

**CITY OF PALM COAST,
FLORIDA**



**WATER AND WASTEWATER
REVENUE SUFFICIENCY AND
CAPITAL FACILITIES
FEES STUDY**

August 15, 2018



Public Resources Management Group, Inc.
Utility, Rate, Financial, and Management Consultants



Public Resources Management Group, Inc.

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August 15, 2018

The Honorable Mayor and
Members of the City Council
City of Palm Coast
160 Lake Avenue
Palm Coast, FL 32164

Subject: 2018 Water and Wastewater Revenue Sufficiency and Capital Facilities Fees Study

Ladies and Gentlemen:

Public Resources Management Group, Inc. ("PRMG") has completed the 2018 Water and Wastewater Revenue Sufficiency and Capital Facilities Fees Analysis (the "Study") on behalf of the City of Palm Coast, Florida (the "City") and has presented the results of our analyses, assumptions, and recommendations in this report for your consideration. The focus of the Study was to update the forecast of utility operations and the corresponding expenditure and funding needs (the "revenue requirements") to evaluate the sufficiency of the water and wastewater utility (the "Utility" or "System") revenues to meet such projected revenue requirements and to review the System's current Capital Facilities Fees and recommended adjustments if necessary. The Study period evaluated a forecast of operations for the Fiscal Years 2018 through 2023 (the "Forecast Period") to identify the estimated financial effects to Utility rates from changes in operations, timing and level of capital funding requirements. The principle objective of the revenue sufficiency evaluation is to determine the level of rate revenues needed to reasonably recover the cost of providing service and maintain compliance with the rate covenants as delineated in the meet the rate covenant requirements pursuant to Resolution No. 2003-22 entitled the Master Utility System Bond Resolution adopted by the City Council on September 30, 2003, and as amended and supplemented from time to time (the "Bond Resolution"). This report outlines the analyses and assumptions used to determine the proposed Rates being recommended by PRMG for consideration by the City.

The rates for service were last formally reviewed in Fiscal Year 2014 and since Fiscal Year 2016 the rates for service have only been indexed based on the change in the Consumer Price Index (averaging approximately 1.0% annually for such period). Based on the projected expenditure and funding needs of the System and the projected financing plan for the capital program, it is projected that the current rates will not be sufficient to meet such needs and that the rates for monthly utility service will need to be increased. The recommended overall system rate adjustments are assumed to become effective on October 1st of each Fiscal Year during the Forecast Period beginning with the Fiscal Year 2019. The recommended rate adjustments by Fiscal Year are summarized on the following page:

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Estimated System Average Rate Percentage Adjustment

Fiscal Year	Effective Date	Water System			Wastewater			Combined Water and Wastewater Increase
		Price Indexing Rate Adjustment [*]	Additional Revenue Adjustment	Combined Increase	Price Indexing Rate Adjustment [*]	Additional Revenue Adjustment	Combined Increase	
2019	10/1/2018	2.90%	3.10%	6.00%	2.90%	3.10%	6.00%	6.00%
2020	10/1/2019	2.40%	3.60%	6.00%	2.40%	3.60%	6.00%	6.00%
2021	10/1/2020	2.40%	0.00%	2.40%	2.40%	0.00%	2.40%	2.40%
2022	10/1/2021	2.40%	0.00%	2.40%	2.40%	0.00%	2.40%	2.40%
2023	10/1/2022	2.40%	0.00%	2.40%	2.40%	0.00%	2.40%	2.40%

[*] Fiscal Year 2019 index based on actual change in the Consumer Price Index change from June 2017 to June 2018. For Fiscal Years 2020 through 2023 the price index is estimated based on projections of the Consumer Price Index from the Congressional Budget Office regarding future inflation rates.

As can be seen above and based on the assumptions recognized for the development of the System revenue requirements, additional increases above annual price indexing adjustments have been identified to be implemented during Fiscal Years 2019 and 2020 for both the water and wastewater systems. For Fiscal Years 2021 through 2023, it is currently anticipated that annual price indexing adjustments will be adequate to maintain the operating margins of the System. It is proposed that the future rate increases be applied uniformly to all of the monthly base charges and consumption charges in effect. The table below provides a summary of the estimated monthly impact to the typical monthly water and wastewater bill for a City resident using 4,000 gallons per month of service (reflects average monthly use for a typical City customer).

Residential Monthly Bill Impact from Proposed Rates – Monthly Service at 4,000 Gallons

Effective Date	Proposed Increase	Water		Wastewater		Combined	
		Average Residential Bill	Increase	Average Residential Bill	Increase	Average Residential Bill	Increase
PROPOSED ADJUSTMENTS:							
Existing Average Bill		\$33.55		\$32.21		\$65.76	
October 1, 2018	6.00%	\$35.56	\$2.01	\$34.16	\$1.95	\$69.72	\$3.96
October 1, 2019	6.00%	\$37.70	\$2.14	\$36.21	\$2.05	\$73.91	\$4.19
ANNUAL RATE INDEXING							
October 1, 2020	2.40%	\$38.60	\$0.90	\$37.08	\$0.87	\$75.68	\$1.77
October 1, 2021	2.40%	\$39.53	\$0.93	\$37.97	\$0.89	\$77.50	\$1.82
October 1, 2022	2.40%	\$40.48	\$0.95	\$38.88	\$0.91	\$79.36	\$1.86

The primary reasons for the projected rate adjustments are to:

1. Recover increased operating expenses associated with the impacts of general inflation, the effects of an improved economy which is affecting the cost for materials and professional / contracted services, and increased additional personnel assumed during the Forecast Period due to System growth and facility expansions;

2. Recover increased debt service requirements associated with the anticipated issuance of the additional debt during the Forecast Period required to fund the City's capital improvement program;
3. Projected adjustment in annual transfers to fund capital expenditures for the renewal, replacement, betterment and upgrade of System assets. The City's current policy is to transfer 10% or preceding years System Gross revenues to the Renewal, Replacement, and Improvement Fund (the "RR&I Fund"). The purpose of the RR&I Fund is to provide moneys for the purpose of paying the cost of extensions, enlargements, or additions to, or the replacement of capital assets of the System or emergency repairs thereto. PRMG is recommending the City gradually increase the transfer to the RR&I Fund from 10% to 15% of the preceding years System gross revenues to provide ongoing and increased pay-as-you-go ("Pay-Go") funding for future capital improvements of the Utility and to minimize the use of future indebtedness to promote long-term rate flexibility and sustainability;
4. Provide sufficient funds necessary to meet the rate covenant requirements as delineated in the Bond Resolution for senior lien debt and as delineated in the Loan Agreements for subordinate lien debt (i.e., loans from the State Revolving Fund program as administered by the Florida Department of Environmental Protection); and
5. Maintain targeted unrestricted working cash (fund balance) reserves within the System to limit the risk to the utility due to unforeseen changes in revenues, the incurrence of unexpected operating or capital expenditures and to promote the financial stability of the System.

The average single-family (individually-metered) residential customer uses approximately 4,000 gallons of monthly water and wastewater service and the average bills produced at this typical usage range are comparable to other neighboring utility systems. This comparison is shown in more detail on Tables 16 through 18, at the end of this report, and is summarized below:

Comparison of Proposed Bills with Neighboring Utilities [1]			
	Water	Wastewater	Combined Service
City of Palm Coast:			
Existing Rates FY 2018	\$33.55	\$32.21	\$65.76
Proposed Rates FY 2019	\$35.56	\$34.16	\$69.72
Neighboring Utilities	\$27.63	\$37.41	\$65.04

[*] Amounts shown derived from Tables 16 through 18 at the end of this report; neighboring utilities represent current (Fiscal Year 2018) rates and have not been adjusted for any possible change to such rates that are under consideration by the surveyed utilities.

The City currently charges System Capital Facilities Fees, which are sometimes referred to as "Impact Fees", to new connections 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 purpose of the Capital Facilities Fees is 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 obligation for the payment of these charges by a new customer or developer arises at the time when the City and developer enter into a developer agreement, which is prior to construction. If an existing customer requests an increase in water or wastewater capacity due to increased development, additional Water and/or Wastewater System Capital Facilities Fees will be charged prior to the development consistent with the net increase in demand. The current Capital Facilities Charges were adopted by the City on February 2013 pursuant to Resolution No. 2013-10. It is important to mention, the Capital Facilities Fees charged by the City were reduced in Fiscal Year 2013 to reflect lower capital spending at that time as a result of the downturn in the economy. The City's current proposed capital improvement program is significantly greater than what was anticipated in Fiscal Year 2013 as a result of a rebound in the economy and the continuation of growth anticipated in the City's service territory, therefore the City has requested PRMG to update the City's Capital Facilities Fees to reflect the City's current capital spending plan.

PRMG has reviewed the current System Capital Facilities Fees and it is recommended that the fees be revised based on the City's current capital improvement plan and existing facilities that are currently in service as reported by the City. The following table summarizes the current and proposed Water System and Wastewater System Capital Facilities Fees.

Water and Wastewater Capital Facilities Fees				
<u>Description</u>	<u>In FY 2013</u>	<u>Existing</u>	<u>Proposed</u>	<u>Increase</u>
Water Fee	\$2,679.81	\$2,355.72	\$2,658.00	\$302.28
Wastewater Fee	\$2,734.95	\$2,609.15	\$2,860.00	\$250.85
Combined Fee	\$5,414.76	\$4,964.87	\$5,518.00	\$553.13

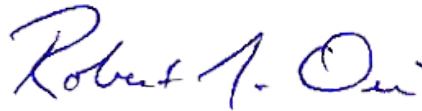
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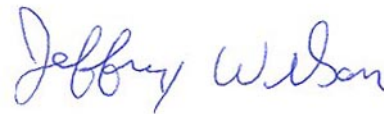
Following this letter is an attached summary report documenting recent trends, principal assumptions, and findings for your consideration. As always, we appreciate the opportunity to be of service to the City and the fine cooperation and valuable assistance given to us by the City staff in the completion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

Respectively submitted,

Public Resources Management Group, Inc.

Handwritten signature of Robert J. Ori in blue ink.

Robert J. Ori
President

Handwritten signature of Jeffrey M. Wilson in blue ink.

Jeffrey M. Wilson
Supervising Consultant

RJO/dlc
Attachments

CITY OF PALM COAST, FLORIDA

**WATER AND WASTEWATER REVENUE SUFFICIENCY
AND CAPITAL FACILITIES FEES STUDY**

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CITY OF PALM COAST, FLORIDA

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CITY OF PALM COAST, FLORIDA

WATER AND WASTEWATER REVENUE SUFFICIENCY AND CAPITAL FACILITIES FEES STUDY

INTRODUCTION

Public Resources Management Group, Inc. ("PRMG") has completed the 2018 Water and Wastewater Revenue Sufficiency and Capital Facilities Fees Analysis (the "Study") on behalf of the City of Palm Coast, Florida (the "City") and has presented the results of our analyses, assumptions, and recommendations in this report for your consideration. The focus of the Study was to update the forecast of utility operations and the corresponding expenditure and funding needs (the "revenue requirements") to evaluate the sufficiency of the water and wastewater utility (the "Utility" or "System") revenues to meet such projected revenue requirements and the review the System's Capital Facilities Fees and recommend adjustments if necessary. The Study period evaluated a forecast of operations for the Fiscal Years 2018 through 2023 (the "Forecast Period") to identify the estimated financial effects to Utility rates from changes in operations, timing and level of capital funding requirements. The principle objective of the revenue sufficiency evaluation is to determine the level of rate revenues needed to reasonably recover the cost of providing service and maintain compliance with the rate covenants as delineated in the meet the rate covenant requirements pursuant to Resolution No. 2003-22 entitled the Master Utility System Bond Resolution adopted by the City Council on September 30, 2003, and as amended and supplemented from time to time (the "Bond Resolution") as well as the covenant contained in the Loan Agreements with the Florida Department of Environmental Protection ("FDEP") associated with securing loans from the State Revolving Fund ("SRF") loan program. All capitalized undefined terms reflected in this report have the same meaning as prescribed in the Bond Resolution, which authorized the issuance of the outstanding utility system senior lien revenue bonds. This report outlines the analyses and assumptions used to determine the proposed water and wastewater system rates (referred to as "Monthly User Charges") being recommended by PRMG for consideration by the City.

The City has established and accounts for the System as a utility enterprise fund (the "Utility Fund"). In general, the Utility Fund must have revenues equal to the costs of the services provided by the System and the City must establish Monthly User Charges sufficient to cover the cost of operating, maintaining, repairing and financing of 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." The Monthly User Charges currently being charged by the City were last placed into effect pursuant to the adoption of Resolution No. 2013-10, on February 19, 2013 (the "Rate Resolution") and have subsequently been updated for annual price indexing adjustments as codified in such resolution. The most recent index implemented by the City represented a 1.6% adjustment, which was made effective on October 1, 2017 and reflects the current rates in service as of the date of this report.

In order to evaluate the ability of the System Revenues to meet the expenditure needs of the System, PRMG has prepared this report of the Monthly User Charges required to provide service. The remainder of this Report includes a discussion of the customer projections, a summary of the capital improvement program and the anticipated financial resources anticipated to fund the program, and a discussion of the ability of the System to fund the Cost of Operation and Maintenance and make the necessary transfers for debt repayment and capital funding needs. Additionally, the Report includes a discussion of the recommended Capital Facilities Fees to be applied to new development requesting capacity from the System.

FORECAST OF REVENUES

The revenues for the Utility are principally generated from the rates for water and wastewater service, which during the Fiscal Year 2018, are estimated to account for approximately 85% of the City's gross revenues, not including other income and Capital Facilities Fees. Growth-related fees (i.e., Capital Facilities Fees) presently account for approximately 9.0% of the Utility's gross revenues and income, while the balance of the revenues is provided from miscellaneous service charges, late fee revenue and interest income on investments. Since revenues are primarily generated from the monthly rates for Utility service, the forecast of rate revenues was predicated on assumptions of the number of customers receiving service and their anticipated usage demands and the assumed change in customers for the Forecast Period.

