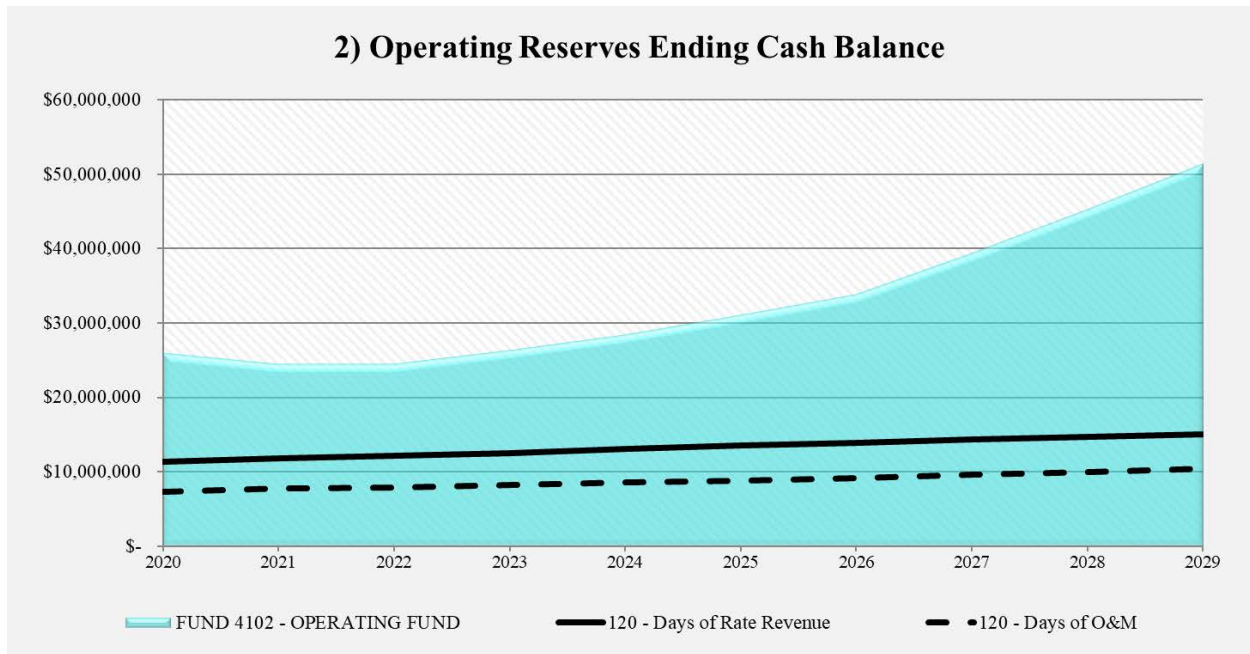
Projected Water and Wastewater System Ending Cash Balances (\$000s) [1][2]										
Description	Fiscal Year Ending September 30,									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Projected Ending Cash Balances:										
Fund 4102 – Operating Reserve	\$26,047	\$24,618	\$24,597	\$26,449	\$28,532	\$31,169	\$33,987	\$39,461	\$45,322	\$51,431
Sub-Fund 4102 – Customer Deposits	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176
Sub-Fund 4102 – Lend a Hand	3	3	3	3	3	3	3	3	3	3
Fund 4105 – R&R Fund	864	2,800	2,551	4,267	5,356	7,699	8,538	9,507	8,249	7,681
Fund 4103 – Water System CFC	5,434	4,938	2,605	3,565	3,783	4,488	5,125	5,679	6,204	6,714
Fund 4104 – Wastewater System CFC	4,360	5,528	6,600	7,492	7,896	4,625	5,926	7,250	8,656	10,080
Construction Account	0	0	0	0	0	0	0	0	0	0
Debt Service Reserve Fund	0	0	0	0	0	0	0	0	0	0
<b>Total Projected Ending Cash Balances</b>	<b>\$37,884</b>	<b>\$39,064</b>	<b>\$37,533</b>	<b>\$42,953</b>	<b>\$46,747</b>	<b>\$49,160</b>	<b>\$54,755</b>	<b>\$63,077</b>	<b>\$69,611</b>	<b>\$77,084</b>

[1] Amounts shown in thousands of dollars (\$1,000s); includes application of the approved price index rate adjustments.

[2] Amounts shown derived from Table 8 at the end of this report.

As can be seen above the ending cash balance for the utility funds increase during the Forecast Period primarily due to: i) growth in customers and corresponding net revenues associated with the assumed extension program; ii) issuance of debt to fund all capital for the extension program not funded from general fund contributions or grants; and iii) reduced capital spending in outer years of the Forecast Period, which may understate the true funding needs of the System as it is more difficult to anticipate capital funding requirements beyond the near-term. The projected increase in reserves will help maintain the County’s “Pay-Go” funding for future Capital needs not yet identified, or for unexpected emergency projects the County may run into. With less money available for “Pay-Go” funding, the County may have to issue more debt in the future to help fund the capital program.

Below is a graphical representation of the projected ending cash balances for the Operating Fund (working capital) and targeted ending balance:



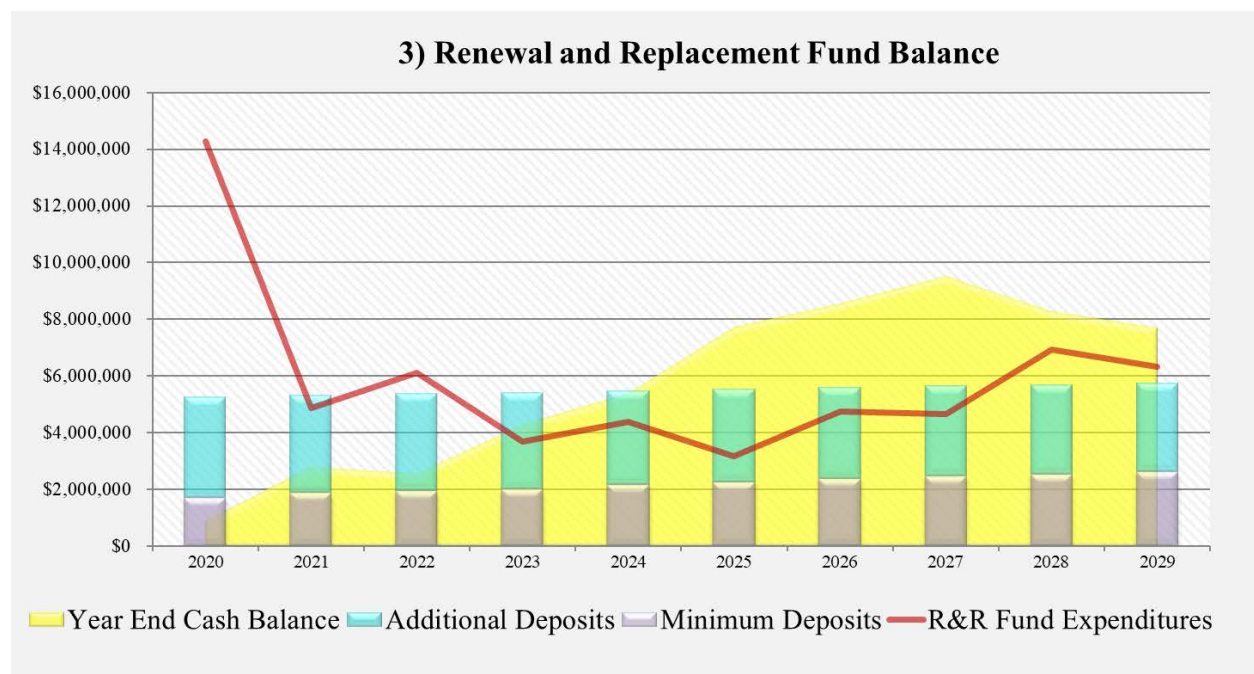
As can be seen above the recommended rate adjustments serve to generally maintain the minimum targeted ending cash balance throughout the Forecast Period. It is projected that the Operating Reserve balance



stays above the target in all Fiscal Years. It should be noted that the forecast does recognize the issuance of additional parity bonds in the principal amount of \$10,220,997 during Fiscal Year 2021, and the issuance of additional parity bonds in the principal amount of \$17,642,123 in Fiscal Year 2027 to fund additional capital projects beyond the debt associated with the extension programs; however, this additional increase in debt is considered by Raftelis to be very manageable and is anticipated to not negatively affect the overall fiscal position of the System.

**Figure 3 – Renewal and Replacement (R&R) Fund Balance**

As discussed earlier in this report, it is recommended that the County increase the annual deposits to the R&R Fund in order to provide additional funding for capital improvements, to improve the long-term equity position of the System, and to stabilize rates over the long-term (through the avoidance of debt). The majority of the projects identified by the County are for asset replacement as opposed to asset expansion, especially in the latter part of the Forecast Period. Accordingly, these projects are proposed to be funded from funds deposited to the R&R Fund annually from operations. As can be seen on Figure 3 below, the capital financing plan (which assumes increased revenues due to the application of the Price Index) recognizes that sufficient funds will be available to fund the asset replacement projects and that adequate capital reserves will be maintained, then limiting the long-term financial risks to the System.



As part of the financial evaluation, Raftelis would suggest that the County consider adopting a policy of maintaining a minimum balance in the R&R Fund to provide funds for capital emergencies. As can be seen above, recognizing implementation of all identified price index adjustments (critical to the financial forecast) and the capital plan as shown in Figure 4 below, the System will generate sufficient cash to meet the identified expenditure needs for the Forecast Period and maintain a positive cash flow position.

**(Remainder of page intentionally left blank)**

**Figure 4 – Capital Improvement Program Funding**

The following graph presents the projected capital expenditure needs (on an appropriations basis) for the Forecast Period:

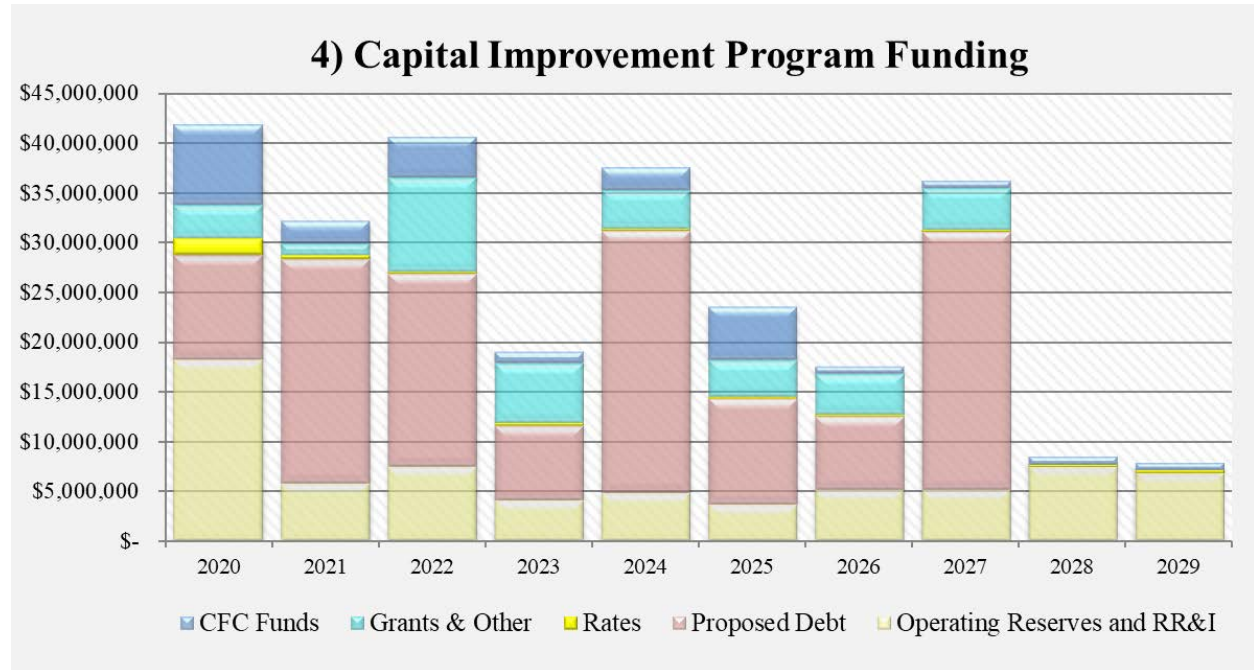


Figure 4 shown above summarizes the annual capital needs of the System and the anticipated projected funding sources of the County's Ten-Year Capital Improvement Program. The breakdown of the Capital Program, which is based on information provided by the County and its Consulting Engineers, reflects an allowance for adjustments to reflect allowances for annual inflation rates depending on the nature of the project beginning in Fiscal Year 2021 ranging from no inflation to 5.00%.