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Customer and Demand Forecast

The forecast of water service revenues relied upon a review of recent historical trends in customer account growth and used statistics and discussions with City staff. The following table provides a summary of recent water customer billing statistics and demands, as well as the estimated accounts to be served and the corresponding usage demands projected for the Forecast Period:

Historical and Projected Customer Accounts and Statistics – Water System [1]				
<u>Fiscal Year Ended September 30, (Historical)</u>	<u>Average Annual Water Accounts</u>	<u>Average Annual ERCs [2]</u>	<u>Water Sales (000s of Gallons)</u>	<u>Average Monthly Water Use per Account</u>
2014	43,455	47,422	2,348,377	4,127
2015	43,905	47,786	2,220,354	3,872
2016	44,483	48,454	2,359,466	4,058
2017	45,220	49,233	2,411,872	4,082
Average Annual Historical Growth Rate	1.34%	1.26%	0.89%	
<u>Fiscal Year Ending September 30, (Projected)</u>	<u>Average Annual Water Accounts</u>	<u>Average Annual ERCs [2]</u>	<u>Water Sales (000s of Gallons)</u>	<u>Average Monthly Water Use per Account</u>
2018	45,975	50,019	2,461,934	4,102
2019	46,725	50,904	2,492,983	4,081
2020	47,476	51,682	2,513,088	4,052
2021	48,218	52,444	2,545,622	4,045
2022	48,934	53,192	2,577,697	4,038
2023	49,647	53,933	2,608,985	4,031
Average Annual Projected Growth Rate [3]	1.29%	1.26%	0.97%	

[1] Amounts shown derived from Tables 1 and 2 at the end of this Report.

[2] ERUs determined based on: i) an application of meter equivalent factors to active accounts served for the residential and commercial class, which is consistent with the water system and was based on meter capacity information as published by the American Water Works Association; and ii) number of units served for the multi-family class.

[3] Reflects average annual projected compounded growth from Fiscal Year 2017 to Fiscal Year 2023.

As can be seen from the above table, water sales are expected to increase primarily due to normal customer growth associated with ongoing new development / construction in the City service area. Based on discussions with City staff and a review of the recent customer growth trends, it is assumed for the Forecast Period that the City may experience average annual growth in customer accounts due to normal or general development of approximately 1.29% per year and corresponding billed water sales corresponding to such growth of approximately 0.97% per year (the lower water sales projection results in a continuing decline in the average monthly use per household, which is the long-term trend being experienced by utilities in Florida and nationwide).

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

Historical and Projected Customer Accounts and Statistics – Wastewater System [1]				
Fiscal Year Ended September 30, (Historical)	Average Annual Wastewater Accounts	Average Annual ERCs [2]	Wastewater Sales (000s of Gallons) [3]	Average Monthly Water Use per Account
2014	35,720	38,437	1,688,626	3,661
2015	36,137	38,742	1,646,658	3,542
2016	36,602	39,282	1,728,500	3,667
2017	37,309	40,002	1,740,407	3,626
Average Annual Historical Growth Rate	1.46%	1.34%	1.01%	
Fiscal Year Ending September 30, (Projected)	Average Annual Wastewater Accounts	Average Annual ERCs [2]	Wastewater Sales (000s of Gallons) [3]	Average Monthly Water Use per Account
2018	38,049	40,767	1,742,772	3,562
2019	38,784	41,543	1,768,375	3,547
2020	39,519	42,306	1,796,931	3,540
2021	40,248	43,053	1,828,358	3,539
2022	40,948	43,777	1,858,930	3,539
2023	41,643	44,500	1,889,417	3,538
Average Annual Projected Growth Rate [4]	1.52%	1.47%	1.36%	

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

[2] ERUs determined based on: i) an application of meter equivalent factors to active accounts served for the residential and commercial class, which is consistent with the water system and was based on meter capacity information as published by the American Water Works Association; and ii) number of units served for the multi-family class.

[3] Based on metered water consumption, which serves as the basis for billed wastewater flows.

[4] Reflects average annual projected compounded growth from Fiscal Year 2017 to Fiscal Year 2023.

Projected Revenues

The revenue forecast was based on the customer and demand forecast and the proposed charges for service, which will be discussed later in this Study. The revenue forecast can be categorized into five primary groups, which comprise: water service (rate) revenues, sewer service (rate) revenues, other operating revenues from miscellaneous fees and charges, capital facilities fees revenues derived solely from new growth or development, and investment earnings or interest income (not considered as a rate revenue but earnings on available cash balances which is a source of income to the System). Monthly water and sewer service charge revenues comprise the majority of the total rate and fee revenues and are projected to account for approximately 85% of the total rate and fee revenues for Fiscal Year 2018. Service revenues are projected to increase over the Forecast Period due to: i) anticipated increases in the monthly water and wastewater user charges; and ii) greater water and wastewater flows as a result of assumed customer growth associated with new development and infill of existing developed areas within the City. Capital facilities fee revenues are derived from charges to new development and were based on actual Fiscal Year 2017 and Fiscal Year-to-date 2018 revenues and the projected growth in the City customer base assumed for the Forecast Period.

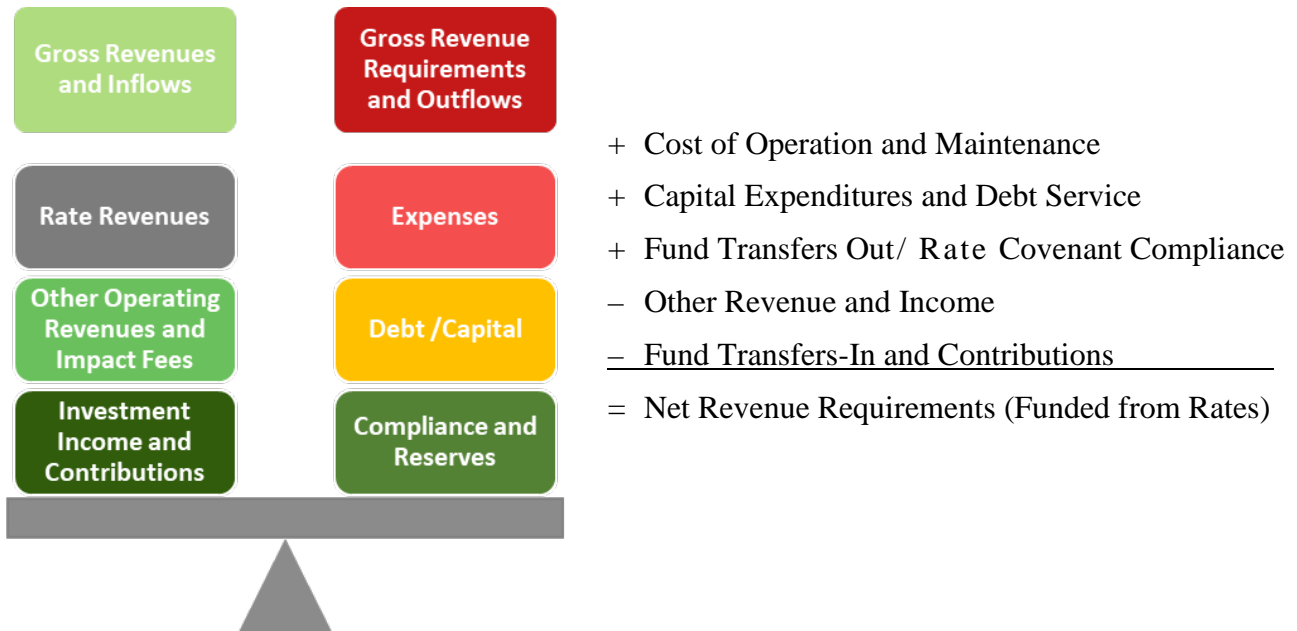
Estimated Rate and Charge Revenues During the Forecast Period

Fiscal Year	Water Rate Adjustment [1]	Sewer Rate Adjustment [1]	Water Service	Sewer Service	Other Revenues	Capital Facilities Fee Revenues	Total Rate and Fee Revenues
2018 [2]	0.00%	0.00%	\$22,321,944	\$14,997,326	\$2,512,593	\$3,967,087	\$43,798,950
2019	6.00%	6.00%	23,707,650	16,158,850	2,460,488	4,164,625	46,491,614
2020	6.00%	6.00%	25,071,972	17,422,559	2,384,190	4,091,236	48,969,956
2021	2.40%	2.40%	26,021,430	18,141,342	2,352,391	3,996,760	50,511,923
2022	2.40%	2.40%	26,997,945	18,880,519	2,328,906	3,880,937	52,088,306
2023	2.40%	2.40%	28,018,658	19,656,252	2,350,142	3,877,973	53,903,025
Growth Rate			3.86%	4.61%	-1.11%	-0.38%	3.52%

[1] Amounts shown for Fiscal Years 2019 and 2020 include recommended price index and additional rate adjustments to reflect an overall increase in rates of 6.0%; rate adjustments thereafter reflect only the application of a price index adjustment as provided in the Rate Resolution.
 [2] Amounts shown for Fiscal Year 2018 based on nine (9) months actual information.

FORECAST OF REVENUE REQUIREMENTS

The foundation of the study and the primary objective of the water and wastewater rates are to reasonably recover the cost of providing service, cost of infrastructure investment, and compliance with covenants of the outstanding bonds and internal fiscal targets (referred to as the "Revenue Sufficiency" evaluation). The various components of costs associated with operating and maintaining a utility system, as well as the costs of financing the renewals and replacements of existing facilities and the capital improvements for upgrades and expansions, are generally considered as the revenue requirements of a public utility such as the City's System. The sum of these costs, after adjusting for other income and other operating revenues available to the utility, represents the net revenue requirements of a utility system required to be funded from monthly user charges or rates. The following is a summary of the net revenue requirement derivation:



Net revenue requirements signify a minimum level of expenditures required to be recovered from monthly user fees or rates. The development of the net revenue requirements of the System is a critical component of the Financial Forecast since utility rates should be designed to fully recover

the cost of providing service. The estimates of the revenue requirements associated with the City's water and wastewater system are consistent with methods generally employed by publicly-owned utilities that rely on revenue bond financing to fund capital investment needs. Specifically, and as can be seen in the above figure, the development of the net revenue requirements was based on the "cash-needs" approach, as opposed to the "utility-basis" approach, which is generally used by regulatory commissions and agencies in the establishment of rates for privately-owned utilities. The advantages of the "cash-needs" approach include:

- Expenditures presented on a basis that is consistent with and conforms to the City's budget process and procedures and supports the financial reporting process;
- Is consistent with and provides compliance with rate covenants and flow of fund provisions included in bond resolutions and state revolving loan funds and provides consistency to the credit rating process;
- The method is relatively transparent and promotes overall administrative simplicity;
- Provides for the matching of revenue recovery and cash requirements; and
- Is easier to explain to the governing councils / commissions (regulators) since it links to the budget and financial reporting process, which they oversee on a general government basis as well.

The water and wastewater revenue sufficiency evaluation recognized a forward-looking study period to assess the adequacy of the existing user rates. An important objective of the projections was to establish rates and rate levels that would reflect current and near future costs of providing service to ensure continuing and adequate financial resources. Designing rates and charges to provide revenues to match near future operating needs and capital funding requirements promotes the objective of maintaining the System's financial integrity over the long-term and provide continued compliance for the overall financial policies and objectives of the City. As previously mentioned, the Forecast Period includes the six projected Fiscal Years 2018 to 2023. A forecast of System operations was prepared to: i) assess the adequacy of utility rates in the near future; ii) recognize potential cost recovery strategies based on the phase-in of any required rate adjustment to meet the projected revenue requirements and finance identified capital expenditure requirements; iii) examine the financial implications of alternatives to funding the System's capital plan; and iv) promote compliance with the bond documents and loan agreements, City policy, maintain a strong credit rating to allow future access to capital markets at a reduced rate, and to promote rate sustainability.

The projected revenue requirements forecast can be generally categorized into three primary groups of requirements comprising operating expenses, capital funding from operations, and debt service issued to fund capital from external sources. Operating expenses account for the majority (58%) of the gross revenue requirements of the System during the Forecast Period. The allowance for capital reinvestment from rates to fund capital expenditures in the future account for approximately 12% of the annual funding needs from rates. The remainder of the gross revenue requirements reflects the annual payment of debt service for capital funding and is projected to account for 30% of the expenditure requirements funded from rate revenues.

Operating Expenses

The forecast of operating expenses was developed based upon: i) a review of the recent trends in historical expenses; ii) the projections contained in the City's Adopted Fiscal Year 2018 Budget, including year-to-date expenditures, and the preliminary Fiscal Year 2019 Budget, which reflect the City's most recently approved or anticipated financial plan for the Utility and which served as the baseline or the development of the financial forecast; and iii) assumed growth rates / escalation factors of costs based on industry trends in such costs and projections of inflation as published by the Congressional Budget Office and other sources. Adjustments to the Fiscal Year 2018 Budget were made to reflect actual operating results as of April 2018. The following table presents a summary of the forecasted System operating expenses by major category:

Summary of Forecasted System Operating Expenses [1]

Description	Fiscal Year Ending September 30,						Annual Compound Growth Rate
	2018 (Est.)	2019	2020	2021	2022	2023	
Salaries and Benefits	\$9,018,655	\$10,605,157	\$11,197,722	\$11,770,769	\$12,325,075	\$13,004,016	6.29%
Insurance	183,740	196,269	202,157	208,222	214,468	220,902	3.12%
Utilities	3,288,683	3,640,133	3,796,280	3,964,899	4,138,796	4,318,948	4.65%
Professional/Contractual Services [2]	3,350,438	2,559,765	2,588,475	2,654,489	2,722,281	2,791,905	-2.99%
Repairs and Maintenance	1,413,239	1,433,784	1,476,798	1,521,101	1,566,734	1,613,737	2.24%
Other	1,870,155	1,994,712	2,073,440	2,243,379	2,244,705	2,297,187	3.49%
Indirect costs	2,921,586	2,631,583	2,694,741	2,759,415	2,825,641	2,893,456	-0.16%
Contingency	440,276	452,853	471,161	490,154	508,979	530,519	3.16%
Bad Debt Expense	93,298	94,025	94,550	95,989	97,408	98,791	0.96%
Total	\$22,580,070	\$23,608,280	\$24,595,323	\$25,708,416	\$26,644,089	\$27,769,460	3.51%

[1] Amounts shown derived from Table 4 at the end of this report.

[2] Fiscal Year 2018 amounts for Contractual Services reflect approximately \$1.3 million in one-time expenses related to sewer pumping and hauling cost related to Hurricane Irma and extreme wet weather conditions at the beginning of Fiscal Year 2018.