As can be seen below, approximately 50.1% of the identified capital program is anticipated to be funded from internal funding sources and grants (i.e., operating reserves, capital facility charges, General Fund contributions, etc.) A breakdown of the funding sources of the capital program is as follows:

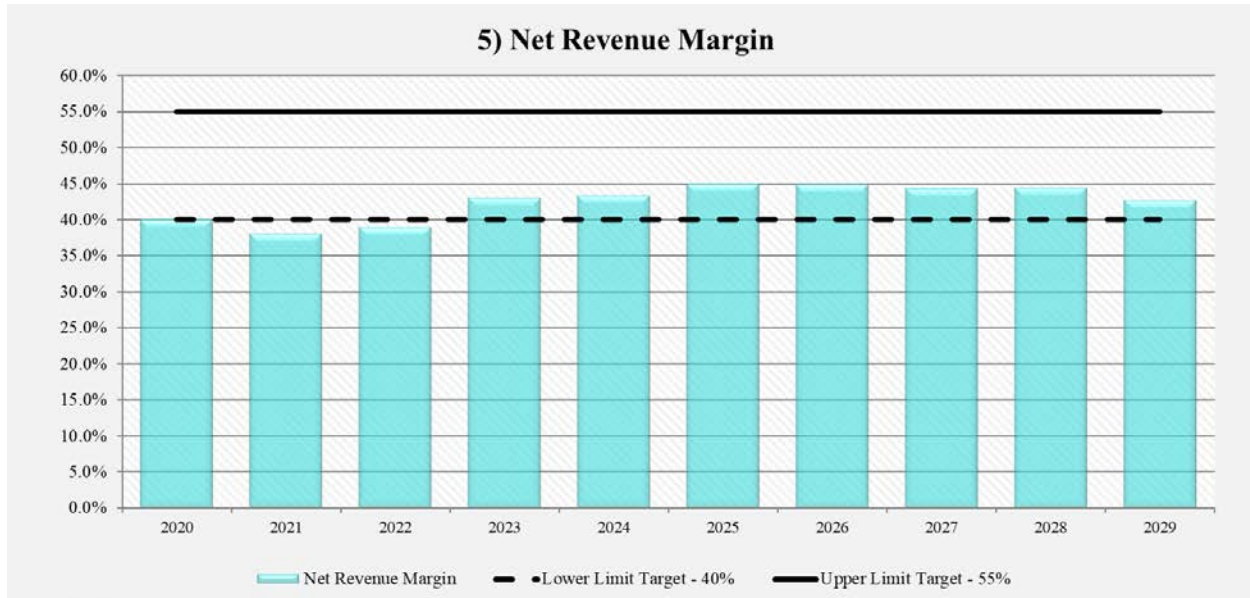
	Amount	Percent
Renewal and Replacement Fund	\$59,135	22.34%
Operating Reserves	9,434	3.56%
Capital Facility Charges	26,294	9.93%
Grants / Internal Contributions [2]	35,920	13.57%
Prior Debt Proceeds	10,509	3.97%
Additional Debt Proceeds	119,271	45.05%
Rate Revenues	4,177	1.58%
<b>Total CIP Funding</b>	<b>\$264,740</b>	<b>100.00%</b>

[1] Derived from Table 5 at the end of this Report.

[2] Internal Contributions are made up of a combination of FPL Franchise Fees as well as State Revenue Sharing.

**Figure 5 – Projected Net Revenue Margin Ratio**

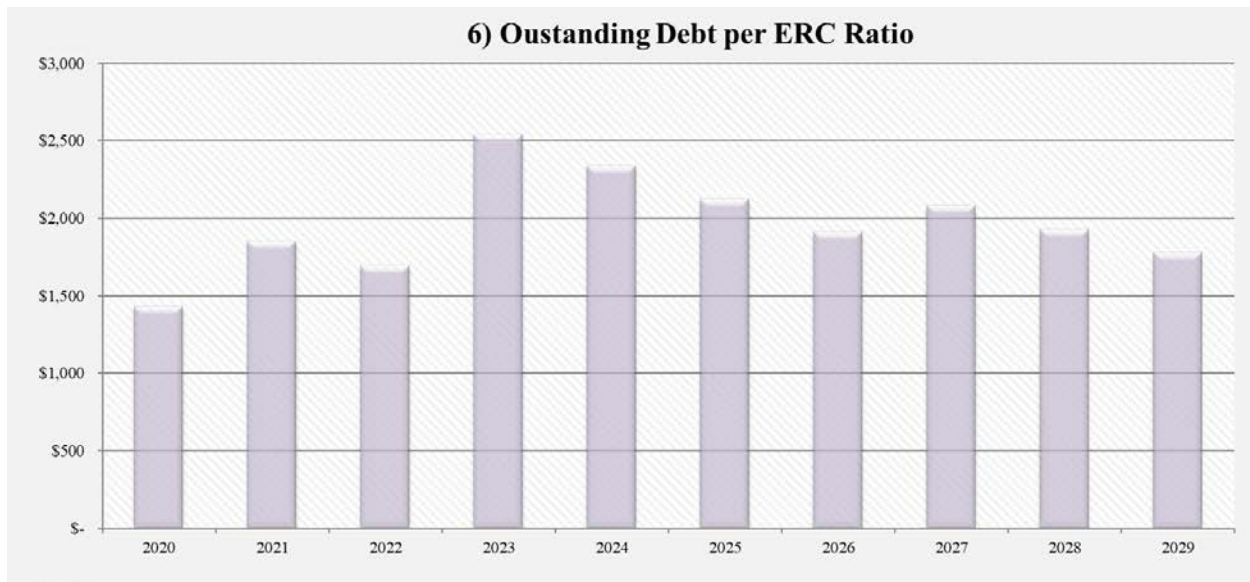
The Net Revenue Margin Ratio is a measure of a utility system's ability to meet its operating expenses and indicates the net contribution margin estimated to be earned by the System. The contribution margin can be considered as what may be available for reinvestment to the capital infrastructure of the System. A declining net revenue margin indicates a reduction in net available funds after payment of operating expenses to go to fund capital improvements. Generally, it is recommended that the Net Revenue Ratio target a minimum of 40% based on industry standards to promote the System's financial health over the long-term. As can be seen below, the net revenue margin is anticipated to generally increase during the Forecast Period reflecting: i) an increase in revenue from customers joining the system from the County's extension program; and ii) the continuation of the price index beginning with the Fiscal Year 2025. Overall, Raftelis views the Net Revenue Margin as favorable since there is a decline in the annual Debt Service Requirement in Fiscal Year 2027, which will release a component of the restrictions on the cash flow of the Utility.



As can be seen above, the net revenue margin is anticipated to stable which further indicates the need to implement the annual Price Index to fund the change in operating expenses.

**Figure 6 – Outstanding Indebtedness per Equivalent Residential Connection (ERC)**

The ratio of the amount of debt outstanding per ERC measures the amount of financial risk a utility has undertaken relative to the customers served. The higher the net ERC debt burden, generally the higher the rates for service and the greater reliance on impact fees or other external sources of funds to meet System operating needs. It is also an indication of the amount of potential "leveraging" capability a utility may have relative to funding future capital needs. Figure 6 shown below illustrates during the most recent historical and projected Forecast Period, the amount of outstanding principal senior lien indebtedness in relation to the amount of projected water system ERCs and is considered on being favorable by Raftelis.

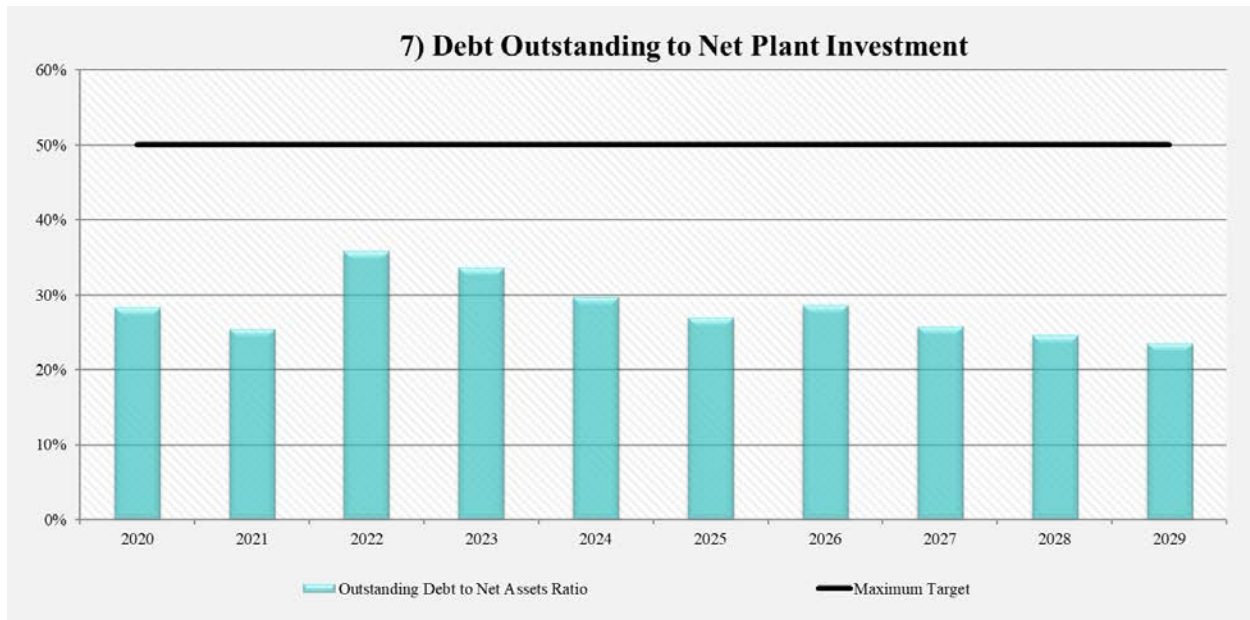


As can be seen, the amount of debt per ERC is expected to fluctuate throughout the forecast due to debt payment reductions and the issuance of debt to help pay for certain capital improvements including the Extension Program. The outstanding debt per ERC is considered favorable and is generally less than other utilities in Florida. This is especially true for those utilities that have not yet addressed the issue of alternative water resources located in the SFWMD Lower East Coast Basin, which are required to implement alternative water resource initiatives (may result in a significant amount of additional indebtedness).

**Figure 7 – Debt Outstanding to Net Plant Investment (Debt) Ratio**

This figure illustrates the amount of debt issued in relation to the amount of net plant investment in service to meet the potable water and wastewater demands of the System service area. This ratio presents the net equity of the utility (in terms of plant investment) and provides an indication of the reliance on debt to fund the existing net assets as well as the flexibility in terms of funding future capital assets and overall rate stability. Generally, the higher the ratio, the greater the need to have a larger portion of the rate revenues being dedicated to debt (principal) retirement. We have identified a maximum target for the ratio since it is expected that additional expansion projects anticipated to be funded from additional bond proceeds may be required in the future (considered to be beyond the Forecast Period). As can be seen below, the Debt Ratio is projected to fluctuate during the Forecast Period, similar to the outstanding debt to ERC graph, as seen above but overall maintains a favorable fiscal position.