As can be seen above, the primary operating expenses are associated with salaries and benefits, which are the single largest expense of the City (accounts for approximately 40% of the total estimated operating expenses for Fiscal Year 2018). Based on the assumptions regarding changes in expenses due to inflation, System growth, and historical trends, the compound annual growth rate in total projected operating expenses for the Forecast Period is estimated at approximately 3.50%. The primary reasons for the operating expenses increasing at an amount greater than general inflation (estimated by the Congressional Budget Office to approximate 2.4% annually) are: i) additional salaries and benefits expenses associated with the addition of seven (7) new employees, budgeted for Fiscal Year 2019, consisting of a Water Treatment Manager, a Utility Systems Supervisor, two (2) Wastewater Collections Technicians, a Wastewater Treatment Plant Operator, a Water Distribution System Foreman and a Water Quality Technician, which added approximately \$445,000 in annual costs primarily related to the start of operations for Wastewater Treatment Plant No. 2 coming on-line, and to meet the increased demands due to System growth; ii) additional salaries and benefits expenses associated with the addition of five (5) new employees which recognized: two (2) water distribution system technicians (Fiscal Years 2020 and 2023 at one [1] per year), two (2) wastewater collection system technicians (Fiscal Years 2020 and 2023 at one [1] per year), and one (1) customer service representative (Fiscal Year 2021), which added approximately \$243,000 in annual costs by Fiscal Year 2023 to meet the increased demands due

to System growth; and iii) based on discussions with the City, the escalation of wages and salaries above Fiscal Year 2018 budgeted amounts was increased by approximately 5.0% annually to reflect increases due to inflation and allowances for salary adjustments, such as merit increases and cost of living adjustments. It should be noted that the projection of operating expenses is based primarily on the preliminary Fiscal Year 2019 budget, since this represents the most recent financial plan of the City. For additional detail concerning the forecast of operating expenses, please reference Table 4 at the end of this report.

Capital Expenditures

Capital reinvestment and funding is integral to the continuity and quality of utility service delivered to customers. These expenditures, coupled with the need to meet increased regulations and the growth requirements of the City, contributed to the CIP reflected in the financial plan. The capital improvement program for the Water and Wastewater Systems was based on data derived from the City's most recent six-year Capital Improvement Plan. The capital funding plan was based on i) the purpose of the expenditures (e.g., expansion-related); ii) available balances in the funds and accounts established by the City that are available for capital projects; iii) anticipated Capital Facilities Fees for receipts derived from new development; iv) the use of additional debt to finance water and wastewater projects; and v) the use of previously issued bond proceeds. Also included in the capital improvement program is the use of funds on deposit in the Renewal, Replacement, and Improvement Fund (the "RR&I 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 City an annual funding mechanism to continue to provide high quality service (i.e., maintain same level of service) to its customers as the utility system ages.

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The following table provides a summary of the capital expenditures by utility type and corresponding sources of funding recognized in the Financial Forecast for the Forecast Period:

Projected Capital Improvement Funding Plan [1]							
Description	Fiscal Year Ending September 30,						Total
	2018	2019	2020	2021	2022	2023	
Capital Projects:							
Water System	\$4,687,144	\$11,961,880	\$7,760,692	\$5,992,829	\$5,715,976	\$15,055,160	\$51,173,681
Wastewater System	10,404,745	13,326,500	14,740,000	15,955,000	16,330,000	8,980,000	79,736,245
Less Reclassify Expenditures to Operating Expenses	(125,998)	(15,000)	(45,000)	(165,000)	(115,000)	(115,000)	(580,998)
Total Capital Projects	<u>\$14,965,891</u>	<u>\$25,273,380</u>	<u>\$22,455,692</u>	<u>\$21,782,829</u>	<u>\$21,930,976</u>	<u>\$23,920,160</u>	<u>\$130,328,928</u>
Funding Sources:							
Operating Reserves	\$2,232,745	\$8,303,343	\$2,300,000	\$750,000	\$0	\$0	\$13,586,088
Renewals & Replacements Fund [2]	5,523,146	7,603,880	6,465,692	5,682,829	5,530,976	7,370,160	38,176,683
Capital Facilities Fees Fund [3]	500,000	6,618,000	3,840,000	2,633,000	1,733,000	5,000,000	20,324,000
Developer Contributions	0	750,000	750,000	0	0	0	1,500,000
Existing Debt Proceeds	1,200,000	998,157	1,000,000	0	0	0	3,198,157
Existing SRF Loan Appropriations	5,510,000	0	0	0	0	0	5,510,000
Future Revenue Bonds [4]	0	0	7,900,000	3,667,000	0	0	11,567,000
Future SRF Loan [5]	0	0	0	9,050,000	11,100,000	3,950,000	24,100,000
Future Revenue Bonds [4]	0	0	0	0	3,567,000	7,600,000	11,167,000
Grants	0	1,000,000	200,000	0	0	0	1,200,000
Total Funding Sources	<u>\$14,965,891</u>	<u>\$25,273,380</u>	<u>\$22,455,692</u>	<u>\$21,782,829</u>	<u>\$21,930,976</u>	<u>\$23,920,160</u>	<u>\$130,328,928</u>

[1] Amounts derived from Table 3 at the end of this Report.

[2] Amounts shown represent projects funded from the RR&I Fund, a fund designated for capital re-investment, which is funded annually from operations of the System.

[3] Amounts shown represents the use of monies derived from Capital Facilities Fees from new development and is used to fund expansion-related capital expenditures.

[4] Amounts shown reflect the anticipated use of future System Revenue Bonds issued on a parity basis with the City's senior lien bonds to fund a portion of the Utility Six-Year Capital Improvement Program.

[5] Amounts shown reflect anticipated use of low-interest loans secured through the State Revolving Loan Fund, primarily related to the construction of the Phase 2 expansion of Wastewater Treatment Plant No. 2 from 2.0 MGD to 4.0 MGD.

As can be seen from the above table and as shown in greater detail in Table 6 at the end of this report, the majority (approximately 55%) of the overall identified funding requirements are anticipated to be financed from internal sources derived from existing cash reserves, capital facilities fees, and programmed transfers from rate revenues to the RR&I Fund.

The remaining capital expenditures identified for the Forecast Period is assumed to be funded with external sources which include the issuance of additional bonds and loans, the use of remaining existing bond proceeds and SRF loan appropriations, developer contributions and grants. The majority of the externally funded projects are associated with extension or expansion of infrastructure including, but not limited to: i) expansion of Water Treatment Plant No. 3 and associated wellfield expansions; ii) Lime Sludge Handling Design and Facilities at Water Treatment Plant No. 1; iii) expansion of Wastewater Treatment Plant No. 2; and iv) other water transmission main extensions and gravity and force main extensions throughout the System. The capital plan also includes ongoing infrastructure renewals and replacements associated with the System utility plant beginning to reach its average useful service life. It should be noted that the CIP is a planning document, which is presented on an appropriations basis, and the timing and completion of projects are subject to changes or modification as to when construction will occur.

As a result, it is recommended that staff continue to annually re-evaluate the financial forecast and the need for adopted or additionally identified rate adjustments.

As previously discussed, a major driver regarding the need for additional rate adjustments are the required deposits for capital re-investment from rate revenues. The Bond Resolution provides that the City establish and maintain the RR&I Fund with annual deposits to the fund being equal to 5% of previous year's Gross Revenues (the "RR&I Fund Requirement"). It has been determined that the deposits to the RR&I Fund at the RR&I Fund Requirement represents a minimum funding threshold based on past capital re-investment needs and that a higher deposit to meet the needs of the System was needed. The City's current RR&I Fund deposit policy is to transfer 10% of the preceding year's System Gross revenues to the RR&I Fund. The purpose of the RR&I Fund is to provide moneys for the purpose of paying the cost of extensions, enlargements, or additions to, or the replacement of capital assets of the System or emergency repairs thereto. Based on the identified capital needs of the System and the level of installed infrastructure capital invest in the System (depreciable assets) approaching over \$305 Million at the end of Fiscal Year 2017 (most recently completed Fiscal Year), PRMG is recommending the City gradually increase the transfer to the RR&I Fund from 10% to 15% of the preceding year's System gross revenues to provide ongoing and increased pay-as-you-go ("Pay-Go") funding for future capital improvements of the Utility and to minimize the use of future indebtedness to promote long-term rate flexibility and sustainability. This deposit rate is approximately 2% of the gross depreciable assets (which are at original cost and not replacement cost or in "today's dollars") which would equate to an average service live of approximately 50 years for all assets. The following table provides a summary of the assumed transfers for capital reinvestment from rate revenues:

Fiscal Year	Required Minimum Transfer Amount	Additional Transfer Amount	Total Transfer Amount Recognized	Total Percentage of Revenues
2018	\$1,909,408	\$1,909,408	\$3,818,816	10.00%
2019	1,991,616	2,389,939	4,381,555	11.00%
2020	2,116,396	3,174,594	5,290,990	12.50%
2021	2,243,983	3,365,974	5,609,957	12.50%
2022	2,325,805	3,488,708	5,814,513	12.50%
2023	2,410,416	4,820,832	7,231,248	15.00%

[1] Pursuant to the Bond Resolution the City is required to transfer 5% of the prior year's Gross Revenues into the Renewal, Replacement, & Improvement Fund; PRMG is recommending a gradual increase to 15% by the end of the Forecast Period to meet the ongoing capital needs of the System and limit the issuance of future financings.

Debt Service

The City had outstanding as of October 1, 2017 in the aggregate principal amount of \$162,961,902 of senior lien utility revenue bonds, State Revolving Fund Loans administered by the Florida Department of Environmental Protection ("FDEP") (the "SRF Loans"), and private bank loans, which were originally issued to finance capital improvements to the Water and Wastewater Systems (the "Outstanding Debt") as shown below:

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Issue	Principal Outstanding [*]
Utility System Improvement and Refunding Revenue Bonds, Series 2013	78,240,000
Utility System Revenue Refunding Note, Series 2016	37,803,000
Utility System Refunding Revenue Note, Series 2017	15,960,500
State Revolving Fund (SRF Loan) WWTP #2 WW180420	30,958,402
Total Outstanding Debt:	162,961,902

[*] Amount outstanding at October 1, 2017 as provided by the City.

The repayment requirements included in this analysis for the Outstanding Debt were based on the actual debt / loan repayment service schedules for each specific debt instrument and are presented on a "gross" basis (i.e., not net of interest earnings on any debt / loan service-related funds or accounts). Furthermore, the amounts shown are based on the monthly funding requirements of the various sinking / loan repayment funds as may be required by the Bond Resolution / Loan Agreements that authorized the debt (essentially an accrual basis), as opposed to when the debt service requirements are actually paid.

As a result of the funding of the Capital Improvement Plan, it is anticipated during the Forecast Period that additional System debt and loans will be issued or secured payable from the Net Revenues of the System. Specifically, it was assumed that the City would issue Utility System Revenue Bonds, Series 2019 (the "Series 2019 Bonds") on a parity basis with the outstanding senior lien debt at the beginning of the Fiscal Year 2020 (during the calendar year 2019) to fund a deposit to the Series 2019 Bonds Project Fund of approximately \$11,567,000 to finance a portion of the six-year CIP. It was also assumed that the City would issue Utility System Revenue Bonds, Series 2021 (the "Series 2021 Bonds") on a parity basis with the outstanding senior lien debt and the additional Series 2019 Bonds at the beginning of the Fiscal Year 2022 (during the calendar year 2021) to fund a deposit to the Series 2021 Bonds Project Fund of approximately \$11,167,000 to finance a portion of the six-year CIP. Also, it was assumed that the City would secure additional loans through the Florida Department of Environmental Protection Department Clean Water (for wastewater projects) SRF loan program primarily for the construction of the expansion to Wastewater Treatment Plant No. 2 from 2.0 million gallons per day ("MGD") to 4.0 MGD. Specifically, it has been assumed that the City would borrow approximately \$24,100,000 from the SRF program to finance a portion of the six-year Capital Improvement Program (collectively for all debt to be issued and loans to be secured, the "Additional Debt"). The following is a summary of the assumptions regarding the issuance of the Additional Debt for the System capital improvements:

Proposed Additional Bonds/Loans	Total Principal Amount of Bonds [*]	Projected Issuance Date	Projected Average Annual Interest Rate	Term/ Years	Est. Annual Additional Debt Repayment Requirement	Maturity Date
Future Revenue Bonds, Series 2019	\$12,160,000	October 1, 2019	4.50%	30	\$746,521	October 2049
Future Wastewater SRF Loan	\$24,591,837	October 1, 2020	2.50%	20	\$1,570,012	October 2044
Future Revenue Bonds, Series 2021	\$11,740,000	October 1, 2021	4.50%	30	\$720,737	October 2051

[*] Amounts shown are estimates for the development of this financial forecast and include the deposits to the Project Fund or appropriations for the capital project, the cost to issue the debt or secure the loan for project financing, capitalized interest during construction where applicable, and other related costs associated with the financing. The City will work with its Municipal Financial Advisor for each series of debt or loans secured to determine the amount, structure and timing of when the debt or loans are to be incurred by the City.

The following table provides a summary of the Outstanding Debt and Additional Debt repayment requirements presented on an accrual basis assumed to be funded from rates for the Forecast Period by individual debt or loan issue:

Summary of Annual Existing and Proposed Debt and Loan repayment Requirements (Accrual Basis)						
Description	2018	2019	2020	2021	2022	2023
Utility System Improvement and Refunding Revenue Bonds, Series 2013	\$6,796,250	\$6,798,250	\$6,797,250	\$6,798,000	\$6,805,000	\$6,802,500
Utility System Revenue Refunding Note, Series 2016	2,518,514	2,518,306	2,521,130	2,521,887	2,519,603	2,518,327
Utility System Refunding Revenue Note, Series 2017	1,875,183	1,875,100	1,876,169	1,875,191	1,874,520	1,875,539
State Revolving Fund (SRF) WWTP #2 WW180420	759,472	1,657,030	1,657,030	1,657,030	1,657,030	1,657,030
Future Revenue Bonds, Series 2019	0	0	746,521	746,522	746,521	746,522
Future Clean Water SRF Loan [*]	0	0	0	0	0	0
Future Revenue Bonds, Series 2021	0	0	0	0	720,737	720,736
Total	\$11,949,419	\$12,848,686	\$13,598,100	\$13,598,630	\$14,323,411	\$14,320,654

[*] The repayment of the Clean Water SRF Loan associated with the expansion of Wastewater Plant No. 2 is estimated to begin after completion of the plant expansion which is anticipated to be beyond the Forecast Period. The anticipated loan repayment requirements for this SRF Loan is estimated to be approximately \$1,570,000 and is scheduled to begin in Fiscal Year 2024.