**(Remainder of page intentionally left blank)**



## Rate Recommendations

In order to maintain the creditworthiness and financial position of the System, it is recommended that the County maintain the application of the adopted automatic Price Index application and consider reinstating the index subsequent to Fiscal Year 2025. It is also recommended that the County consider implementation of a Price Index floor at 2.0% and increase the ceiling to 4.0%. The primary reasons for these recommendations are to:

1. Maintain targeted cash reserves within the Operating Reserve Fund;
2. Maintain net operating margins by recovering increased operation and maintenance expenses associated with inflation, energy, and chemical increases and the residual effects on the cost of doing business (repairs, maintenance, etc.);
3. Provide dedicated annual transfers to the Renewal and Replacement Fund of \$5.7 million on average in support of the CIP funding program to provide for less debt in the future and promote rate sustainability; and
4. Maintain the creditworthiness of the System and meet necessary coverage requirements of the Bond Resolution.

**(Remainder of page intentionally left blank)**



# **MARTIN COUNTY, FLORIDA**

## **Water and Wastewater System**

### **Ten-Year Financial Forecast**

---

#### **LIST OF TABLES**

<u>Table No.</u>	<u>Title</u>
1	Summary of Historical Customer Statistics
2	Summary of Projected Customer Statistics
3	Summary of Projected System Operating Revenues
4	Summary of Projected Capital Facility Charge (CFC) Revenue
5	Summary of the Forecasted Ten-Year Capital Improvements Program
6	Summary of Combined Water and Wastewater System Revenue Requirements and Revenue Sufficiency
7	Projected Debt Service Coverage Analysis
8	Projected Fund Balances and Interest Income Determination
9	Comparison of Typical Monthly Residential Bills for Water Service
10	Comparison of Typical Monthly Residential Bills for Wastewater Service
11	Comparison of Typical Monthly Residential Bills for Combined Service

**Table 1**  
**Martin County, Florida**  
**Water and Wastewater System**  
**Summary of Historical Customer Statistics [1]**

Line No.	Description	Historical Fiscal Year Ending September 30,								
		2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>WATER SYSTEM</b>										
<b>SINGLE - FAMILY RESIDENTIAL:</b>										
1	Average Accounts (Monthly)	28,013	28,454	28,934	29,598	30,183	30,690	31,093	31,541	32,032
2	Average ERC (Monthly)	29,177	29,643	30,164	30,851	31,491	32,110	32,623	33,110	33,620
3	Billed Flow (Kgal)	2,149,350	2,072,961	1,935,251	2,088,152	2,179,449	2,236,914	2,409,849	2,246,229	2,431,105
4	Avg Monthly Flow Per Account (Gallons)	6,394	6,071	5,574	5,879	6,017	6,074	6,459	5,935	6,325
<b>MULTI - FAMILY RESIDENTIAL:</b>										
5	Average Accounts (Monthly)	377	389	387	389	390	390	392	392	394
6	Average Units Monthly	9,808	9,991	9,976	9,970	9,973	9,997	9,935	9,949	9,976
7	Average ERC (Monthly)	4,904	4,996	4,988	4,985	4,987	4,998	4,968	4,974	4,988
8	Billed Flow (Kgal)	317,575	323,343	303,670	313,697	333,855	335,543	341,479	330,316	329,333
9	Avg Monthly Flow Per Unit (Gallons)	2,698	2,697	2,537	2,622	2,790	2,797	2,864	2,767	2,751
<b>COMMERCIAL - NON-RESIDENTIAL:</b>										
10	Average Accounts (Monthly)	1,577	1,584	1,606	1,629	1,640	1,645	1,660	1,678	1,717
11	Average ERC (Monthly)	5,860	5,820	5,877	5,977	6,030	6,054	6,194	6,386	6,792
12	Billed Flow (Kgal)	467,576	470,160	475,239	487,291	494,938	514,111	508,592	515,328	507,621
13	Avg Monthly Flow Per Account (Gallons)	24,708	24,735	24,660	24,928	25,149	26,044	25,532	25,592	24,637
<b>IRRIGATION</b>										
14	Average Accounts (Monthly)	240	235	237	242	245	241	237	248	254
15	Average ERC (Monthly)	1,067	1,031	1,036	1,058	1,079	1,054	1,004	1,129	1,140
16	Billed Flow (Kgal)	187,286	169,119	163,697	156,750	175,509	158,329	177,326	150,246	167,283
17	Avg Monthly Flow Per Account (Gallons)	65,030	59,971	57,559	53,977	59,697	54,747	62,351	50,486	54,883
<b>FIRE LINE SERVICES:</b>										
18	Average Accounts (Monthly)	359	365	375	385	389	396	404	413	420
19	Average ERC (Monthly)	1,825	1,852	1,884	1,925	1,948	1,969	1,997	2,038	2,074
<b>TEMPORARY METER ACCOUNTS:</b>										
20	Average Accounts (Monthly)	28	21	24	24	27	30	31	38	49
21	Average Units (Monthly)	28	21	24	24	27	30	31	38	49
22	Billed Flow (Kgal)	2,631	1,554	2,715	3,907	3,889	6,396	13,309	11,351	21,284
23	Avg Monthly Flow Per Account (Gallons)	7,830	6,167	9,427	13,566	12,003	17,767	35,777	24,893	36,197
<b>TOTAL WATER SYSTEM</b>										
24	Average Accounts (Monthly)	30,594	31,048	31,563	32,267	32,874	33,392	33,817	34,310	34,866
25	Average ERC (Monthly)	42,861	43,363	43,973	44,820	45,562	46,215	46,817	47,675	48,663
26	Billed Flow (Kgal)	3,124,418	3,037,137	2,880,572	3,049,797	3,187,640	3,251,293	3,450,555	3,253,470	3,456,626
27	Avg Monthly Flow Per Account (Gallons)	8,510	8,152	7,605	7,876	8,080	8,114	8,503	7,902	8,262
28	Avg Monthly Flow Per ERC (Gallons)	6,075	5,837	5,459	5,670	5,830	5,863	6,142	5,687	5,919
29	Total Finished Water Produced (Kgal)	3,319,745	3,401,399	3,222,504	3,402,494	3,474,602	3,544,526	3,774,542	3,595,298	3,717,900
30	Unbilled Flow (Kgal)	195,327	364,262	341,932	352,697	286,962	293,233	323,987	341,828	261,274
31	As Percent of Treated Flow	5.88%	10.71%	10.61%	10.37%	8.26%	8.27%	8.58%	9.51%	7.03%

Footnotes on Following Page.

**Table 1**  
**Martin County, Florida**  
**Water and Wastewater System**  
**Summary of Historical Customer Statistics [1]**

Line No.	Description	Historical Fiscal Year Ending September 30,								
		2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>WASTEWATER SYSTEM</b>										
<b>SINGLE - FAMILY RESIDENTIAL:</b>										
32	Average Accounts (Monthly)	20,349	20,792	21,191	21,579	21,936	22,233	22,497	22,641	22,864
33	Average ERC (Monthly)	20,579	21,004	21,424	21,817	22,183	22,504	22,762	22,918	23,158
34	Billed Flow (Kgal)	1,025,556	1,028,369	1,007,093	1,053,967	1,079,641	1,099,512	1,144,745	1,089,328	1,145,280
35	Avg Monthly Flow Per Account (Gallons)	4,200	4,122	3,960	4,070	4,101	4,121	4,240	4,009	4,174
<b>MULTI - FAMILY RESIDENTIAL:</b>										
36	Average Accounts (Monthly)	251	265	268	274	274	274	276	277	281
37	Average Units Monthly	7,143	7,686	7,796	7,811	7,811	7,827	7,801	7,864	8,043
38	Average ERC (Monthly)	3,572	3,843	3,898	3,906	3,906	3,914	3,901	3,932	4,022
39	Billed Flow (Kgal)	253,542	242,776	242,805	247,822	260,557	263,824	273,413	266,526	262,365
40	Avg Monthly Flow Per Unit (Gallons)	2,958	2,632	2,595	2,644	2,780	2,809	2,921	2,824	2,718
<b>COMMERCIAL - NON-RESIDENTIAL:</b>										
41	Average Accounts (Monthly)	1,157	1,166	1,186	1,209	1,216	1,224	1,237	1,252	1,274
42	Average ERC (Monthly)	4,265	4,188	4,280	4,374	4,353	4,395	4,501	4,551	4,671
43	Billed Flow (Kgal)	397,690	379,695	382,634	411,525	405,074	420,220	420,887	424,173	414,778
44	Avg Monthly Flow Per Account (Gallons)	28,644	27,137	26,885	28,365	27,760	28,610	28,354	28,233	27,131
<b>FLAT RATE - SEWER ONLY ACCOUNTS</b>										
45	Average Accounts (Monthly)	405	414	416	406	414	417	417	415	418
<b>TOTAL WASTEWATER SYSTEM</b>										
46	Average Accounts (Monthly)	22,162	22,637	23,061	23,468	23,840	24,148	24,427	24,585	24,837
47	Average ERC (Monthly)	28,821	29,449	30,018	30,503	30,856	31,230	31,581	31,816	32,269
48	Billed Flow (Kgal)	1,676,788	1,650,840	1,632,532	1,713,314	1,745,272	1,783,556	1,839,045	1,780,027	1,822,423
49	Avg Monthly Flow Per Account (Gallons)	6,305	6,077	5,899	6,084	6,101	6,155	6,274	6,034	6,115
50	Avg Monthly Flow Per ERC (Gallons)	4,848	4,671	4,532	4,681	4,714	4,759	4,853	4,662	4,706
51	Total Treated Flow (Kgal)	1,412,566	1,503,830	1,518,403	1,513,667	1,514,569	1,565,968	1,540,257	1,631,239	1,531,925
52	Monthly Wastewater Flow per ERC (Gallons)	4,084	4,255	4,215	4,135	4,090	4,179	4,064	4,273	3,956
53	Ratio of Billed Flow to Treated Flow	118.71%	109.78%	107.52%	113.19%	115.23%	113.89%	119.40%	109.12%	118.96%

## Footnotes:

- [1] Amounts shown based on a summary of monthly operating reports provided by Department staff.  
[2] Beginning with April 2007, the South Florida Water Management District (SFWMD) imposed general water use restrictions.



**Table 2**  
**Martin County, Florida**  
**Water and Wastewater System**  
**Summary of Projected Customer Statistics [1]**

Line No.	Description	Historical	Projected Fiscal Year Ending September 30,									
		2019	2020 [2]	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>WATER SYSTEM</b>												
<b>SINGLE - FAMILY RESIDENTIAL:</b>												
1	Average Accounts (Monthly)	32,032	32,685	33,235	34,004	34,664	35,255	35,810	36,213	36,517	36,769	36,977
2	Average ERC (Monthly)	33,620	34,305	34,882	35,689	36,382	37,002	37,585	38,008	38,327	38,591	38,809
3	Billed Flow (Kgal)	2,431,105	2,392,542	2,432,802	2,489,093	2,537,405	2,580,666	2,621,292	2,650,792	2,673,044	2,691,491	2,706,716
4	Avg Monthly Flow Per Account (Gallons)	6,325	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100
<b>MULTI - FAMILY RESIDENTIAL:</b>												
5	Average Accounts (Monthly)	394	394	395	395	396	396	397	397	398	398	399
6	Average Units Monthly	9,976	9,976	10,001	10,001	10,026	10,026	10,051	10,051	10,076	10,076	10,101
7	Average ERC (Monthly)	4,988	4,988	5,001	5,001	5,014	5,014	5,027	5,027	5,040	5,040	5,053
8	Billed Flow (Kgal)	329,333	323,222	324,032	324,032	324,842	324,842	325,652	325,652	326,462	326,462	327,272
9	Avg Monthly Flow Per Unit (Gallons)	2,751	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700
<b>COMMERCIAL - NON-RESIDENTIAL:</b>												
10	Average Accounts (Monthly)	1,717	1,727	1,737	1,747	1,754	1,761	1,766	1,770	1,774	1,778	1,781
11	Average ERC (Monthly)	6,792	6,832	6,872	6,912	6,940	6,968	6,988	7,004	7,020	7,036	7,048
12	Billed Flow (Kgal)	507,621	518,100	521,100	524,100	526,200	528,300	529,800	531,000	532,200	533,400	534,300
13	Avg Monthly Flow Per Account (Gallons)	24,637	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
<b>IRRIGATION</b>												
14	Average Accounts (Monthly)	254	254	254	254	254	254	254	254	254	254	254
15	Average ERC (Monthly)	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140
16	Billed Flow (Kgal)	167,283	153,619	153,619	153,619	153,619	153,619	153,619	153,619	153,619	153,619	153,619
17	Avg Monthly Flow Per Account (Gallons)	54,883	50,400	50,400	50,400	50,400	50,400	50,400	50,400	50,400	50,400	50,400
<b>FIRE LINE SERVICES:</b>												
18	Average Accounts (Monthly)	420	424	428	432	435	438	441	444	446	448	450
19	Average ERC (Monthly)	2,074	2,094	2,114	2,134	2,149	2,164	2,179	2,194	2,204	2,214	2,224
<b>TEMPORARY METER ACCOUNTS:</b>												
20	Average Accounts (Monthly)	49	49	49	49	49	49	49	49	49	49	49
21	Average Units (Monthly)	49	49	49	49	49	49	49	49	49	49	49
22	Billed Flow (Kgal)	21,284	14,700	14,700	14,700	14,700	14,700	14,700	14,700	14,700	14,700	14,700
23	Avg Monthly Flow Per Account (Gallons)	36,197	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
<b>TOTAL WATER SYSTEM</b>												
24	Average Accounts (Monthly)	34,866	35,533	36,098	36,881	37,552	38,153	38,717	39,127	39,438	39,696	39,910
25	Average ERC (Monthly)	48,663	49,408	50,058	50,925	51,674	52,337	52,968	53,422	53,780	54,070	54,323
26	Billed Flow (Kgal)	3,456,626	3,402,184	3,446,254	3,505,544	3,556,766	3,602,128	3,645,064	3,675,763	3,700,026	3,719,672	3,736,608
27	Avg Monthly Flow Per Account (Gallons)	8,262	7,979	7,956	7,921	7,893	7,868	7,846	7,829	7,818	7,809	7,802
28	Avg Monthly Flow Per ERC (Gallons)	5,919	5,738	5,737	5,736	5,736	5,735	5,735	5,734	5,733	5,733	5,732
29	Percent of Unbilled / Treated Flow	7.03%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
30	Total Treated Water Flow	3,717,900	3,759,319	3,808,015	3,873,530	3,930,129	3,980,251	4,027,695	4,061,617	4,088,427	4,110,135	4,128,849

Footnotes on Following Page.

**Table 2**  
**Martin County, Florida**  
**Water and Wastewater System**  
**Summary of Projected Customer Statistics [1]**

Line No.	Description	Historical	Projected Fiscal Year Ending September 30,									
		2019	2020 [2]	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>WASTEWATER SYSTEM</b>												
<b>SINGLE - FAMILY RESIDENTIAL:</b>												
31	Average Accounts (Monthly)	22,864	23,223	23,795	24,228	25,591	26,709	27,815	28,841	29,645	30,441	31,037
32	Average ERC (Monthly)	23,158	23,522	24,101	24,540	25,921	27,053	28,173	29,212	30,026	30,832	31,436
33	Billed Flow (Kgal)	1,145,280	1,148,145	1,176,425	1,197,832	1,265,219	1,320,493	1,375,174	1,425,899	1,465,649	1,505,003	1,534,469
34	Avg Monthly Flow Per Account (Gallons)	4,174	4,120	4,120	4,120	4,120	4,120	4,120	4,120	4,120	4,120	4,120
<b>MULTI - FAMILY RESIDENTIAL:</b>												
35	Average Accounts (Monthly)	281	281	282	282	283	283	284	284	285	285	286
36	Average Units Monthly	8,043	8,043	8,068	8,068	8,093	8,093	8,118	8,118	8,143	8,143	8,168
37	Average ERC (Monthly)	4,022	4,022	4,035	4,035	4,048	4,048	4,061	4,061	4,074	4,074	4,087
38	Billed Flow (Kgal)	262,365	260,593	261,403	261,403	262,213	262,213	263,023	263,023	263,833	263,833	264,643
39	Avg Monthly Flow Per Unit (Gallons)	2,718	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700
<b>COMMERCIAL - NON-RESIDENTIAL:</b>												
40	Average Accounts (Monthly)	1,274	1,281	1,288	1,295	1,302	1,309	1,316	1,323	1,330	1,337	1,344
41	Average ERC (Monthly)	4,671	4,697	4,723	4,749	4,775	4,801	4,827	4,853	4,879	4,905	4,931
42	Billed Flow (Kgal)	414,778	415,044	417,312	419,580	421,848	424,116	426,384	428,652	430,920	433,188	435,456
43	Avg Monthly Flow Per Account (Gallons)	27,131	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000
<b>FLAT RATE - SEWER ONLY ACCOUNTS</b>												
44	Average Accounts (Monthly)	418	420	420	420	420	420	420	420	420	420	420
<b>TOTAL WASTEWATER SYSTEM</b>												
45	Average Accounts (Monthly)	24,837	25,205	25,785	26,225	27,596	28,721	29,835	30,868	31,680	32,483	33,087
46	Average ERC (Monthly)	32,269	32,661	33,279	33,744	35,164	36,322	37,481	38,546	39,399	40,231	40,874
47	Billed Flow (Kgal)	1,822,423	1,823,782	1,855,140	1,878,815	1,949,280	2,006,822	2,064,581	2,117,574	2,160,402	2,202,024	2,234,568
48	Avg Monthly Flow Per Account (Gallons)	6,115	6,030	5,996	5,970	5,886	5,823	5,767	5,717	5,683	5,649	5,628
49	Avg Monthly Flow Per ERC (Gallons)	4,706	4,653	4,645	4,640	4,619	4,604	4,590	4,578	4,569	4,561	4,556
50	Total Treated Wastewater Flow	1,531,925	1,531,925	1,637,327	1,660,205	1,730,069	1,787,042	1,844,065	1,896,463	1,938,431	1,979,365	2,011,001
51	Wastewater Treated Flow per ERC	3,956	4,100	4,100	4,100	4,100	4,100	4,100	4,100	4,100	4,100	4,100
52	Ratio of Billed Flow to Treated Flow	118.96%	119.05%	113.30%	113.17%	112.67%	112.30%	111.96%	111.66%	111.45%	111.25%	111.12%

## Footnotes:

- [1] Forecast of customer growth takes into account the reduced water demands and the addition of incremental growth from planned water line extensions.
- [2] Based on three (6) months of reported sales.

**Table 3**  
**Martin County, Florida**  
**Water and Wastewater System**

**Summary of Projected System Operating Revenues [1]**

Line No.	Description	Projected Fiscal Year Ending September 30th.									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>WATER SYSTEM</b>											
1	Retail Rate Revenue (Indexed Rates) [2]	\$ 19,270	\$ 19,923	\$ 20,572	\$ 21,080	\$ 21,688	\$ 22,282	\$ 22,817	\$ 23,322	\$ 23,802	\$ 24,274
2	Retail Rate Revenue Adjustments [3]	-	-	-	-	-	-	-	-	-	-
3	CFC Revenue - New Development	1,077	946	811	653	532	361	289	219	188	183
4	CFC Revenue - Assessment Programs	349	341	410	477	509	512	512	498	498	488
5	Service Availability Charge Revenue [3]	319	248	195	152	120	99	90	90	94	101
6	Other Operating Revenues [4]	806	790	964	2,300	2,613	3,463	4,709	5,004	5,328	5,287
7	Unrestricted Interest Income [5]	246	221	244	269	298	333	369	412	459	501
8	Gross Water System Revenues	\$ 22,067	\$ 22,469	\$ 23,196	\$ 24,931	\$ 25,761	\$ 27,049	\$ 28,786	\$ 29,544	\$ 30,369	\$ 30,833
<b>WASTEWATER SYSTEM</b>											
9	Retail Rate Revenue (Indexed Rates) [2]	\$ 15,311	\$ 15,930	\$ 16,365	\$ 17,187	\$ 17,999	\$ 18,817	\$ 19,608	\$ 20,311	\$ 21,038	\$ 21,692
10	Retail Rate Revenue Adjustments [3]	-	-	-	-	-	-	-	-	-	-
11	CFC Revenue - New Development	1,298	977	918	773	689	550	498	433	420	418
12	CFC Revenue - Assessment Programs	126	126	69	444	538	711	738	809	886	886
13	Service Availability Charge Revenue [3]	323	291	266	247	237	235	242	255	273	295
14	Other Operating Revenues [4]	1,161	1,188	1,241	1,816	2,044	1,955	1,106	1,115	1,131	1,143
15	Unrestricted Interest Income [5]	201	182	200	226	250	280	309	333	371	402
16	Gross Wastewater System Revenues	\$ 18,419	\$ 18,693	\$ 19,058	\$ 20,693	\$ 21,758	\$ 22,548	\$ 22,500	\$ 23,256	\$ 24,120	\$ 24,835
<b>COMBINED SYSTEMS</b>											
17	Retail Rate Revenue (Indexed Rates) [2]	\$ 34,581	\$ 35,853	\$ 36,937	\$ 38,268	\$ 39,688	\$ 41,098	\$ 42,424	\$ 43,633	\$ 44,841	\$ 45,965
18	Retail Rate Revenue Adjustments [3]	-	-	-	-	-	-	-	-	-	-
19	CFC Revenue - New Development	2,375	1,922	1,728	1,426	1,221	911	787	651	608	601
20	CFC Revenue - Assessment Programs	475	466	478	921	1,048	1,223	1,250	1,307	1,384	1,374
21	Service Availability Charge Revenue [3]	641	539	462	399	358	335	331	345	367	396
22	Other Operating Revenues [4]	1,967	1,978	2,205	4,116	4,658	5,418	5,815	6,118	6,459	6,429
23	Unrestricted Interest Income [5]	447	403	444	495	548	613	679	746	830	904
24	Gross Water and Wastewater Revenues	\$ 40,486	\$ 41,162	\$ 42,253	\$ 45,625	\$ 47,519	\$ 49,597	\$ 51,285	\$ 52,800	\$ 54,489	\$ 55,668

**Footnotes:**

- [1] Amounts shown in \$1,000's.
- [2] Amounts shown based on the application of existing rates, including application of assumed automatic rate indexing, to projected customer statistics.
- [3] Service Availability Charge revenue was calculated based on recent historical monthly reports and estimates of future development as provided by Department staff.
- [4] Other operating revenue include Reclaimed Sales, Miscellaneous Revenue, Engineering Review Fees, Special Assessment Revenues, Wellfield Protection Fees, Leachate Processing, etc.
- [5] Amounts shown include interest income projected for the following funds, as identified in greater detail on Table 8: i) Operating Reserve Fund; ii) Renewal and Replacement Fund; and iii) Debt Service-related Funds. Amounts shown are exclusive of any interest income earned on Construction (project) Funds, customer deposits, or capital facility charges/impact fee-related funds.