As can be seen from the table above and as previously mentioned, the City will experience an increase in overall debt service payments through Fiscal Years 2023 as a result of the issuance of the Additional Debt to finance a portion of the six-year Capital Improvement Program. It is important to note, the future debt service associated with the assumed future wastewater SRF Loan used to finance the expansion of Wastewater Treatment Plant No. 2 is not projected to begin until Fiscal Year 2024 after completion of the construction of the improvements; therefore, the repayment requirements for this loan fall outside of the Forecast Period. If the annual loan repayment requirements associated with this future SRF Loan were recognized during the Forecast Period, it would result in approximately \$1,570,000 in additional annual loan repayment requirements to be funded from rates which could result in an additional 3% increase to water and wastewater rates. Since this loan requirement is at the end of the Forecast Period which results in more uncertainty as to the timing and need of the additional loan, it is not recommended that the City consider adjusting rates for this potential loan at this time but monitor it closely since it does represent a significant future capital investment of the System.

PRINCIPAL FINDINGS

As shown on Table 6 at the end of this report and based on the forecast of sales and revenues for the System and the assumptions and considerations set forth herein with respect to the estimation of the System revenue requirements, the projected rate revenue surplus or (deficiency) for the Forecast Period is anticipated to be as follows:

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Adequacy of Proposed System Rate Revenues [*]

	Fiscal Year Ending September 30,					
	2018	2019	2020	2021	2022	2023
Total Operating Expenses	\$22,580,070	\$23,608,280	\$24,595,323	\$25,708,416	\$26,644,089	\$27,769,460
Existing Debt Service	11,949,419	12,848,686	12,851,579	12,852,108	12,856,153	12,853,396
Proposed Debt Service	0	0	746,521	746,522	1,467,258	1,467,258
Capital Funded from Rates/Deposits to Reserves and Other Required Transfers	4,565,201	5,178,886	6,140,881	6,493,212	6,732,082	8,184,746
Less Income and Revenue from Other Sources	<u>(2,513,054)</u>	<u>(2,461,416)</u>	<u>(2,385,126)</u>	<u>(2,353,337)</u>	<u>(2,329,861)</u>	<u>(2,651,107)</u>
Net Revenue Requirements	36,581,637	39,174,437	41,949,178	43,446,922	45,369,721	47,623,753
Existing Rate Revenue	37,319,270	37,609,906	37,819,980	38,395,496	38,963,385	39,516,529
Revenue Surplus/(Deficiency) – Existing Rates	<u>737,634</u>	<u>(1,564,531)</u>	<u>(4,129,197)</u>	<u>(5,051,426)</u>	<u>(6,406,335)</u>	<u>(8,107,224)</u>
As Percent of Existing Revenue	1.98%	-4.16%	-10.92%	-13.16%	-16.44%	-20.52%
Rate Adjustments						
Annual Price Indexing	0.00%	2.90%	2.40%	2.40%	2.40%	2.40%
Projected Additional Rate Adjustment	0.00%	3.10%	3.60%	0.00%	0.00%	0.00%
Projected Combined Rate Adjustment [2]	0.00%	6.00%	6.00%	2.40%	2.40%	2.40%
Effective Date of Adjustment	October1 st	October1 st	October1 st	October1 st	October1 st	October1 st
Cumulative Rate Adjustments	0	2,256,594	4,674,551	5,767,276	6,915,078	8,158,381
Adjusted Rate Revenue	\$37,319,270	\$39,866,500	\$42,494,531	\$44,162,773	\$45,878,463	\$47,674,909
Revenue Surplus / (Deficiency) After Adjustments	<u>\$737,634</u>	<u>\$692,064</u>	<u>\$545,353</u>	<u>\$715,850</u>	<u>\$508,743</u>	<u>\$51,156</u>
As Percent of Existing Revenue	<u>1.981%</u>	<u>1.74%</u>	<u>1.28%</u>	<u>1.62%</u>	<u>1.11%</u>	<u>0.11%</u>

[*] Derived from Table 6.

As shown in the table above, the current monthly user charges are not anticipated to be adequate to meet the System's needs over the Forecast Period. Based on the results of the Revenue Sufficiency Evaluation, it is recommended that i) the Monthly User Rates be increased annually by 6% for Fiscal Years 2019 and 2020 and ii) the City re-implement of the application of the annual index beginning in Fiscal Year 2021 throughout the remainder of the Forecast Period to provide a mechanism to recovery inflationary effects on the cost of providing service. The proposed System adjustments identified in this Report are necessary to:

- Recover increased operating expenses associated with the impacts of general inflation and increased additional personnel assumed during the Forecast Period due to System growth and facility expansions;
- Recover increased debt and loan repayment requirements associated with the anticipated issuance of the Additional Debt during the Forecast Period which is considered necessary to fund the capital improvement program as identified by the City for the System;
- Provide annual transfers to fund capital expenditures for the renewal, replacement, betterment and upgrade of System assets. The City's current policy is to transfer 10% or preceding year's System Gross revenues to the Renewal, Replacement, and Improvement Fund (the "RR&I Fund"). The purpose of the RR&I Fund is to provide moneys for the purpose of paying the cost of extensions, enlargements, or additions to, or the replacement

of capital assets of the System or emergency repairs thereto. PRMG is recommending the City gradually increase the transfer to the RR&I Fund from 10% to 15% of the preceding year's System gross revenues to provide ongoing and increased Pay-Go funding for future capital improvements of the Utility and to minimize the use of future indebtedness to promote long-term rate flexibility and sustainability;

- Provide sufficient funds necessary to meet the rate covenant requirements as delineated in the Bond Resolution (senior lien bonds) and the Loan Agreements (subordinate lien loans secured through the SRF loan program); and
- Maintain targeted unrestricted working cash (fund balance) reserves within the System to limit the risk to the utility due to unforeseen changes in revenues, the incurrence of unexpected operating or capital expenditures and to promote the financial stability of the System.

Proposed Water Rates

Based on the customer forecast, the projected net revenue requirements, and the assumptions described above the proposed rates for the Water System are as follows:

Proposed Water Rates			
	<u>Existing Rates</u>	<u>Fiscal Year</u>	
		<u>2019</u>	<u>2020</u>
Monthly Retail Base Facility Charge (by Meter Size):			
Residential, Commercial, and Multi-Family Service			
5/8 x 3/4", 3/4"	\$16.11	\$17.08	\$18.10
1"	40.27	42.69	45.25
1-1/2"	80.56	85.39	90.51
2"	128.89	136.62	144.82
3"	257.75	273.22	289.61
4"	402.73	426.89	452.50
6"	805.47	853.80	905.03
8"	1,288.77	1,366.10	1,448.07
10"	1,852.59	1,963.75	2,081.58
Irrigation Service (Water-Only):			
5/8 x 3/4", 3/4"	\$8.06	\$8.54	\$9.05
1"	40.27	42.69	45.25
1-1/2"	80.56	85.39	90.51
2"	128.89	136.62	144.82
3"	257.75	273.22	289.61
4"	402.73	426.89	452.50
6"	805.47	853.80	905.03
Private Fire Protection Services:			
5/8"	\$1.34	\$1.42	\$1.51
3/4"	1.34	1.42	1.51
1"	3.35	3.55	3.76
1-1/2"	6.72	7.12	7.55
2"	10.73	11.37	12.05
3"	21.49	22.78	24.15
4"	33.60	35.62	37.76
6"	67.19	71.22	75.49
8"	107.48	113.93	120.77
10"	154.51	163.78	173.61
12"	288.87	306.20	324.57

Table continued on following page.

Proposed Water Rates (cont'd.)

	Existing Rates	Fiscal Year	
		2019	2020
Monthly Retail Usage Charge (per 1,000 Gallons of Meter Water Use)			
General and Multi-Family	\$5.00	\$5.30	\$5.62
Wholesale Rate (\$/1,000 Gallons of Metered Water Use)	4.52	4.79	5.08
Single-Family and Duplex			
<u>Rate Block:</u>			
0 - 5,000 Gallons	\$4.36	\$4.62	\$4.90
5,001-10,000 Gallons	4.80	5.09	5.40
10,001-20,000 Gallons	6.12	6.49	6.88
Above 20,000 Gallons	7.85	8.32	8.82
Irrigation			
<u>Rate Block:</u>			
0 - 5,000 Gallons	\$4.80	\$5.09	\$5.40
5,001-10,000 Gallons	4.80	5.09	5.40
10,001-20,000 Gallons	6.12	6.49	6.88
Above 20,000 Gallons	7.85	8.32	8.82
Surcharge for Outside City Limits (Retail Only)	25%	25%	25%

Proposed Wastewater Rates

Based on the customer forecast, the projected net revenue requirements, and the assumptions described above the proposed rates for the Wastewater System are as follows:

	Existing Rates	Fiscal Year	
		2019	2020
Monthly Retail Base Facility Charge (by Meter Size):			
Residential, Commercial, and Multi-Family Service			
5/8 x 3/4", 3/4"	\$15.81	\$16.76	\$17.77
1"	39.53	41.90	44.41
1-1/2"	79.05	83.79	88.82
2"	126.47	134.06	142.10
3"	252.96	268.14	284.23
4"	395.23	418.94	444.08
6"	790.48	837.91	888.18
8"	1,264.78	1,340.67	1,421.11
10"	1,818.11	1,927.20	2,042.83
Monthly Usage (per 1,000 Gallons of Meter Water Use)			
Retail Wastewater Rate (Residential 8,000 Cap):	\$4.10	\$4.35	\$4.61
Retail Wastewater Rate (General/Multi-Family)	4.93	5.23	5.54
Bulk Rate (\$/1,000 Gallons of Service):	\$3.94	\$4.18	\$4.43
Wholesale Reclaimed Water:			
Monthly Base Charge:	N/A	N/A	N/A
Usage Charge:			
Secondary Treatment Only			
Dunes CDD (Low Pressure)	\$0.25	\$0.27	\$0.29
Grand Haven CDD (Low Pressure)	0.38	0.40	0.42
All Other Wholesale (Low Pressure)	0.61	0.65	0.69

Table continued on following page.

Proposed Wastewater Rates (cont'd.)

	Existing Rates	Fiscal Year	
		2019	2020
Retail Reclaimed Water:			
Monthly Base Charge	\$6.31	\$6.69	\$7.09
Usage Charge:			
0-10,000 Gallons	\$0.94	\$1.00	\$1.06
10,001-20,000 Gallons:	1.40	1.48	1.57
Over 20,000 Gallons	1.90	2.01	2.13
Surcharge for Outside City Limits (Retail Only)	25%	25%	25%

Rate Comparisons – Monthly User Fees

Tables 16 through 18 at the end of this Report provide a comparison of the monthly cost of providing water and wastewater service for a 5/8-inch by 3/4-inch water meter at various usage levels calculated under the existing System rates. Also included on the tables is a comparison to bills calculated under the rates of other neighboring Florida utilities and coastal communities as of the billing month of January 2018. The monthly bills for the various Florida utilities used for the comparison are exclusive of local taxes. Additionally, for municipal-owned utility systems, which includes the City, such utilities may apply to customers located outside the corporate limits of such municipality a surcharge of up to 50% when compared to the rates for service to customers located within the corporate limits as allowed pursuant to Section 180.191, Florida Statutes (the City currently imposes a 25% surcharge for service rendered outside the corporate limits of the City). The 5/8-inch by 3/4-inch meter comparison (for inside-the-city service) is presented since this represents the majority of the City's water and wastewater residential customers and the majority of the customers for the other utilities reflected in the comparison. As can be seen in the comparison, the System rates produce bills for the City that are comparable in amount when compared to the other neighboring utilities. The average residential customer for the System uses approximately 4,000 gallons of monthly water service. A comparison of water and wastewater rates at this consumption level between the City and the utilities surveyed are as follows:

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Comparison of Typical Monthly Residential Bill at 4,000 Gallons of Utility Service

	Residential Service Assuming 4,000 Gallons of Utility Service [1]		
	Water	Wastewater	Total
<u>City of Palm Coast</u>			
Existing Rates	\$33.55	\$32.21	\$65.76
Proposed FY 2019	35.56	34.16	69.72
<u>Other Neighboring/Surveyed Utilities</u>			
Brevard County	\$21.39	\$39.14	\$60.53
City of Daytona Beach [2]	32.54	41.39	73.93
City of Edgewater	28.76	43.76	72.52
City of Melbourne	26.28	39.23	65.51
City of Ormond Beach	21.44	27.65	49.09
City of Palm Bay [2]	28.81	42.57	71.38
City of Port Orange	20.62	29.10	49.72
City of Port St. Lucie	27.27	42.89	70.16
City of St. Augustine	27.09	39.05	66.14
City of South Daytona	30.79	36.61	67.40
St. Johns County	24.95	32.95	57.90
City of Titusville [2]	22.47	44.46	66.93
New Smyrna Beach Utilities Commission	15.68	34.89	50.57
Volusia County – Softened	29.68	40.05	69.73
JEA (City of Jacksonville) [2]	17.80	35.34	53.14
Flagler County (Beverly Beach)	55.04	33.30	88.34
City of West Melbourne	39.13	33.59	72.72
Other Florida Utilities Average	\$27.63	\$37.41	\$65.04