**Table 4**  
**Martin County, Florida**  
**Water and Wastewater System**

**Projected Capital Facility Charge (CFC) Revenue [1]**

Line No.	Description	Projected Fiscal Year Ending September 30th									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<u>Water System CFC Revenue:</u>											
1	Water System CFC Fee (Per ERC)	\$ 1,710	\$ 1,710	\$ 1,710	\$ 1,710	\$ 1,710	\$ 1,710	\$ 1,710	\$ 1,710	\$ 1,710	\$ 1,710
2	Water System CFC Connecting ERCs	630	553	474	382	311	211	169	128	110	107
3	Total Water System CFC Revenue [2]	<u>\$ 1,077</u>	<u>\$ 946</u>	<u>\$ 811</u>	<u>\$ 653</u>	<u>\$ 532</u>	<u>\$ 361</u>	<u>\$ 289</u>	<u>\$ 219</u>	<u>\$ 188</u>	<u>\$ 183</u>
4	Adjustments [3]	-	-	-	-	-	-	-	-	-	-
5	Adjusted Total Water System CFC Revenue [2]	<u>\$ 1,077</u>	<u>\$ 946</u>	<u>\$ 811</u>	<u>\$ 653</u>	<u>\$ 532</u>	<u>\$ 361</u>	<u>\$ 289</u>	<u>\$ 219</u>	<u>\$ 188</u>	<u>\$ 183</u>
<u>Wastewater System CFC Revenue:</u>											
6	Wastewater System CFC Fee (Per ERC)	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100
7	Wastewater System CFC Connecting ERCs	431	365	337	268	228	162	137	106	100	99
8	Total Wastewater System CFC Revenue [2]	<u>\$ 905</u>	<u>\$ 767</u>	<u>\$ 708</u>	<u>\$ 563</u>	<u>\$ 479</u>	<u>\$ 340</u>	<u>\$ 288</u>	<u>\$ 223</u>	<u>\$ 210</u>	<u>\$ 208</u>
9	Adjustments [3]	-	-	-	-	-	-	-	-	-	-
10	Adjusted Total Wastewater System CFC Revenue [2]	<u>\$ 905</u>	<u>\$ 767</u>	<u>\$ 708</u>	<u>\$ 563</u>	<u>\$ 479</u>	<u>\$ 340</u>	<u>\$ 288</u>	<u>\$ 223</u>	<u>\$ 210</u>	<u>\$ 208</u>
11	Combined System CFC Revenue Collections [2]	<u><u>\$ 1,982</u></u>	<u><u>\$ 1,712</u></u>	<u><u>\$ 1,518</u></u>	<u><u>\$ 1,216</u></u>	<u><u>\$ 1,011</u></u>	<u><u>\$ 701</u></u>	<u><u>\$ 577</u></u>	<u><u>\$ 441</u></u>	<u><u>\$ 398</u></u>	<u><u>\$ 391</u></u>

Footnotes:

- [1] Does not recognize CFC revenue from Assessment programs, which are reflected as a transfer from the operating reserves of the Utility to the CFC Fund (assumes full receipt up front with all assessment revenues being included as gross revenues per utility staff).
- [2] Amounts shown in \$1,000's. Reflects ERC growth associated with new development that has not already entered the development process and are paying Service Availability Charges.
- [3] Represents prepayment of CFC charges from Jensen Dunes per Department Staff.

Table 5

Martin County, Florida  
Water and Wastewater System

Summary of Forecasted Ten-Year Capital Improvement Program [1]

Line No.	Description	Funding Source	Projected Fiscal Year Ending September 30,										Total
			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
<b>CAPITAL PROJECTS - WATER SYSTEM</b>													
Water Capital Projects													
1	Loop Tie-ins	CFC	\$ 442,818	\$ 200,000	\$ 206,000	\$ 212,180	\$ 218,545	\$ 225,102	\$ 231,855	\$ 238,810	\$ 245,975	\$ 253,354	\$ 2,474,639
2	North Plant Floridan Aquifer Well	CFC	-	250,000	3,399,000	-	-	-	-	-	-	-	3,649,000
3	Martin Downs Water Treatment Plant	WD2-E	-	-	-	-	-	-	-	17,642,123	-	-	17,642,123
4	Martin Downs Water Treatment Plant	CFC	-	-	-	-	655,636	-	-	-	-	-	655,636
5	Wellfield Pump Standardization	RR	60,000	60,000	61,800	63,654	65,564	67,531	-	-	-	-	378,549
6	Wellfield Pump Standardization	CFC	55,000	-	-	-	-	-	-	-	-	-	55,000
7	Pine Lake Drive Bridge Water Main	RR	-	-	-	21,218	-	-	-	173,891	-	-	195,109
8	North VFD and Electrical Replacement	RR	-	-	489,250	-	-	-	-	-	-	-	489,250
9	NWTP Building Improvements	RR	-	425,000	-	-	-	-	-	-	-	-	425,000
10	Hydrant Replacement	RR	334,723	150,000	154,500	159,135	163,909	168,826	173,891	179,108	184,481	190,016	1,858,589
11	Water Meter Automation Retrofit	RR	705,189	750,000	772,500	795,675	819,545	844,132	869,456	895,539	922,405	950,078	8,324,519
12	Well and Pump Improvements	RR	243,921	100,000	103,000	106,090	109,273	112,551	115,927	119,405	122,987	126,677	1,259,831
13	R.O. Membrane Replacement	RR	1,122,505	-	-	-	-	983,454	-	-	-	1,352,861	3,458,820
14	R.O. Membrane Replacement	OpRes	176,837	-	-	-	-	-	-	-	-	-	176,837
15	Water Main Replacement	RR	1,431,545	500,000	2,317,500	530,450	546,364	562,754	579,637	597,026	614,937	633,385	8,313,598
16	North WTP FPL Vault Rehab	RR	-	200,000	-	-	-	-	-	-	-	-	200,000
17	Water System Interconnects	RR	-	100,000	103,000	-	-	-	-	-	-	-	203,000
18	Emergency Generator Storage Building	OpRes	50,000	450,000	-	-	-	-	-	-	-	-	500,000
19	Utilities Infrastructure Accommodations	RR	304,216	100,000	103,000	106,090	109,273	112,551	231,855	238,810	245,975	253,354	1,805,124
20	Utilities Infrastructure Accommodations	OpRes	150,000	-	-	-	-	-	-	-	-	-	150,000
21	Bulk Chemical Storage Tank Replacement	RR	148,610	103,725	103,515	7,002	81,955	-	751,789	394,037	437,835	157,713	2,186,181
22	Misc. Improvements - Water	RR	520,300	-	-	-	-	-	-	-	-	-	520,300
23	Misc. Improvements - Water	CFC	150,000	-	-	-	-	-	-	-	-	-	150,000
24	North Sodium Hypochlorite Pipe	RR	95,000	-	-	-	-	-	-	-	-	-	95,000
25	Tropical Farms Water Plant - Wellfield Expansion	RR	3,876,880	-	-	-	-	-	-	-	-	-	3,876,880
26	Tropical Farms Water Plant - Wellfield Expansion	CFC	2,985,048	-	-	-	-	-	-	-	-	-	2,985,048
27	TF Wellfield Expansion	CFC	72,391	-	-	-	-	-	-	-	-	-	72,391
28	Equipment R&R	RR	194,000	-	-	-	-	-	-	-	-	-	194,000
29	Vehicles R&R 06402	RR	162,896	-	-	-	-	-	-	-	-	-	162,896
30	Kanner Highway Accommodations	RR	63,875	-	-	-	-	-	-	-	-	-	63,875
31	NRS Laterals	OpRes	28,996	-	-	-	-	-	-	-	-	-	28,996
32	Valve Replacement	RR	162,344	-	-	-	-	-	-	-	-	-	162,344
33	Warehouse Addition North	OpRes	326,150	-	-	-	-	-	-	-	-	-	326,150
34	Tropical Farms CO2 System	CFC	-	-	927,000	-	-	-	-	-	-	-	927,000
35	Capital Equipment Replacement	RR	196,829	224,500	201,365	232,868	242,585	175,579	194,758	222,691	239,825	258,421	2,189,421
Water Line Extension Program Projects													
36	Indian River WM Extension	CFC	304,783	-	-	-	-	-	-	-	-	-	304,783
37	Murphy Road Bridge WM	RR	225,000	-	-	-	-	-	-	-	-	-	225,000
38	Evergreen Windstone WM	Evergreen	-	3,848,000	-	-	-	-	-	-	-	-	3,848,000
39	Rocky Point	Rocky Point	-	-	-	-	3,226,746	-	-	-	-	-	3,226,746
40	Palm Lake Water SA	OpRes	664,947	-	-	-	-	-	-	-	-	-	664,947
41	Western Extension	CFC	-	1,400,000	-	-	-	-	-	-	-	-	1,400,000
42	Western Extension	WD1-E	-	6,749,820	-	-	-	-	-	-	-	-	6,749,820
43	Western Extension	OpRes	496,840	-	-	-	-	-	-	-	-	-	496,840
44	Old Palm City Septic to Sewer and Water Main Extensions	CFC	337,798	-	-	-	-	-	-	-	-	-	337,798
45	Old Palm City Septic to Sewer and Water Main Extensions	Old Palm	-	1,468,890	997,957	1,027,895	-	-	-	-	-	-	3,494,742
46	Port Salerno / New Monrovia Septic to Sewer and Water	New Monrovia	-	-	3,605,350	-	-	-	-	-	-	-	3,605,350
Water Extensions Related to Grinder Septic to Sewer Extensions													
47	Water Line Extension Projects 2021	WLE 2	-	2,994,000	-	-	-	-	-	-	-	-	2,994,000
48	Departmental Capital	Rates	184,000	188,600	193,315	198,148	203,102	208,179	213,384	218,718	224,186	229,791	2,061,423
49	<b>Total Water System Capital Costs</b>		\$ 16,273,441	\$ 20,262,535	\$ 13,738,052	\$ 3,460,405	\$ 7,425,951	\$ 2,477,205	\$ 3,536,443	\$ 20,746,267	\$ 4,591,467	\$ 3,052,789	\$ 95,564,555