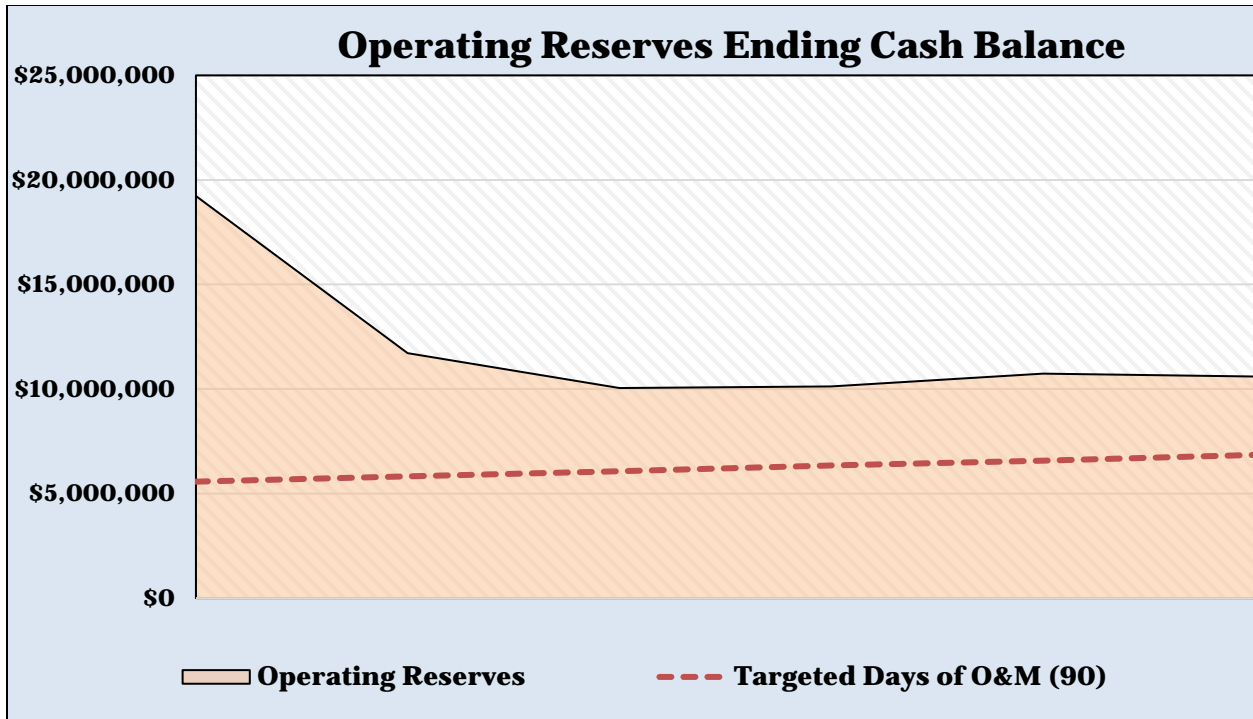
[1] Based on utility survey shown on Tables 16 through 18; reflects inside-City service rates for municipal utility systems.

[2] Utilities are currently involved in or contemplating a rate study, or are expecting a change in the rates charged during the next twelve months; the proposed rate adjustments, if any, are not reflected in the current rate above.

In the development of the Financial Forecast and the determination of the projected rate adjustments, the following financial targets or objectives were recognized to maintain a strong fiscal position and to limit financial risk:

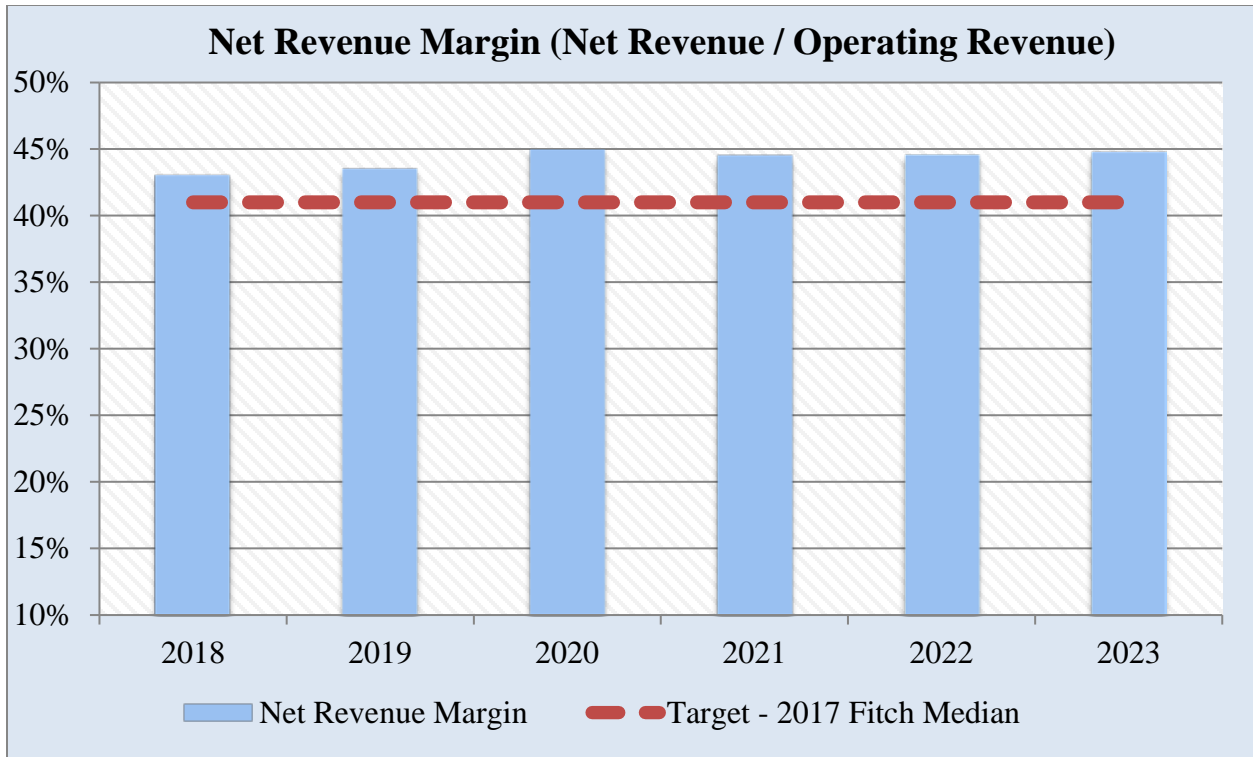
- Maintaining a minimum operating cash reserve balance equal to or greater than 90 days or approximately 25% of annual budgeted operating expenses. As can be seen below and assuming the implementation of the proposed rate adjustments, it is estimated that this operating reserve target will be maintained during the Forecast Period which is considered favorable by PRMG.

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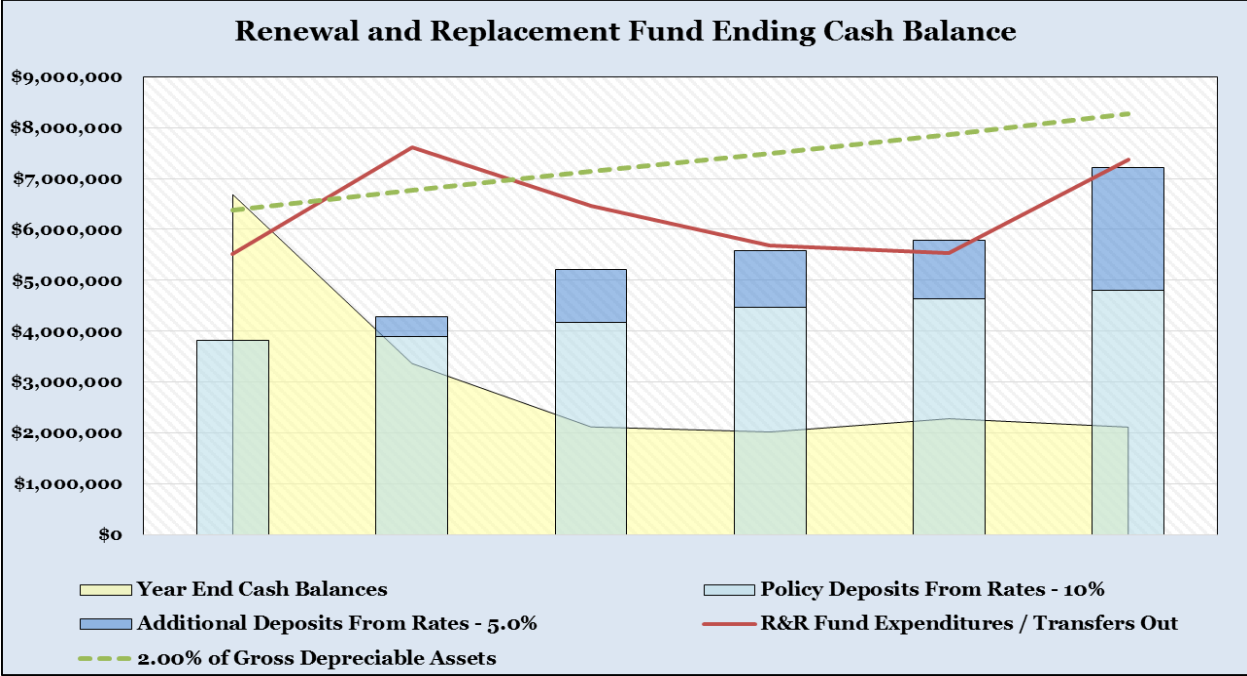
- Maintaining a minimum net revenue margin (net revenues divided by gross revenues) of at least 41% (reflects 2017 Fitch Ratings median ratio) to provide flexibility in cash flow and strategic planning purposes. The Net Revenue Margin Ratio is a measure of a utility system's ability to annually meet 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 in the capital infrastructure of the System (by payment of debt service or through pay-as-you-go capital funding) and for the maintenance of liquidity for System emergencies and rating agency credit levels. A declining net revenue margin indicates a reduction in net available funds after payment of Operating Expenses for such purposes. Generally, it is recommended that the Net Revenue Ratio target be a minimum of 41% based on industry standards to promote the System's financial health over the long-term. As can be seen below, the proposed rate adjustment is projected to allow the System to maintain the net revenue margins of the System slightly above the 41% minimum over the Forecast Period which is considered favorable by PRMG.

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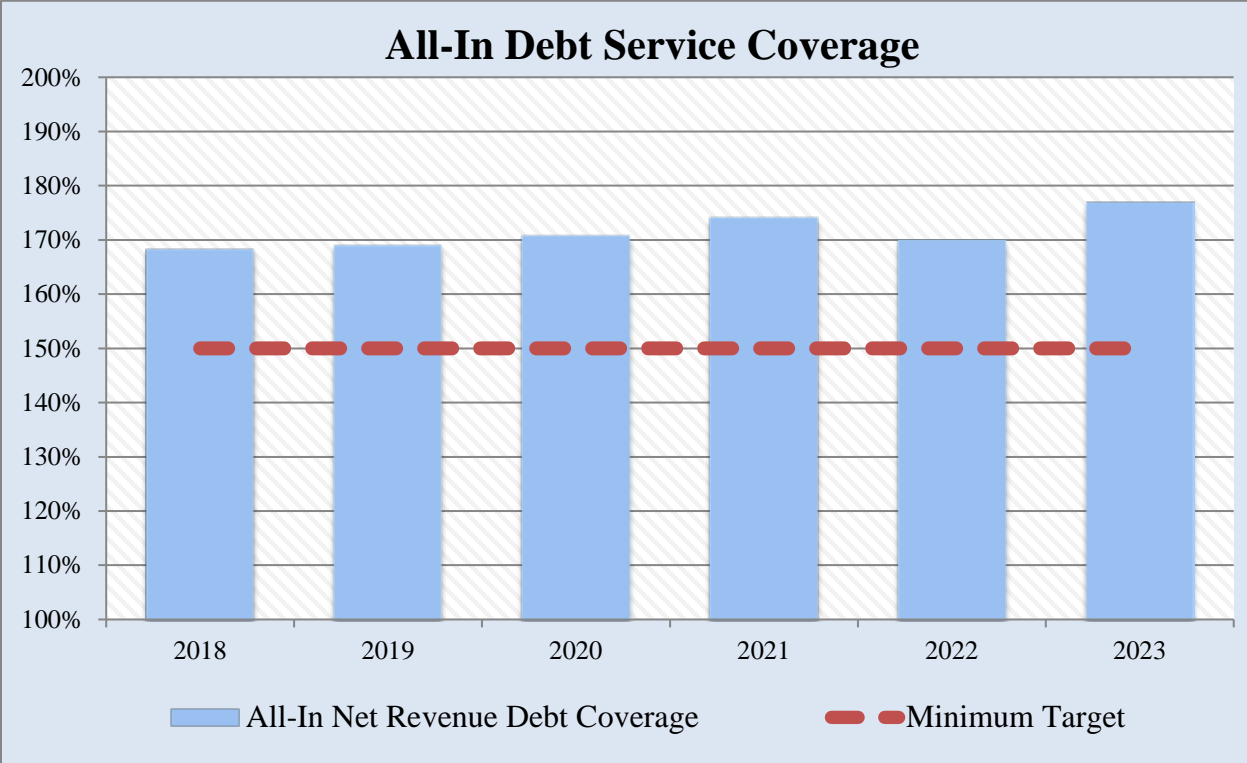


- Based on the provisions of the Bond Resolution, the City is required to establish and maintain a RR&I Fund. The purpose of the RR&I Fund is to provide moneys for the purpose of paying the cost of extensions, enlargements, or additions to, or the replacement of capital assets of the System or emergency repairs thereto. As defined in the Bond Resolution, the City shall deposit into the RR&I Fund an amount equal to 5.0% of the Gross Revenues (as defined in the Bond Resolution) received by the System in the immediately preceding fiscal year. However, no deposit is required if the City maintains a balance in such fund equal to either one percent (1%) of the gross book value of the fixed assets of the System pursuant to generally accepted accounting principles or an amount as certified by the consulting engineer as necessary and desirable to provide immediately available funds to pay renewal and replacement expenditures of the System (the "RR&I Fund Requirement"). The City's current policy is to transfer 10% or preceding year's System gross revenues to the RR&I Fund. PRMG is recommending the City gradually increase the transfer to the RR&I Fund from 10% to 15% of the preceding years System gross revenues to provide ongoing and increased Pay-Go funding for future capital improvements of the Utility and to minimize the use of future indebtedness to promote long-term rate flexibility and sustainability. This RR&I transfer amount will allow the utility to avoid the over-issuance of bonds to fund capital and is viewed favorably by the credit rating agencies and is considered favorable by PRMG.

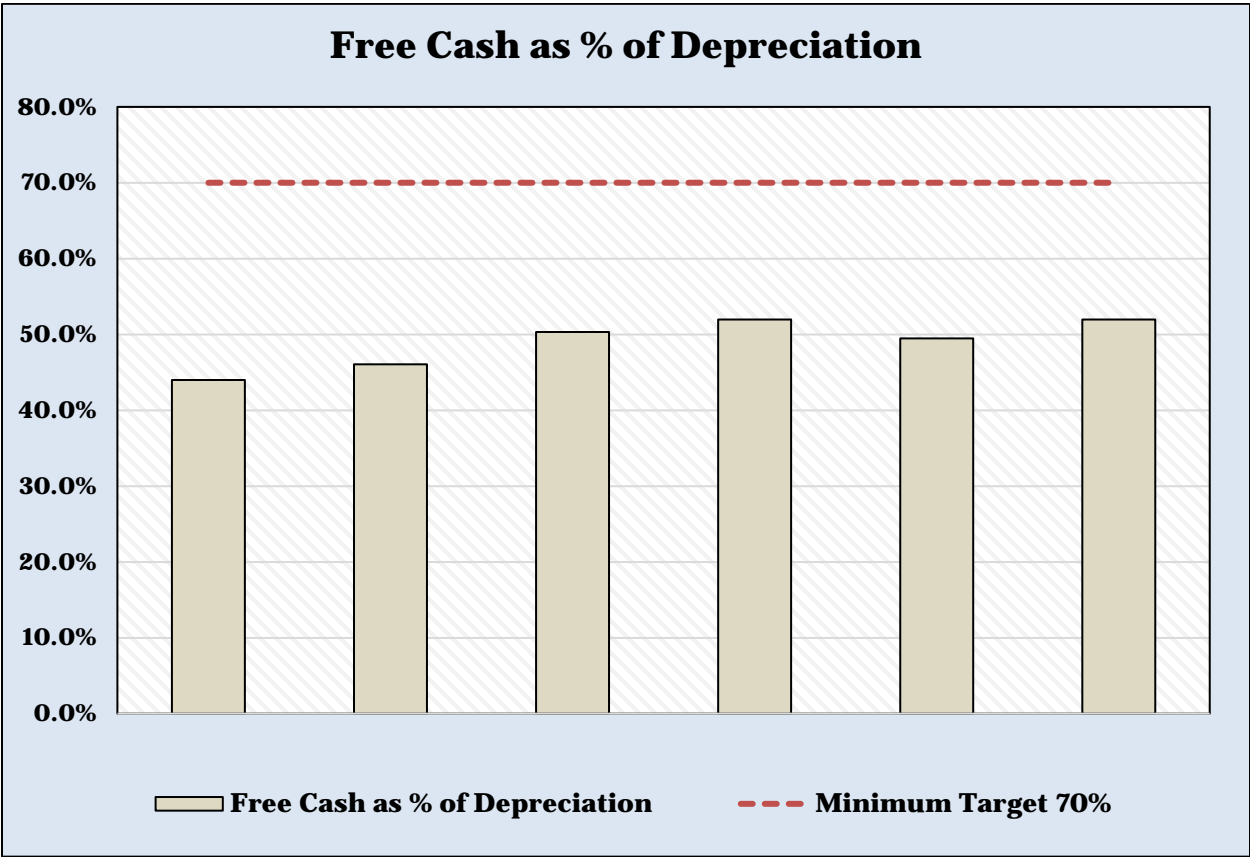
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- Maintaining a minimum "All-In" debt service coverage ratio based on the net revenues of the System (not including Connection Fee revenues) equal to or greater than 150%. As can be seen below and the implementation of the proposed rate adjustments, it is estimated that this coverage ratio will be met for all years of the Forecast Period which is considered favorable by PRMG.



- Maintaining a minimum deposit from rate revenues to capital-related (renewal and extension) funds for ongoing capital re-investment equal to or greater than fifteen (15%) percent of the prior fiscal year's gross System revenues and a minimum free cash ratio (net funds available after payment of operating expenses, debt service and other expenditures that are not available for capital as a percent of depreciation expense) of 70%. This ratio is not being met and needs to be monitored. As was shown in the graph above regarding the RR&I Fund deposits, use, and the end-of-year estimated fund balance levels, the majority of the deposits to the fund are expended on capital projects (reason for the declining fund balance during the Forecast Period). It should also be noted that once the Outstanding Debt begins to mature and are no longer considered as a revenue requirement to be funded from rates, this ratio will improve; however, this is not anticipated to occur until 2034.



As shown above, minimum free cash (net funds available after payment of operating expenses, debt service and other expenditures that are not available for capital-to-depreciation expense ratio) is projected to be below the 70% minimum target over the Forecast Period, but the ratio is projected to increase over the Forecast Period which is considered positive by PRMG and provides support for the levelized phasing of rates over the Forecast Period.

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CAPITAL FACILITIES FEES

The City has historically utilized Water System and the Wastewater System Capital Facilities Fees (often called "Impact Fees") to fund a portion of constructing the infrastructure requirements associated with new growth. The purpose of the Capital Facilities Fees is to assign growth-related capital costs to those new customers responsible for such additional costs. To the extent that new population growth and associated development impose identifiable added capital costs to municipal services, modern capital funding practices include the assignment of such costs to those residents or system users responsible for the costs rather than to the existing customer base. Generally, this practice has been labeled as "growth paying its own way" without existing user cost burdens.

On June 14, 2006, new Impact Fee legislation became effective as Chapter 2006-218, Laws of Florida, and was later incorporated in Section 163.31801 of the Florida Statutes. The new Impact Fee law, which has been designated as the "Florida Impact Fee Act", recognizes that Impact Fees are an important source of revenue for a local government to use in funding the infrastructure necessitated by new growth. The act further states that an Impact Fee adopted by ordinance of a county or municipality, or by resolution of a special district, must at minimum:

- Require that the calculation of the Impact Fee be based on the most recent and localized data;
- Provide for accounting and reporting of Impact Fee collections and expenditures in a separate accounting fund;
- Limit administrative charges for the collection of Impact Fees to actual costs; and
- Require that notice be provided no less than 90 days before the effective date of an ordinance or resolution imposing a new or amended Impact Fee.

On May 21, 2009, Florida House Bill 227 became law, and this legislation added the following language to the Florida Impact Fee Act:

"In any action challenging an impact fee, the government has the burden of proving by a preponderance of the evidence that the imposition or amount of the fee meets the requirements of state legal precedent or this section. The court may not use a deferential standard."

Based on Section 163.31801 of the Florida Statutes and existing Florida case law, certain conditions are required to develop a valid Capital Facilities Fee. Generally, it is our understanding that these conditions involve the following issues:

1. The Capital Facilities Fees must meet the "dual rational nexus" test. First, Capital Facilities Fees are valid when a reasonable impact or rationale exists between the anticipated need for additional capital facilities and the growth in population. Second, Capital Facilities Fees are valid when a reasonable association, or rational nexus, exists between the expenditure of the capital charge proceeds and the benefits accruing to the growth from those proceeds.

2. The system of fees and charges should be set up so that there is not an intentional windfall to existing users.
3. The Capital Facilities Fees should only cover the capital cost of construction and related costs thereto (engineering, legal, financing, administrative, etc.) for capital expansions or other additional capital requirements that are required solely due to growth. Therefore, expenses for rehabilitation or replacement of a facility serving existing customers (e.g., replacement of a capital asset) or an increase in the level of service should be borne by all users of the facility (i.e., existing and future users to the extent that capacity is available in such facilities to serve growth). Likewise, increased expenses due to operation and maintenance of that facility should be borne by all users of the facility.
4. A Capital Facilities Fee resolution or ordinance should be maintained that explicitly restricts the use of Capital Facilities Fees collected. Therefore, Capital Facilities Fee revenue should be set aside in a separate account, and separate accounting must be made for those funds to ensure that they are used only for the lawful purposes described above.
5. Advanced notice of not less than ninety (90) days before the effective date of a resolution or ordinance amending (increasing) the existing Capital Facilities Fee should be provided.

Based on the criteria above, the proposed Capital Facilities Fees set forth herein: i) include only the estimated (allocable) capital cost of facilities necessary to serve anticipated population growth; ii) do not reflect costs associated with renewal and replacement of any existing capital assets (except for any portion of upgrades allocable to growth, such as "upsizing" transmission lines) that are allocable to and should be funded from existing users of the System; and iii) do not include any costs of operation and maintenance of any facilities.

Existing Capital Facilities Fees

The City's current water and wastewater Capital Facilities Fees were last established by the City in 2013 and were subsequently increased since the initial adoption by the City based on the System rate and index adjustments that were also applied to the Monthly User Fees. It is important to mention, the Capital Facilities Fees charged by the City were reduced in Fiscal Year 2013 to reflect lower capital spending at that time as a result of the downturn in the economy. The City's current proposed capital improvement program is significantly greater than what was anticipated in Fiscal Year 2013 as a result of a rebound in the economy and the continuation of growth anticipated in the City's service territory. Therefore the City requested PRMG to update the City's Capital Facilities Fees to reflect the City's current capital spending plan and the associated cost of the installed asset in service that have capacity to serve new development and growth. The Capital Facilities Fees are based on the estimated equitable portion of the cost of providing water and wastewater capacity of the System to new development or growth and are imposed based on meter size. The current Capital Facilities Fees are summarized as follows:

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Existing Water and Wastewater System Capital Facilities Fees

Meter Size	Water	Wastewater
Residential – per ERC [1]	\$2,355.72	\$2,609.15
General Service – per Gallon [2]	\$10.46	\$14.49

[1] Reflects fees applied to individually-metered residential dwellings, which is fee charged to a typical household.

[2] Capital Facilities Fees for the general service customers (commercial and multi-family) are determined on a "per gallon of capacity reserved" basis as requested by the applicant; but never less than one ERC.

As can be seen in the previous page, the City's Capital Facilities Fees for the residential class are based on an equivalent residential connection ("ERC") basis. An ERC is a unit of measure that approximates the average demand requirements of a single-family residential customer. The City as adopted a level of service per ERC for water service at 225 gallons per day ("gpd") of water capacity on an average daily basis. Similarly, the adopted level of service for a wastewater ERC as adopted by the City is 180 gpd of wastewater capacity expressed on an average daily basis. With respect to the application of the system connection charges to other users of the System, the fees are generally based on the reserved or requested capacity requirements, as requested by the applicant and approved by the City. In no instances should the allocated gallons be less than the level of service for one ERC. By using this approach for the general service customers, the fee is based on the specific attributes of the customer, which provides a better nexus between the fee and the capacity being allocated.

Existing Plant-in-Service

In the determination of the Capital Facilities Fees associated with the servicing of future customers, any excess capacity of the existing utility system available to serve such growth was considered. Since this capacity is available to serve the near-term incremental growth of the utility system, it would be appropriate to evaluate the capacity availability of such facilities. In order to evaluate the availability of the existing utility plant-in-service to meet future capacity needs, it was necessary to functionalize the plant by specific plant requirement. The functionalization of the existing plant is necessary to: i) identify those assets that should be included in the determination of the capital facilities fees; and ii) match existing plant type to the capital improvements to meet future service needs.

The functional cost categories are based on the purpose of the assets and the service that such assets served. The following is a summary of the functional cost categories for the utility plant-in-service identified in this Report.

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Functional Plant Categories

Water Service [*]	Wastewater Service [*]	Other Plant
Supply	Treatment	General Plant
Treatment	Effluent/Reclaimed	Indirect
Transmission	Transmission	Developer Contributions
Distribution	Collection	
Fire Hydrants		
Meters		

[*] Amounts shown would not include utility plant that was contributed by a developer (primarily water distribution and wastewater collection lines).

It is necessary to functionalize the utility plant into these cost categories so that a proper fee can be developed. Generally, the costs of on-site facilities that serve a specific development or customer, such as water distribution and wastewater collection lines, meters and services, and fire hydrants, are usually: i) donated by a developer as part of the City's utility extension program (a contribution of the plant); ii) recovered from the individual properties through an assessment program based on those properties that receive special benefit from such facilities or from the application of a main line extension fee to recover the specific cost of such facilities; or iii) funded from the customer directly (e.g., by a "front-foot" charge where the on-site lines were initially financed by the utility and then paid by the customer or an installation charge to recover the cost of a new service line and/or the meter).

The City provided PRMG with a fixed asset register report identifying the fixed assets in service as of September 30, 2017 for the Water System and the Wastewater System. Before functionalizing the assets, PRMG first made adjustments to remove fixed assets not considered eligible to be recovered from Capital Facilities Fees. The functionalization of the existing plant is included on Table 9 at the end of this section. This functionalization of the existing utility plant-in-service represents the original cost of such assets (gross book value) and was based on the reported in-service values as of September 30, 2017.

Determination of Capital Facilities Fees – Water System

The existing water system impact fee was adopted by the Board approximately five (5) years ago. In the development of the proposed fees, the "System Buy-in" approach was recognized using the original cost method. This method allocates the estimated proportionate share of capacity at cost (value) of the existing assets – the applicant requesting capacity pays (buys) for its share of the infrastructure constructed to serve System growth. It should be noted that this method does not impart or transfer ownership to the customer but is generally considered to provide access to capacity in the amount purchased at a status equal to that of the existing customers of the System. As shown on Table 14, the proposed impact fee for the water system is \$2,658 per ERC and represents an increase of approximately \$302 above the existing charge of \$2,355.72. This increase is primarily attributed to the additional utility plant investment of water production, treatment, and transmission asset since the fees were last established, predicated primarily on the original installed costs as contained in the System's fixed asset records.

In the development of the proposed water capital facilities fees, several assumptions were utilized or incorporated in the analysis. The major assumptions utilized in the design of the proposed water capital facilities fees are:

1. The existing water supply and treatment facilities are estimated to have approximately 26.17% of the available permitted capacity to serve new growth based on: i) the firm design capacity of the existing water treatment plant facilities; and ii) estimated peak day to average daily flow factors based on recent historical relationships experienced by the water system. The analysis is included on Table 10 at the end of this Report. Since there is existing capacity in the water production and treatment facilities to serve new growth, such available capacity was recognized in the fee evaluation. The proposed fee reflects the proportionate share of the existing plant considered as a primary or "System" cost that would be allocated to all users and is available to serve new development to reflect the estimated "buy-in" infrastructure value for the water system.