**Table 5**  
**Martin County, Florida**  
**Water and Wastewater System**

**Summary of Forecasted Ten-Year Capital Improvement Program [1]**

Line No.	Description	Funding Source	Projected Fiscal Year Ending September 30,										
			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
100	Woodside/Stratford Septic to Sewer	OpRes	-	75,000	38,831	-	-	-	-	-	-	-	113,831
101	NRS Phase II S2S	OpRes	53,823	-	-	-	-	-	-	-	-	-	53,823
102	Grinder Septic to Sewer Extension Projects Connect to Protect Grinder System Installation	OpRes	600,000	400,000	412,000	424,360	437,091	450,204	463,710	477,621	491,950	506,708	4,663,644
103	Departmental Capital	Rates	40,000	41,000	42,025	43,076	44,153	45,256	46,388	47,547	48,736	49,955	448,136
104	<b>Total Wastewater System Capital Costs</b>		\$ 25,521,794	\$ 11,920,402	\$ 26,838,505	\$ 15,561,179	\$ 30,043,555	\$ 21,081,788	\$ 13,985,980	\$ 15,437,171	\$ 3,916,690	\$ 4,868,749	\$ 169,175,813
105	<b>TOTAL CAPITAL PROJECTS - WATER AND WASTEWATER</b>		<u>\$ 41,795,235</u>	<u>\$ 32,182,937</u>	<u>\$ 40,576,557</u>	<u>\$ 19,021,584</u>	<u>\$ 37,469,506</u>	<u>\$ 23,558,993</u>	<u>\$ 17,522,423</u>	<u>\$ 36,183,438</u>	<u>\$ 8,508,157</u>	<u>\$ 7,921,538</u>	<u>\$ 264,740,368</u>
<b>FUNDING SOURCES FOR CAPITAL IMPROVEMENT PROGRAM</b>													
<b>WATER SYSTEM</b>													
106	Rate Revenue	Rates	\$ 184,000	\$ 188,600	\$ 193,315	\$ 198,148	\$ 203,102	\$ 208,179	\$ 213,384	\$ 218,718	\$ 224,186	\$ 229,791	\$ 2,061,423
107	Water Capital Facility Charge (CFC)	CFC	4,347,838	1,850,000	3,605,000	212,180	874,181	225,102	231,855	238,810	245,975	253,354	12,084,295
108	Renewal, Replacement & Improvement Fund	RR	9,847,833	2,713,225	4,409,430	2,022,182	3,121,922	2,043,924	3,091,204	2,646,616	4,121,306	2,569,644	36,587,286
109	Operating Reserves	OpRes	1,893,770	450,000	927,000	-	-	-	-	-	-	-	3,270,770
110	Debt Issue No. 1 - 2021 Revenue Bonds - Expansion	WD1-E	-	6,749,820	-	-	-	-	-	-	-	-	6,749,820
111	Debt Issue No. 2 - 2027 Revenue Bonds - Expansion	WD2-E	-	-	-	-	-	-	-	17,642,123	-	-	17,642,123
112	Water Extension Debt 1	Old Palm	-	1,468,890	997,957	1,027,895	-	-	-	-	-	-	3,494,742
113	Water Extension Debt 2	New Monrovia	-	-	3,605,350	-	-	-	-	-	-	-	3,605,350
114	Water Extension Debt 3	Rocky Point	-	-	-	-	3,226,746	-	-	-	-	-	3,226,746
115	Water Extension Debt 4	Evergreen	-	3,848,000	-	-	-	-	-	-	-	-	3,848,000
116	Water Extension Debt 6	WLE 2	-	2,994,000	-	-	-	-	-	-	-	-	2,994,000
117	<b>Total Water System Capital Funding Sources</b>		\$ 16,273,441	\$ 20,262,535	\$ 13,738,052	\$ 3,460,405	\$ 7,425,951	\$ 2,477,205	\$ 3,536,443	\$ 20,746,267	\$ 4,591,467	\$ 3,052,789	\$ 95,564,555
<b>WASTEWATER SYSTEM</b>													
118	Rate Revenue	Rates	\$ 1,507,559	\$ 241,000	\$ 42,025	\$ 43,076	\$ 44,153	\$ 45,256	\$ 46,388	\$ 47,547	\$ 48,736	\$ 49,955	\$ 2,115,695
119	Wastewater Capital Facility Charge (CFC)	CFC	3,670,335	450,000	463,500	901,765	1,420,545	5,121,065	521,674	537,324	553,444	570,047	14,209,699
120	Renewal, Replacement & Improvement Fund	RR	4,419,449	2,153,225	1,695,380	1,672,085	1,253,359	1,132,261	1,643,851	2,013,769	2,822,560	3,742,039	22,547,978
121	Grants	Grants	2,000,000	-	-	-	-	-	-	-	-	-	2,000,000
122	Operating Reserves	OpRes	1,985,845	475,000	450,831	424,360	437,091	450,204	463,710	477,621	491,950	506,708	6,163,320
123	State Revenue Sharing	GF	1,430,000	1,184,059	7,923,600	4,473,743	2,185,454	2,023,240	2,318,548	2,388,105	-	-	23,926,749
124	FPL Franchise Fees	FPL	-	-	1,545,000	1,591,350	1,639,091	1,688,263	1,738,911	1,791,078	-	-	9,993,693
125	Debt Issue No. 1 - 2021 Revenue Bonds - Expansion	SD1-E	-	3,471,177	-	-	-	-	-	-	-	-	3,471,177
126	Prior Debt Proceeds	PriorDebt	10,508,606	-	-	-	-	-	-	-	-	-	10,508,606
127	Vacuum Project	Vacuum	-	-	-	-	23,063,862	10,621,499	7,252,898	8,181,727	-	-	49,119,986
128	Sewer Extension Debt 1 - Vacuum	Old Palm	-	3,945,941	4,635,000	-	-	-	-	-	-	-	8,580,941
129	Sewer Extension Debt 2 - Vacuum	New Monrovia	-	-	9,424,800	-	-	-	-	-	-	-	9,424,800
130	Sewer Extension Debt 3 - Vacuum	Wood/Strat	-	-	658,369	-	-	-	-	-	-	-	658,369
131	Sewer Extension Debt 4 - Vacuum	Coral	-	-	-	6,454,800	-	-	-	-	-	-	6,454,800
132	<b>Total Wastewater System Capital Funding Sources</b>		\$ 25,521,794	\$ 11,920,402	\$ 26,838,505	\$ 15,561,179	\$ 30,043,555	\$ 21,081,788	\$ 13,985,980	\$ 15,437,171	\$ 3,916,690	\$ 4,868,749	\$ 169,175,813
133	<b>TOTAL WATER AND WASTEWATER FUNDING SOURCES</b>		<u>\$ 41,795,235</u>	<u>\$ 32,182,937</u>	<u>\$ 40,576,557</u>	<u>\$ 19,021,584</u>	<u>\$ 37,469,506</u>	<u>\$ 23,558,993</u>	<u>\$ 17,522,423</u>	<u>\$ 36,183,438</u>	<u>\$ 8,508,157</u>	<u>\$ 7,921,538</u>	<u>\$ 264,740,368</u>

Footnotes:

[1] Unless otherwise noted, amounts shown were based upon the ten-year CIP program as provided by Department which is presented in today's dollars; such estimated costs were escalated annually at 1% to 3% beginning in Fiscal Year 2022 to account for potential increases in construction costs associated with inflation based on discussion with Staff.

**Table 6**  
**Martin County, Florida**  
**Water and Wastewater System**

**Summary of Combined Water and Wastewater System Revenue Requirements and Revenue Sufficiency [1]**

Line No.	Description	Projected Fiscal Year Ending September 30,									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Expenses:											
1	Combined Systems	\$ 22,131	\$ 23,595	\$ 23,973	\$ 24,933	\$ 26,038	\$ 26,774	\$ 27,929	\$ 29,145	\$ 30,068	\$ 31,513
2	Contingency @ 1% of Operating Expenses	111	119	120	125	131	135	140	146	151	158
3	Combined Systems Operating Expenses:	\$ 22,242	\$ 23,713	\$ 24,093	\$ 25,058	\$ 26,169	\$ 26,909	\$ 28,069	\$ 29,291	\$ 30,219	\$ 31,671
Other Revenue Requirements:											
4	Existing Sr Lien and SRF Debt Service	\$ 7,837	\$ 7,836	\$ 7,834	\$ 8,370	\$ 8,372	\$ 8,289	\$ 8,189	\$ 4,525	\$ 4,530	\$ 3,990
5	Proposed Debt Service	-	1,199	1,689	3,156	3,901	4,879	5,283	6,605	6,918	6,918
6	Capital Funded From Rates	1,692	430	235	241	247	253	260	266	273	280
7	Transfer to Renewal and Replacement Fund	5,250	5,303	5,356	5,410	5,464	5,519	5,574	5,630	5,686	5,743
8	Transfer to Rate Stabilization Fund	-	-	-	-	-	-	-	-	-	-
9	Transfer to Operating Reserves	267	-	518	721	776	1,292	1,553	4,203	4,549	4,770
10	Transfer to General Fund - Building Mortgage Payment	196	168	169	169	169	169	169	169	169	169
11	Municipal Service Benefit Unit - Special Assessment Revenue Note	153	154	153	153	153	153	153	153	153	153
12	Total Other Revenue Requirements	\$ 15,394	\$ 15,089	\$ 15,954	\$ 18,220	\$ 19,082	\$ 20,555	\$ 21,180	\$ 21,550	\$ 22,277	\$ 22,023
13	Gross Revenue Requirements	\$ 37,636	\$ 38,803	\$ 40,047	\$ 43,278	\$ 45,251	\$ 47,464	\$ 49,249	\$ 50,842	\$ 52,497	\$ 53,694
Less Income and Funds from Other Sources:											
14	Other Operating Revenue	\$ 2,608	\$ 2,517	\$ 2,666	\$ 4,515	\$ 5,015	\$ 5,753	\$ 6,146	\$ 6,463	\$ 6,827	\$ 6,825
15	Unrestricted Interest Income	447	403	444	495	548	613	679	746	830	904
16	Transfer From Operating Reserves	-	29	-	-	-	-	-	-	-	-
17	Net Revenue Requirements	\$ 34,581	\$ 35,853	\$ 36,937	\$ 38,268	\$ 39,688	\$ 41,098	\$ 42,424	\$ 43,633	\$ 44,841	\$ 45,965
18	Rate Revenue Under Existing Rates	\$ 34,581	\$ 35,853	\$ 36,937	\$ 38,268	\$ 39,688	\$ 41,098	\$ 42,424	\$ 43,633	\$ 44,841	\$ 45,965
19	Additional Revenue from Prior Period Rate Adjustments	-	-	-	-	-	-	-	-	-	-
20	Revenue Surplus / (Deficiency)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	Identified Current Year Rate Revenue Adjustment	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
22	Identified Rate Adjustment - Adj. for Effective Months of Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Footnotes:

[1] Amounts shown in \$1,000's.