The approach used to determine the estimated impact fee was the "System Buy-in" method, which is based on the identification and allocation of the installed cost of the gross plant investment (expressed on an original cost basis – that is when the asset was originally placed into service) that is available (in-service) to serve new growth. Under this approach, the applicant paying the impact fee is essentially reimbursing the System for only the applicant's proportionate share of the constructed facilities that are currently in service as of September 30, 2017 and estimated to be constructed in the next six (6) years. This method also recognizes that as improvements are made to the water system, the available capacity to meet the future demands of the new development that would be served from the current constructed gross plant investment is being maintained and, therefore, the most recent installed cost of the gross plant investment is considered as being reasonable for the determination of the impact fee.

2. The capital improvement program as identified in the City's six-year Capital Improvement Program was reviewed and the capital costs were incorporated into the determination of the capital facilities fee as deemed appropriate. Those facilities that were considered to be entirely allocable to growth were included in the fee determination at full cost (i.e., 100% of the total cost). For capital expenditures that were solely for the rehabilitation or betterment of existing assets that would directly benefit only the existing customers or were considered as an on-site cost (provide service to a local area such as a development, which would normally be constructed and subsequently contributed to the City by a developer), such amounts were not reflected as an appropriate cost to be recovered from the application of capital facilities fees. A summary of the capital costs recognized in the capital facilities fee analysis is shown on Table 12.
3. For the capital improvements identified as transmission system upgrades, which would benefit both existing and future users, the total cost of such improvements has been recognized in the analysis. Since the transmission function capacity is difficult to ascertain except at "build-out" conditions, the total existing (expressed at original cost and not on a replacement or current cost basis) and anticipated capital costs to serve the total capacity of the water system through 2023 was recognized; thus, calculating a new user's per ERC "buy-in" cost for this functional component of the system. Therefore, the cost of certain

capital expenditures shown on Table 14 that was fully recognized in the fee determination will not be fully recovered by growth since the "unit cost" of this function includes existing ERCs.

4. No capital facility expansion costs associated with distribution facilities have been included in the calculation, since the City generally requires the developer to contribute such facilities, or the City has a separate fee (e.g., water meter installation fee and main extension charges) to recover the cost of such capital additions (contribution-in-aid-of-construction).
5. Based on discussions with the City, the level of service for a water ERC was assumed to be 225 gpd expressed on an average daily flow basis predicated on historical average capacity requirements of a typical City residential connection.

As shown on Table 14, the analysis was calculated utilizing estimated capital costs for the water supply / treatment / transmission system, ERC service requirements, and current fixed asset and plant capacity data available to PRMG regarding the water system. By designing the System capital facilities fee to recover costs on a prospective basis, an attempt is made to design a charge that will provide funds on a reasonable basis in order to meet the future needs of the water system. It should be noted that in the event the construction costs, capacity requirements, or utility service area materially change from what was reflected on Table 14, the water capital facility fees may possibly need to be adjusted accordingly.

As shown on Table 14, the proposed water capacity facilities fee is recommended to be \$2,658 per ERC. Based on the capital facilities associated with the determination of the fee, the functional breakdown of the components of the rate are as follows:

Proposed Water Capital Facilities Fees	
Description	Amount
Water Supply/Treatment	\$2,347.35
Water Transmission	311.19
Total Fee	2,658.54
Rounded Fee	<u>\$2,658</u>
Cost per Gallon	<u>\$11.813</u>

The City also recognizes a 20% reduction to fees shown above for any new developed property that has been Florida Water Star Certified, whereby the reduction in water capacity requirements (level of service) is considered as being permanent and that the facility will not require the availability of service equal to the City's current adopted level of service.

Design of Capital Facilities Fees – Wastewater System

As shown on Table 15, the proposed wastewater system capital facilities fee of \$2,860 represents an increase of \$250.85 when compared to the existing fee. The reason for this increase is due to an increase in the City's capital improvement program due to increased growth anticipated for the service territory since the fees were last established.

In the development of the proposed wastewater capital facilities fee, several assumptions were utilized or incorporated in the analysis. The major assumptions utilized in the design of the proposed capital facilities fees are:

1. The existing wastewater treatment and disposal facilities have approximately 12.52% of available capacity margin to serve new growth, based on: i) the firm design capacity of the existing wastewater treatment plant facilities; ii) recognizing the amount of capacity currently reserved by developers for future use; and iii) estimated average daily flows based on historical statistics. The analysis is included on Table 11 herein. Since there is existing capacity in the wastewater treatment and disposal facilities to serve new growth, such available capacity was recognized in the fee evaluation. The proposed impact fee reflects the proportionate share of the existing plant considered as a primary or "System" cost that would be allocated to all users and is available to serve new development to reflect the estimated "buy-in" infrastructure value for the wastewater system.
2. The approach used to determine the estimated impact fee was the "System Buy-in" method, which is based on the identification and allocation of the installed cost of the gross plant investment (expressed on an original cost basis, which is when the asset was originally placed into service) that is available (in-service) to serve new growth. Under this approach, the applicant paying the impact fee is essentially reimbursing the System for only the applicant's proportionate share of the constructed facilities that are currently in-service as of September 30, 2017 and estimated to be constructed in the next six (6) years. This method also recognizes that as improvements are made to the wastewater system, the available capacity to meet the future demands of the new development that would be served from the current constructed gross plant investment is being maintained, and therefore, the most recent installed cost of the gross plant investment is considered as being reasonable for the determination of the impact fee.
3. The capital improvement program, as identified in the City's six-year Capital Improvement Program, was reviewed and the capital costs were incorporated into the determination of the capital facilities fee as deemed appropriate. Those facilities that were considered to be entirely allocable to growth were included in the fee determination at full cost (i.e., 100% of the total cost). For capital expenditures that were solely for the replacement of existing assets that would directly benefit existing customers or were considered as an on-site cost (provide service to a local area such as a development that would normally be constructed and subsequently contributed to the City by a developer), such amounts were not reflected as an appropriate cost to be recovered from the application of impact fees. A summary of the capital costs recognized in the capital facilities fee analysis is shown on Table 13.
4. For the capital improvements identified as transmission system upgrades that would benefit both existing and future users, the total cost of such improvements has been recognized in the analysis. Since the transmission function capacity is difficult to ascertain except at "build-out" conditions, the total existing (expressed at original cost and not on a replacement or current cost basis) and anticipated capital costs to serve the total capacity of the water system through 2017 was recognized, thus calculating a new user's per ERC "buy-in" cost for this functional component of the system. Therefore, the cost of certain capital expenditures

shown on Table 15, that was fully recognized in the fee determination will not be fully recovered by growth since the "unit cost" of this function includes existing ERCs.

5. No capital facility expansion costs associated with collection facilities have been included in the calculation, since the City generally requires the developer to contribute such facilities, or the City has a separate fee (e.g., wastewater tap-in fee and main extension charges) to recover the cost of such capital additions (contribution-in-aid-of-construction).
6. Based on discussions with the City, the level of service for a wastewater ERC was assumed to be 180 gpd expressed on an average daily flow basis predicated on historical average capacity requirements of a typical City ERC.

As shown on Table 15, the analysis was calculated utilizing estimated capital costs for the wastewater transmission / treatment / disposal system, ERC service requirements, and current fixed asset and plant capacity data available to PRMG regarding the wastewater system. By designing the System capital facilities fee to recover costs on a prospective basis, an attempt is made to design a charge that will provide funds on a reasonable basis in order to meet the future needs of the wastewater system. It should be noted that in the event the construction costs, capacity requirements, or utility service area materially change from what was reflected on Table 15 (or as a result of the findings of the wastewater master plan study), the wastewater capital facilities fee may possibly need to be adjusted accordingly.

As shown on Table 15, the proposed wastewater capital facilities fee is recommended to be \$2,860 per ERC, which is the fee that would be applied to a standard individually metered residential customer. Based on the capital facilities associated with the determination of the fee, the functional breakdown of the components of the rate are as follows:

Proposed Wastewater Capital Facilities Fees	
Description	Amount
Wastewater Treatment and Disposal	\$2,366.54
Wastewater Transmission	494.16
Total Fee	\$2,860.70
Rounded Fee	<u>\$2,860.00</u>
Cost per Gallon	<u>\$15.89</u>

RATE OBSERVATIONS AND RECOMMENDATIONS

The following is a summary of PRMG's rate observations and recommendations:

1. The current Monthly User Charges are not projected to be sufficient to fully fund the projected expenditure and funding requirements of the System for the Forecast Period. The City Council should consider i) the adoption of the proposed water and wastewater monthly user rate adjustments of 6.0% for both Fiscal Years 2019 and 2020; and ii) the re-implementation of the application of the annual index the beginning in Fiscal Year 2021fort the remainder of the Forecast Period.

The primary reasons for the projected rate adjustments are to:

- a. Recover increased operating expenses associated with the impacts of general inflation and increased additional personnel assumed during the Forecast Period due to System growth and facility expansions;
 - b. Recover increased debt and loan repayment requirements associated with the anticipated issuance of the Additional Debt during the Forecast Period which is considered necessary to fund the capital improvement program as identified by the City for the System;
 - c. Provide annual transfers to fund capital expenditures for the renewal, replacement, betterment and upgrade of System assets. The City's current policy is to transfer 10% or preceding year's System Gross revenues to the RR&I Fund. PRMG is recommending the City gradually increase the transfer to the RR&I Fund from 10% to 15% of the preceding years System gross revenues to provide ongoing and increased Pay-Go funding for future capital improvements of the Utility and to minimize the use of future indebtedness to promote long-term rate flexibility and sustainability;
 - d. Provide sufficient funds necessary to meet the rate covenant requirements as delineated in the Bond Resolution (senior lien bonds) and the Loan Agreements (subordinate lien loans secured through the SRF loan program); and
 - e. Maintain targeted unrestricted working cash (fund balance) reserves within the System to limit the risk to the utility due to unforeseen changes in revenues, the incurrence of unexpected operating or capital expenditures and to promote the financial stability of the System.
2. The City Council should consider the adoption of the proposed Capital Facilities Fess identified in this Report and implement the revised fees ninety (90) days after adoption in accordance with the fee implementation provisions as delineated the Florida Impact Fee Act.
 3. As shown on Tables 16 through 18 at the end of this Study, the recommended rates for the water and wastewater system are projected to remain competitive when compared to rates charges by other local governments (public utilities) in the region. It is further anticipated that this competitive relationship will remain during the Forecast Period.
 4. Based on the implementation of the proposed rates as presented in this Study, it is anticipated that the System will produce sufficient Net Revenues to maintain compliance with the rate covenants as delineated in the Bond Resolution (senior lien debt) and the Loan Agreements (subordinate lien loans) and continue to be in a strong credit position, which will provide flexibility in the future relative to the funding of future capital investment and maintaining rates at competitive levels.

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5. It should be noted that the projected results and assumptions as contained in this Study might materially vary from actual results. As such, City staff should continue to perform regular ongoing evaluations of the System rates and the financial position of the System, including the continued funding of capital expenditures for growth and replacement the capital funding needs, and the need to modify the financial plan which could result in the need for additional or modified rate adjustments.

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CITY OF PALM COAST, FLORIDA

**WATER AND WASTEWATER REVENUE SUFFICIENCY
AND CAPITAL FACILITIES FEES STUDY**

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7	Summary of Projected Operating Results
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City of Palm Coast, Florida

Water and Wastewater Utility System

Summary of Historical Customer Statistics

Line No.	Description	Fiscal Year Ended September 30, [1]									
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Water System:											
Inside City											
Residential [2]											
	Account Growth	1,962	135	113	93	14	248	307	346	428	697
1	Accounts	32,290	32,425	32,538	32,631	32,645	32,893	33,200	33,546	33,974	34,671
2	ERC's	32,293	32,428	32,541	32,634	32,648	32,896	33,203	33,549	33,977	34,674
3	Sales (000s)	1,331,121	1,580,970	1,564,326	1,621,429	1,595,016	1,551,256	1,557,816	1,554,653	1,634,668	1,686,312
4	Average Monthly Use	3,435	4,072	4,006	4,141	4,072	3,930	3,910	3,862	4,010	4,053
Multi-Family											
5	Account Growth	0	318	42	89	(16)	32	4	149	3	4
6	Accounts	1,095	1,413	1,455	1,544	1,528	1,560	1,564	1,713	1,716	1,720
7	ERC's	1,308	1,688	1,738	1,845	1,826	1,864	1,869	2,047	2,050	2,055
8	Sales (000s)	41,581	56,002	56,429	71,080	74,515	75,277	75,047	68,265	74,878	77,569
9	Average Monthly Use	3,164	3,303	3,232	3,836	4,064	4,021	3,999	3,321	3,636	3,758
Commercial											
10	Account Growth	0	78	22	49	10	23	4	(68)	37	9
11	Accounts	1,031	1,109	1,131	1,180	1,190	1,213	1,217	1,149	1,186	1,195
12	ERC's	3,477	3,740	3,815	3,980	4,014	4,091	4,105	3,875	4,000	4,031
13	Sales (000s)	123,695	168,406	166,947	232,698	248,390	242,018	243,559	205,704	217,500	220,501
14	Average Monthly Use	9,998	12,655	12,301	16,433	17,394	16,627	16,678	14,919	15,282	15,377
Irrigation [3]											
15	Account Growth	0	73	78	56	20	66	6	(137)	27	9
16	Accounts	5,161	5,234	5,312	5,368	5,388	5,454	5,460	5,323	5,350	5,359
17	ERC's	5,446	5,523	5,605	5,664	5,685	5,755	5,761	5,617	5,645	5,655
18	Sales (000s)	240,324	279,836	279,302	334,073	279,441	275,299	277,187	192,866	214,765	205,954
19	Average Monthly Use	3,880	4,455	4,382	5,186	4,322	4,206	4,231	3,019	3,345	3,203
Bulk											
20	Account Growth	0	0	0	0	0	0	0	0	0	0
21	Accounts	0	0	0	0	0	0	0	0	0	0
22	ERC's	0	0	0	0	0	0	0	0	0	0
23	Sales (000s)	0	0	0	0	0	0	0	0	0	0
24	Average Monthly Use	0	0	0	0	0	0	0	0	0	0
Fire Protection											
25	Account Growth	79	58	9	13	5	3	3	27	13	2
26	Accounts	151	209	218	231	236	239	242	269	282	284
27	ERC's	151	209	218	231	236	239	242	269	282	284
28	Sales (000s)	0	704	235	102	109	110	111	366	137	140
29	Average Monthly Use	0	281	90	37	38	38	38	113	40	41
Outside City											
Residential [2]											
30	Account Growth	101	20	59	14	36	18	17	127	69	7
31	Accounts	1,388	1,408	1,467	1,481	1,517	1,535	1,552	1,679	1,748	1,755
32	ERC's	1,394	1,414	1,474	1,488	1,524	1,542	1,559	1,687	1,756	1,763
33	Sales (000s)	82,683	102,656	107,381	121,441	114,432	115,602	116,785	108,182	123,766	125,899
34	Average Monthly Use	4,964	6,076	6,100	6,833	6,286	6,276	6,271	5,369	5,900	5,978