Table 7

**Martin County, Florida  
Water and Wastewater System**

**Projected Debt Service Coverage Analysis [1]**

Line No.	Description	Fiscal Year Ending September 30,									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	System Revenues:										
1	Total Sales Revenue	\$ 34,581	\$ 35,853	\$ 36,937	\$ 38,268	\$ 39,688	\$ 41,098	\$ 42,424	\$ 43,633	\$ 44,841	\$ 45,965
2	Other Operating Revenue	2,011	1,950	1,888	1,877	1,847	1,844	1,857	1,881	1,924	1,967
	Unrestricted Interest Income from Special Assessments	259	229	440	535	621	690	637	593	551	506
3	Unrestricted Interest Income	447	403	444	495	548	613	679	746	830	904
4	Total Gross System Revenues	\$ 37,298	\$ 38,435	\$ 39,709	\$ 41,174	\$ 42,703	\$ 44,245	\$ 45,596	\$ 46,853	\$ 48,145	\$ 49,342
5	Total Operating Expenses	\$ 22,242	\$ 23,713	\$ 24,093	\$ 25,058	\$ 26,169	\$ 26,909	\$ 28,069	\$ 29,291	\$ 30,219	\$ 31,671
6	Less Indirect Cost Allocation	(1,441)	(1,441)	(1,484)	(1,528)	(1,574)	(1,621)	(1,670)	(1,720)	(1,772)	(1,825)
7	Total Operating Expenses Less Indirect Cost Allocation	\$ 20,801	\$ 22,273	\$ 22,609	\$ 23,530	\$ 24,595	\$ 25,288	\$ 26,399	\$ 27,571	\$ 28,448	\$ 29,846
8	Net Revenues	\$ 16,497	\$ 16,163	\$ 17,099	\$ 17,644	\$ 18,108	\$ 18,957	\$ 19,197	\$ 19,282	\$ 19,698	\$ 19,496
	Annual Debt Service - Senior Lean Debt:										
9	Existing Debt Payments	\$ 6,818	\$ 6,817	\$ 6,815	\$ 6,816	\$ 6,817	\$ 6,818	\$ 6,817	\$ 3,153	\$ 3,158	\$ 3,158
10	Proposed Debt Payments	-	1,199	1,689	1,884	2,188	2,359	2,359	3,386	3,386	3,386
11	Total Outstanding Bond Indebtedness	\$ 6,818	\$ 8,016	\$ 8,505	\$ 8,700	\$ 9,005	\$ 9,178	\$ 9,176	\$ 6,539	\$ 6,544	\$ 6,544
	Outstanding Bond Coverage - Net Revenues										
12	Coverage Ratio - Calculated	242%	202%	201%	203%	201%	207%	209%	295%	301%	298%
13	Coverage Ratio - Required	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
14	Net Revenues After Payment of Outstanding Bond Debt	9,679	8,147	8,595	8,944	9,103	9,780	10,021	12,744	13,154	12,953
15	Coverage Allowance for Outstanding Bond Debt Service	(1,364)	(1,603)	(1,701)	(1,740)	(1,801)	(1,836)	(1,835)	(1,308)	(1,309)	(1,309)
16	Indirect Cost Allocation	(1,441)	(1,441)	(1,484)	(1,528)	(1,574)	(1,621)	(1,670)	(1,720)	(1,772)	(1,825)
17	Net Available for Subordinate Bond Coverage	\$ 6,875	\$ 5,103	\$ 5,410	\$ 5,676	\$ 5,728	\$ 6,323	\$ 6,515	\$ 9,716	\$ 10,073	\$ 9,819
	Special Assessments (P/I) Pledged to SRF Loans	160	160	160	1,926	2,369	3,041	3,475	3,810	4,173	4,173
	Total Available for Subordinate Lien Coverage	\$ 7,034	\$ 5,263	\$ 5,570	\$ 7,602	\$ 8,098	\$ 9,363	\$ 9,990	\$ 13,526	\$ 14,246	\$ 13,992
	Annual Debt Service - Subordinate Lien Debt:										
18	Existing SRF Loan Debt Service	\$ 182	\$ 182	\$ 182	\$ 718	\$ 718	\$ 635	\$ 536	\$ 536	\$ 536	\$ 536
19	2014 Interfund Loan Dent Service	-	-	-	1,271	1,713	2,519	2,923	3,219	3,532	3,532
20	Total Subordinate Bond Indebtedness	\$ 182	\$ 182	\$ 182	\$ 1,990	\$ 2,432	\$ 3,154	\$ 3,459	\$ 3,755	\$ 4,068	\$ 4,068

Footnotes on Following Page

Table 7

**Martin County, Florida  
Water and Wastewater System**

**Projected Debt Service Coverage Analysis [1]**

Line No.	Description	Fiscal Year Ending September 30,									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Subordinate Bond Coverage - Net Revenues										
21	Coverage Ratio - Calculated	3856%	2885%	3053%	382%	333%	297%	289%	360%	350%	344%
22	Coverage Ratio - Required	115%	115%	115%	115%	115%	115%	115%	115%	115%	115%
	Required Transfers:										
23	Indirect Cost Allocation	\$ 1,441	\$ 1,441	\$ 1,484	\$ 1,528	\$ 1,574	\$ 1,621	\$ 1,670	\$ 1,720	\$ 1,772	\$ 1,825
24	Renewal, Replacement and Improvement Fund (Minimum Deposit)	1,707	1,882	1,939	2,002	2,164	2,263	2,373	2,462	2,542	2,625
25	Payment of Subordinate Interfund Loans	836	836	836	836	836	836	836	836	836	296
26	Municipal Service Benefit Unit - Special Assessment Revenue Note	153	154	153	153	153	153	153	153	153	153
27	CenterState Bank Series 2017A / B Revenue Note - Willoughby Office	196	168	169	169	169	169	169	169	169	169
28	Total Required Transfers	\$ 4,334	\$ 4,481	\$ 4,580	\$ 4,689	\$ 4,896	\$ 5,043	\$ 5,201	\$ 5,341	\$ 5,471	\$ 5,068
29	Special Assessments (P/I) Allocated to Subordinate Interfund Loans	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178
30	Amount Available for Other System Purposes	\$ 5,501	\$ 3,822	\$ 4,170	\$ 4,369	\$ 4,323	\$ 4,802	\$ 5,013	\$ 7,637	\$ 7,966	\$ 8,168

Footnotes:

[1] Amounts shown in \$1,000's.



Table 8

**Martin County, Florida  
Water and Wastewater System**

**Projected Fund Balances and Interest Income Determination (\$1,000's)**

Line No.	Description	Fiscal Year Ending September 30,									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>CONSTRUCTION ACCOUNT - Future Indebtedness</b>											
44	Beginning Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
45	Transfers In - New Debt	-	10,221	-	-	-	-	-	17,642	-	-
46	Total Funds Available	-	10,221	-	-	-	-	-	17,642	-	-
47	Transfers Out - CIP	-	10,221	-	-	-	-	-	17,642	-	-
48	Total Transfers Out of Funds	-	10,221	-	-	-	-	-	17,642	-	-
49	Interest Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
50	Interest Income	-	-	-	-	-	-	-	-	-	-
51	Recognition of Interest Earnings in Revenue Requirements	-	-	-	-	-	-	-	-	-	-
52	Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>CUSTOMER DEPOSITS</b>											
53	Beginning Balance	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176
54	Transfers In - System Connection Fee Revenue	-	-	-	-	-	-	-	-	-	-
55	Total Funds Available	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176
56	Transfers Out	-	-	-	-	-	-	-	-	-	-
57	Total Transfers Out of Funds	-	-	-	-	-	-	-	-	-	-
58	Interest Rate	1.25%	1.35%	1.45%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
59	Interest Income	15	16	17	18	18	18	18	18	18	18
60	Recognition of Interest Earnings in Revenue Requirements	15	16	17	18	18	18	18	18	18	18
61	Ending Balance	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176	\$ 1,176
<b>LEND A HAND DEPOSITS</b>											
62	Beginning Balance	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3
63	Transfers In - System Connection Fee Revenue	-	-	-	-	-	-	-	-	-	-
64	Total Funds Available	3	3	3	3	3	3	3	3	3	3
65	Transfers Out	-	-	-	-	-	-	-	-	-	-
66	Total Transfers Out of Funds	-	-	-	-	-	-	-	-	-	-
67	Interest Rate	1.25%	1.35%	1.45%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
68	Interest Income	-	-	-	-	-	-	-	-	-	-
69	Recognition of Interest Earnings in Revenue Requirements	-	-	-	-	-	-	-	-	-	-
70	Ending Balance	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3
<b>FUND 4103 - WATER SYSTEM CAPACITY FEE FUND</b>											
71	Beginning Balance	\$ 8,273	\$ 5,434	\$ 4,938	\$ 2,605	\$ 3,565	\$ 3,783	\$ 4,488	\$ 5,125	\$ 5,679	\$ 6,204
72	Transfers In - System Connection Fee Revenue	1,077	946	811	653	532	361	289	219	188	183
73	Transfers In - Revenue Fund (Assessment Programs)	349	341	410	477	509	512	512	498	498	488
74	Total Funds Available	9,699	6,721	6,159	3,735	4,606	4,655	5,289	5,841	6,366	6,875
75	Transfers Out - Capital Improvements	4,348	1,850	3,605	212	874	225	232	239	246	253
76	Total Transfers Out of Funds	4,348	1,850	3,605	212	874	225	232	239	246	253
77	Interest Rate	1.25%	1.35%	1.45%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
78	Interest Income	83	67	51	42	51	58	68	77	85	93
79	Recognition of Interest Earnings in Revenue Requirements	-	-	-	-	-	-	-	-	-	-
80	Ending Balance	\$ 5,434	\$ 4,938	\$ 2,605	\$ 3,565	\$ 3,783	\$ 4,488	\$ 5,125	\$ 5,679	\$ 6,204	\$ 6,714

Table 8

**Martin County, Florida**  
**Water and Wastewater System**

**Projected Fund Balances and Interest Income Determination (\$1,000's)**

Line No.	Description	Fiscal Year Ending September 30.									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>FUND 4104 - WASTEWATER SYSTEM CAPACITY FEE FUND</b>											
81	Beginning Balance	\$ 5,607	\$ 4,360	\$ 5,528	\$ 6,600	\$ 7,492	\$ 7,896	\$ 4,625	\$ 5,926	\$ 7,250	\$ 8,656
82	Transfers In - System Connection Fee Revenue	1,298	977	918	773	689	550	498	433	420	418
83	Transfers In - Revenue Fund (Assessment Program)	180	180	123	498	592	765	792	863	940	940
84	Transfer In - Connect to Protect Program (Grinder Program)	890	400	412	424	437	450	464	478	492	507
85	Total Funds Available	7,975	5,916	6,980	8,296	9,210	9,662	6,378	7,699	9,102	10,521
86	Transfers Out - Capital Improvements	3,670	450	464	902	1,421	5,121	522	537	553	570
87	Total Transfers Out of Funds	3,670	450	464	902	1,421	5,121	522	537	553	570
88	Interest Rate	1.25%	1.35%	1.45%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
89	Interest Income	55	62	83	98	107	84	69	88	108	129
90	Recognition of Interest Earnings in Revenue Requirements	-	-	-	-	-	-	-	-	-	-
91	Ending Balance	<u>\$ 4,360</u>	<u>\$ 5,528</u>	<u>\$ 6,600</u>	<u>\$ 7,492</u>	<u>\$ 7,896</u>	<u>\$ 4,625</u>	<u>\$ 5,926</u>	<u>\$ 7,250</u>	<u>\$ 8,656</u>	<u>\$ 10,080</u>

Table 9

**Martin County, Florida  
Water System**

**Comparison of Typical Monthly Residential Bills for Water Service [1]**

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter							
		0 Gallons	2,000 Gallons	4,000 Gallons	6,000 Gallons	8,000 Gallons	10,000 Gallons	15,000 Gallons	20,000 Gallons
<b>Martin County</b>									
1	Existing Rates - Effective 6/1/20	\$18.03	\$22.65	\$27.27	\$31.89	\$36.51	\$41.13	\$57.53	\$78.48
2	Adopted Rates - Effective 6/1/21	18.35	23.05	27.75	32.45	37.15	41.85	58.55	79.90
<b>Other Florida Utilities:</b>									
<b>Within Martin County:</b>									
3	Indiantown Company, Inc.	\$13.20	\$17.48	\$21.76	\$26.04	\$30.32	\$35.66	\$49.01	\$65.11
4	South Martin Regional Utility	21.61	23.55	26.79	31.33	35.87	40.41	57.41	74.41
5	City of Stuart	17.13	23.69	30.25	37.15	44.05	55.91	88.53	123.13
6	Outside City - City of Stuart [3]	21.42	29.62	37.82	46.44	55.06	69.88	110.65	153.90
7	Other Martin County Utilities' Average	\$18.34	\$23.59	\$29.16	\$35.24	\$41.33	\$50.47	\$76.40	\$104.14
<b>Outside Martin County:</b>									
8	Broward County	\$17.13	\$20.37	\$24.90	\$30.72	\$44.36	\$58.00	\$96.39	\$137.64
9	City of Dania Beach [2]	14.55	22.73	30.91	41.54	54.62	67.70	102.03	142.88
10	Town of Davie [2]	22.23	29.57	36.91	46.05	56.99	67.93	104.43	140.93
11	Fort Pierce Utilities Authority [2]	14.64	25.89	29.64	37.14	44.64	52.14	75.59	103.69
12	City of Hollywood [2]	7.82	14.50	22.06	35.43	48.80	62.16	120.80	187.58
13	Indian River County	8.75	13.15	17.55	22.69	30.21	40.11	79.26	128.01
14	Town of Jupiter [2]	22.21	24.83	27.45	30.07	33.63	37.19	47.45	63.15
15	City of Lake Worth [2]	21.14	27.96	34.78	45.28	55.78	70.00	121.54	183.74
16	City of Oakland Park [2]	15.20	28.48	42.56	57.44	72.32	89.34	132.93	180.68
17	Outside City - City of Oakland Park [2] [3]	19.00	35.60	53.20	71.80	90.40	111.68	166.18	225.88
18	Okeechobee Utility Authority [2]	20.30	29.08	40.07	53.27	66.47	79.67	112.67	145.67
19	Palm Beach County [2]	16.37	19.41	22.45	29.19	35.93	42.67	85.12	127.57
20	City of Port St. Lucie	11.48	20.64	29.80	40.35	52.29	64.23	98.22	134.97
21	St. Lucie West Services District	15.42	22.36	29.30	36.24	43.18	50.12	67.47	84.82
22	Seacoast Utility Authority	22.08	24.32	26.56	28.80	37.62	46.44	68.49	90.54
23	St. Lucie County	23.62	31.16	38.70	49.11	62.39	75.67	119.72	171.07
24	City of Vero Beach	13.60	15.26	16.92	20.53	26.09	31.65	45.55	73.35
25	Outside City - City of Vero Beach [3]	14.96	16.78	18.60	22.57	28.69	34.81	50.11	80.71
26	Village of Wellington [2]	20.01	24.53	29.05	33.57	40.31	47.05	63.90	86.50
27	Outside Municipality - Village of Wellington [2] [3]	25.01	30.67	36.33	41.99	50.41	58.83	79.88	108.13
28	City of West Palm Beach [2]	23.66	30.99	38.31	45.65	54.82	64.00	89.40	116.40
29	Outside City - City of West Palm Beach [2] [3]	29.58	38.74	47.90	57.08	68.54	80.00	111.74	145.49
30	<b>All Comparable Utilities' Average</b>	\$18.16	\$24.67	\$31.18	\$39.13	\$48.61	\$58.97	\$90.17	\$126.00

## Footnotes:

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2020 and are exclusive of taxes or franchise fees, if any, and reflect 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.
- [2] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next twelve months following the comparison preparation date.
- [3] Utilities shown reflect bills calculated recognizing the respective city's adopted and effective outside city surcharge as applied uniformly to the inside city rates for monthly water and wastewater service. Unless otherwise noted and with exception to the City of Vero Beach, which charges a 10% outside city surcharge, all other utilities shown reflect the application of a 25% outside city surcharge to inside city rates.

Table 10

**Martin County, Florida  
Wastewater System**

**Comparison of Typical Monthly Residential Bills for Wastewater Service [1]**

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter							
		0 Gallons	2,000 Gallons	4,000 Gallons	6,000 Gallons	8,000 Gallons	10,000 Gallons	15,000 Gallons	20,000 Gallons
<b>Martin County</b>									
1	Existing Rates - Effective 6/1/20	\$18.70	\$27.84	\$36.98	\$46.12	\$55.26	\$64.40	\$64.40	\$64.40
2	Adopted Rates - Effective 6/1/21	19.04	28.34	37.64	46.94	56.24	65.54	65.54	65.54
<b>Other Florida Utilities:</b>									
<b>Within Martin County:</b>									
3	Indiantown Company, Inc.	\$23.86	\$32.78	\$41.70	\$50.62	\$59.54	\$68.46	\$68.46	\$68.46
4	South Martin Regional Utility	13.50	25.12	36.74	48.36	59.98	71.60	71.60	71.60
5	City of Stuart	8.42	22.32	36.22	50.12	64.02	77.92	91.82	91.82
6	Outside City - City of Stuart [3]	10.53	27.91	45.29	62.67	80.05	97.43	114.81	114.81
7	Other Martin County Utilities' Average	\$14.08	\$27.03	\$39.99	\$52.94	\$65.90	\$78.85	\$86.67	\$86.67
<b>Outside Martin County:</b>									
8	Broward County	\$20.54	\$29.06	\$37.58	\$46.10	\$54.62	\$63.14	\$84.44	\$84.44
9	City of Dania Beach	21.52	36.44	51.36	66.28	81.20	96.12	133.42	170.72
10	Town of Davie	39.83	54.17	68.51	82.85	97.19	111.53	147.38	147.38
11	Fort Pierce Utilities Authority	15.76	27.06	38.36	49.66	60.96	72.26	72.26	72.26
12	City of Hollywood	7.83	27.24	46.65	66.07	85.48	104.89	116.73	116.73
13	Indian River County	15.60	21.32	27.04	32.76	38.48	44.20	49.92	49.92
14	Town of Jupiter [2]	22.75	22.75	22.75	22.75	22.75	22.75	22.75	22.75
15	City of Lake Worth	15.66	25.14	34.62	44.10	53.58	63.06	72.54	72.54
16	City of Oakland Park [2]	18.01	31.09	44.17	57.25	70.33	83.41	116.11	116.11
17	Outside City - City of Oakland Park [2][3]	22.51	38.87	55.23	71.59	87.95	104.31	145.21	145.21
18	Okeechobee Utility Authority [2]	23.27	37.75	52.23	66.71	81.19	95.67	131.87	168.07
19	Palm Beach County	18.21	22.33	26.45	36.13	45.81	55.49	55.49	55.49
20	City of Port St. Lucie	16.88	32.70	48.52	64.34	80.16	80.16	80.16	80.16
21	St. Lucie West Services District [2]	19.29	27.01	34.73	42.45	50.17	57.89	77.19	96.49
22	Seacoast Utility Authority [2]	32.25	33.73	35.21	36.69	38.17	39.65	39.65	39.65
23	St. Lucie County	25.05	40.11	55.17	70.23	85.29	100.35	100.35	100.35
24	City of Vero Beach	19.89	27.07	34.25	41.43	48.61	55.79	55.79	55.79
25	Outside City - City of Vero Beach [3]	21.88	29.78	37.68	45.58	53.48	61.38	61.38	61.38
26	Village of Wellington [2]	19.08	23.28	27.48	31.68	35.88	40.08	50.58	50.58
27	Outside Municipality - Village of Wellington [2] [3]	23.85	29.11	34.37	39.63	44.89	50.15	63.30	63.30
28	City of West Palm Beach [2]	14.32	25.60	36.89	48.17	59.45	70.74	81.84	81.84
29	Outside City - City of West Palm Beach [2] [3]	17.90	32.00	46.10	60.20	74.30	88.40	102.27	102.27
30	<b>All Comparable Utilities' Average</b>	<b>\$19.55</b>	<b>\$30.07</b>	<b>\$40.59</b>	<b>\$51.32</b>	<b>\$62.06</b>	<b>\$72.19</b>	<b>\$84.90</b>	<b>\$88.47</b>

## Footnotes:

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2020 and are exclusive of taxes or franchise fees, if any, and reflect 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.
- [2] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next twelve months following the comparison preparation date.
- [3] Utilities shown reflect bills calculated recognizing the respective city's adopted and effective outside city surcharge as applied uniformly to the inside city rates for monthly water and wastewater service. Unless otherwise noted and with exception to the City of Vero Beach, which charges a 10% outside city surcharge, all other utilities shown reflect the application of a 25% outside city surcharge to inside city rates.

Table 11

**Martin County, Florida  
Combined Water and Wastewater System**

**Comparison of Typical Monthly Residential Bills for Water and Wastewater Service [1]**

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter							
		0 Gallons	2,000 Gallons	4,000 Gallons	6,000 Gallons	8,000 Gallons	10,000 Gallons	15,000 Gallons	20,000 Gallons
<b>Martin County</b>									
1	Existing Rates - Effective 6/1/20	\$36.73	\$50.49	\$64.25	\$78.01	\$91.77	\$105.53	\$121.93	\$142.88
2	Adopted Rates - Effective 6/1/21	37.39	51.39	65.39	79.39	93.39	107.39	124.09	145.44
<b>Other Florida Utilities:</b>									
<b>Within Martin County:</b>									
3	Indiantown Company, Inc.	\$37.06	\$50.26	\$63.46	\$76.66	\$89.86	\$104.12	\$117.47	\$133.57
4	South Martin Regional Utility	35.11	48.67	63.53	79.69	95.85	112.01	129.01	146.01
5	City of Stuart	25.55	46.01	66.47	87.27	108.07	133.83	180.35	214.95
6	Outside City - City of Stuart [3]	31.95	57.53	83.11	109.11	135.11	167.31	225.46	268.71
7	Other Martin County Utilities' Average	\$32.42	\$50.62	\$69.14	\$88.18	\$107.22	\$129.32	\$163.07	\$190.81
<b>Outside Martin County:</b>									
8	Broward County	\$37.67	\$49.43	\$62.48	\$76.82	\$98.98	\$121.14	\$180.83	\$222.08
9	City of Dania Beach [2]	36.07	59.17	82.27	107.82	135.82	163.82	235.45	313.60
10	Town of Davie [2]	62.06	83.74	105.42	128.90	154.18	179.46	251.81	288.31
11	Fort Pierce Utilities Authority [2]	30.40	52.95	68.00	86.80	105.60	124.40	147.85	175.95
12	City of Hollywood [2]	15.65	41.75	68.71	101.49	134.27	167.05	237.53	304.31
13	Indian River County	24.35	34.47	44.59	55.45	68.69	84.31	129.18	177.93
14	Town of Jupiter [2]	44.96	47.58	50.20	52.82	56.38	59.94	70.20	85.90
15	City of Lake Worth [2]	36.80	53.10	69.40	89.38	109.36	133.06	194.08	256.28
16	City of Oakland Park [2]	33.21	59.57	86.73	114.69	142.65	172.75	249.04	296.79
17	Outside City - City of Oakland Park [2] [3]	41.51	74.47	108.43	143.39	178.35	215.99	311.39	371.09
18	Okeechobee Utility Authority [2]	43.57	66.83	92.30	119.98	147.66	175.34	244.54	313.74
19	Palm Beach County [2]	34.58	41.74	48.90	65.32	81.74	98.16	140.61	183.06
20	City of Port St. Lucie	28.36	53.34	78.32	104.69	132.45	144.39	178.38	215.13
21	St. Lucie West Services District	34.71	49.37	64.03	78.69	93.35	108.01	144.66	181.31
22	Seacoast Utility Authority	54.33	58.05	61.77	65.49	75.79	86.09	108.14	130.19
23	St. Lucie County	48.67	71.27	93.87	119.34	147.68	176.02	220.07	271.42
24	City of Vero Beach	33.49	42.33	51.17	61.96	74.70	87.44	101.34	129.14
25	Outside City - City of Vero Beach [3]	36.84	46.56	56.28	68.15	82.17	96.19	111.49	142.09
26	Village of Wellington [2]	39.09	47.81	56.53	65.25	76.19	87.13	114.48	137.08
27	Outside Municipality - Village of Wellington [2] [3]	48.86	59.78	70.70	81.62	95.30	108.98	143.18	171.43
28	City of West Palm Beach [2]	37.98	56.59	75.20	93.82	114.28	134.73	171.24	198.24
29	Outside City - City of West Palm Beach [2] [3]	47.48	70.74	94.00	117.28	142.84	168.40	214.02	247.77
30	<b>All Comparable Utilities' Average</b>	\$37.70	\$54.73	\$71.76	\$90.46	\$110.67	\$131.16	\$175.07	\$214.46

## Footnotes:

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2020 and are exclusive of taxes or franchise fees, if any, and reflect 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.
- [2] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next twelve months following the comparison preparation date.
- [3] Utilities shown reflect bills calculated recognizing the respective city's adopted and effective outside city surcharge as applied uniformly to the inside city rates for monthly water and wastewater service. Unless otherwise noted and with exception to the City of Vero Beach, which charges a 10% outside city surcharge, all other utilities shown reflect the application of a 25% outside city surcharge to inside city rates.