City of Palm Coast, Florida

Water and Wastewater Utility System

Summary of Historical Customer Statistics

Line No.	Description	Fiscal Year Ended September 30, [1]									
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Outside City (continued)											
Multi-Family											
35	Account Growth	0	0	0	0	0	0	0	(1)	0	2
36	Accounts	38	38	38	38	38	38	38	37	37	39
37	ERC's	182	182	182	182	182	182	182	177	177	187
38	Sales (000s)	8,325	10,197	11,320	11,187	11,320	11,436	11,553	12,000	12,003	11,985
39	Average Monthly Use	18,257	22,362	24,825	24,533	24,825	25,079	25,335	27,028	27,034	25,609
Commercial											
40	Account Growth	0	8	19	(1)	3	1	1	(3)	0	4
41	Accounts	58	66	85	84	87	88	89	86	86	90
42	ERC's	211	241	310	306	317	321	324	313	313	328
43	Sales (000s)	16,739	21,678	26,410	27,981	27,586	25,868	26,153	26,181	33,165	33,993
44	Average Monthly Use	24,050	27,371	25,892	27,759	26,423	24,496	24,488	25,369	32,137	31,475
Irrigation [3]											
45	Account Growth	0	6	15	2	4	1	1	8	1	3
46	Accounts	48	54	69	71	75	76	77	85	86	89
47	ERC's	61	69	88	90	95	96	98	108	109	113
48	Sales (000s)	4,081	4,049	5,685	8,281	8,416	8,502	8,589	8,199	8,660	8,361
49	Average Monthly Use	7,085	6,249	6,866	9,720	9,351	9,323	9,296	8,039	8,391	7,829
Bulk											
50	Account Growth	(1)	0	0	0	0	0	0	2	0	0
51	Accounts	2	2	2	2	2	2	2	4	4	4
52	ERC's	65	65	65	65	65	65	65	130	130	130
53	Sales (000s)	18,627	27,842	27,196	27,156	30,939	31,255	31,575	43,936	39,923	41,158
54	Average Monthly Use	776,104	1,160,067	1,133,167	1,131,483	1,289,113	1,302,300	1,315,623	915,342	831,733	857,458
Fire Protection											
55	Account Growth	0	3	0	0	1	0	0	0	0	0
56	Accounts	10	13	13	13	14	14	14	14	14	14
57	ERC's	10	13	13	13	14	14	14	14	14	14
58	Sales (000s)	0	1	9	4	0	0	0	0	0	0
59	Average Monthly Use	1	4	61	23	2	2	2	2	2	2
Total Water System											
60	Average Annual Accounts	41,272	42,191	42,328	42,643	42,720	43,112	43,455	43,905	44,483	45,220
61	Average Annual ERC's	44,599	45,792	46,048	46,498	46,606	47,065	47,422	47,786	48,454	49,233
62	Annual Water Sales	1,867,175	2,266,388	2,245,240	2,455,433	2,390,163	2,336,624	2,348,377	2,220,354	2,359,466	2,411,872
63	Finished Water Produced	2,675,450	2,555,000	2,653,185	2,728,587	2,620,620	2,568,823	2,515,226	2,540,582	2,818,234	2,961,353
64	Non-Revenue Water Produced	808,275	288,612	407,945	273,154	230,457	232,199	166,849	320,228	458,768	549,481
65	Non-Revenue Water Loss Percent	43.29%	12.73%	18.17%	11.12%	9.64%	9.94%	7.10%	14.42%	19.44%	22.78%
66	Average Daily Flow (MGD)	7.330	7.000	7.269	7.406	7.155	7.987	7.443	8.009	7.698	8.113
67	Maximum Daily Flow (MGD)	10.347	10.064	9.698	11.141	9.463	9.423	10.463	9.247	10.255	10.528
68	Peak Day Factor	41.16%	43.77%	33.42%	50.43%	32.26%	17.98%	40.58%	15.46%	33.22%	29.77%

Footnotes on Page 3 of 3

City of Palm Coast, Florida

Water and Wastewater Utility System

Summary of Historical Customer Statistics

Line No.	Description	Fiscal Year Ended September 30, [1]									
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Wastewater System:											
Inside City											
Residential [2]											
69	Account Growth	1,960	135	113	93	14	248	307	346	428	696
70	Accounts	32,258	32,393	32,505	32,598	32,612	32,860	33,167	33,512	33,940	34,636
71	ERC's	32,261	32,395	32,508	32,601	32,615	32,863	33,170	33,515	33,943	34,639
72	Sales (000s)	1,117,023	1,329,453	1,312,720	1,360,639	1,338,473	1,301,752	1,407,257	1,404,603	1,469,730	1,476,879
73	Average Monthly Use	2,886	3,420	3,365	3,478	3,420	3,301	3,285	3,244	3,609	3,648
Multi-Family											
74	Account Growth	0	270	36	(2)	64	27	3	127	3	3
75	Accounts	931	1,201	1,237	1,235	1,299	1,326	1,329	1,456	1,459	1,462
76	ERC's	1,112	1,435	1,478	1,476	1,552	1,584	1,588	1,740	1,743	1,747
77	Sales (000s)	35,344	47,602	47,965	56,864	63,338	63,986	63,790	58,025	63,646	65,933
78	Average Monthly Use	3,164	3,303	3,232	3,836	4,064	4,021	3,999	3,321	3,636	3,758
Commercial											
79	Account Growth	0	66	19	(17)	68	20	3	(58)	31	6
80	Accounts	876	943	961	944	1,012	1,031	1,034	977	1,008	1,014
81	ERC's	2,956	3,179	3,242	3,184	3,412	3,478	3,489	3,294	3,400	3,420
82	Sales (000s)	105,141	143,145	141,905	186,158	211,132	205,715	207,026	174,849	184,875	187,103
83	Average Monthly Use	9,998	12,655	12,301	16,433	17,394	16,627	16,678	14,919	15,282	15,377
Effluent - Wastewater Accounts											
84	Account Growth	0	0	0	0	0	0	0	0	0	0
85	Accounts	2	2	2	2	2	2	2	2	2	2
86	ERC's	2	2	2	2	2	2	2	2	2	2
87	Sales (000s)	758,999	714,899	913,588	788,687	943,587	829,578	816,789	988,154	916,774	877,710
88	Average Monthly Use	31,624,958	29,787,458	38,066,167	32,861,958	39,316,125	34,565,750	34,032,875	41,173,083	38,198,917	36,571,250
Outside City											
Residential [2]											
89	Account Growth	0	0	0	0	0	(3)	13	3	3	2
90	Accounts	177	177	177	177	177	174	187	190	193	195
91	ERC's	178	178	178	178	178	175	188	191	194	196
92	Sales (000s)	7,908	9,679	9,717	10,885	10,014	9,828	10,554	9,182	10,249	10,492
93	Average Monthly Use	3,723	4,557	4,575	5,125	4,715	4,707	4,703	4,027	4,425	4,484
Total Wastewater System											
94	Average Annual Accounts	34,244	34,715	34,883	34,957	35,102	35,393	35,720	36,137	36,602	37,309
95	Average Annual ERC's	36,508	37,190	37,408	37,441	37,758	38,102	38,437	38,742	39,282	40,004
96	Annual Wastewater Sales	2,024,415	2,244,778	2,425,894	2,403,233	2,566,543	2,410,859	2,505,415	2,634,812	2,645,274	2,618,117
97	Annual Wastewater Sales Excluding Effluent	1,265,416	1,529,879	1,512,306	1,614,546	1,622,956	1,581,281	1,688,626	1,646,658	1,728,500	1,740,407
98	Annual Wastewater Treated	1,721,340	1,790,690	1,922,820	1,746,525	1,838,505	2,087,742	2,148,450	2,181,023	2,112,454	2,153,475
99	Average Daily Flow (MGD)	4.72	4.91	5.27	4.79	5.04	5.71	5.88	5.98	5.77	5.90
100	Max Daily Flow	6.79	7.09	6.96	6.88	7.01	7.41	8.17	10.53	7.90	7.53

Footnotes:

- [1] Fiscal year 2017 is based on actual information as of September 30, 2017
[2] Accounts represented in the residential class include all single family, duplex, tri-plex, quad-plex, and town home customer classes
[3] Includes all irrigation accounts regardless of customer class (i.e. Residential, Commercial or Multi-Family).

City of Palm Coast, Florida

Water and Wastewater Utility System

Summary of Projected Customer Statistics

Line No.	Description	Fiscal Year Ending September 30,						
		2017	2018	2019	2020	2021	2022	2023
Water System:								
Inside City								
Residential Class								
1	Normal Growth		700	700	700	700	675	675
2	Incremental Growth		0	0	0	0	0	0
3	Total Accounts	34,671	35,371	36,071	36,771	37,471	38,146	38,821
4	ERC's per Account Factor	1.00009	1.00008	1.00008	1.00008	1.00008	1.00012	1.00012
5	Total ERCs	34,674	35,374	36,074	36,774	37,474	38,151	38,826
6	Normal Monthly Avg. Use per ERC's	4,053	4,080	4,039	3,999	3,989	3,979	3,969
7	Total Water Sales (000's)	1,686,312	1,731,911	1,748,521	1,764,626	1,793,720	1,821,536	1,849,131
Multi-Family								
8	Normal Growth		10	10	10	7	5	5
9	Incremental Growth		0	0	0	0	0	0
10	Total Accounts	1,720	1,730	1,740	1,750	1,757	1,762	1,767
11	ERC's per Account Factor	1.195	1.194	1.193	1.192	1.191	1.190	1.190
12	Total ERCs	2,055	2,065	2,076	2,086	2,093	2,098	2,103
13	Normal Monthly Avg. Use per ERC's	3,146	3,146	3,146	3,146	3,146	3,146	3,146
14	Total Water Sales (000's)	77,569	77,946	78,342	78,720	78,984	79,173	79,361
Commercial - Water Accounts								
15	Normal Growth		15	15	15	12	12	10
16	Incremental Growth		0	0	0	0	0	0
17	Total Accounts	1,195	1,210	1,225	1,240	1,252	1,264	1,274
18	ERC's per Account Factor	3.373	3.362	3.367	3.360	3.349	3.345	3.348
19	Total ERCs	4,031	4,068	4,124	4,166	4,194	4,228	4,266
20	Normal Monthly Avg. Use per ERC's	4,559	4,559	4,559	4,559	4,559	4,559	4,559
21	Total Water Sales (000's)	220,501	222,553	225,616	227,914	229,418	231,278	233,357
Irrigation - Water Accounts								
22	Normal Growth		10	8	7	7	5	5
23	Incremental Growth		0	0	0	0	0	0
24	Total Accounts	5,359	5,369	5,377	5,384	5,391	5,396	5,401
25	ERC's per Account Factor	1.055	1.056	1.056	1.056	1.056	1.056	1.056
26	Total ERCs	5,655	5,672	5,680	5,687	5,694	5,699	5,704
27	Normal Monthly Avg. Use per ERC's	3,035	3,035	3,035	3,035	3,035	3,035	3,035
28	Total Water Sales (000's)	205,954	206,573	206,865	207,120	207,374	207,557	207,739
Bulk - Water Accounts								
29	Normal Growth		0	0	0	0	0	0
30	Incremental Growth		0	0	0	0	0	0
31	Total Accounts	0	0	0	0	0	0	0
32	ERC's per Account Factor	0	0	0	0	0	0	0
33	Total ERCs	0	0	0	0	0	0	0
34	Normal Monthly Avg. Use per ERC's	0	0	0	0	0	0	0
35	Total Water Sales (000's)	0	0	0	0	0	0	0
Fire Protection - Water Accounts								
36	Normal Growth		3	3	3	2	2	1
37	Incremental Growth		0	0	0	0	0	0
38	Total Accounts	284	287	290	293	295	297	298
39	Normal Monthly Avg. Use per Account	41	41	41	41	41	41	41
40	Total Water Sales (000's)	140	141	143	144	145	146	147

City of Palm Coast, Florida

Water and Wastewater Utility System

Summary of Projected Customer Statistics

Line No.	Description	Fiscal Year Ending September 30,						
		2017	2018	2019	2020	2021	2022	2023
Wastewater System:								
Residential Class								
105	Normal Growth	0	700	700	700	700	675	675
106	Incremental Growth	0	0	0	0	0	0	0
107	Total Accounts	34,636	35,336	36,036	36,736	37,436	38,111	38,786
108	ERU's per Account Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000
109	Total ERCs	34,639	35,339	36,039	36,739	37,439	38,116	38,791
110	Normal Monthly Avg. Use per ERC's	3,553	3,482	3,465	3,456	3,456	3,456	3,456
111	Total Wastewater Sales (000's)	1,476,879	1,476,590	1,498,309	1,523,592	1,552,621	1,580,676	1,608,669
Residential Class - Outside City								
112	Normal Growth	0	15	10	10	10	8	5
113	Incremental Growth	0	0	0	0	0	0	0
114	Total Accounts	195	210	220	230	240	248	253
115	ERU's per Account Factor	1.005	1.005	1.004	1.004	1.004	1.004	1.004
116	Total ERCs	196	211	221	231	241	249	254
117	Normal Monthly Avg. Use per ERC's	4,463	4,374	4,352	4,352	4,352	4,352	4,352
118	Total Wastewater Sales (000's)	10,492	11,072	11,541	12,065	12,590	13,009	13,271
Multi-Family								
119	Normal Growth	0	10	10	10	7	5	5
120	Incremental Growth	0	0	0	0	0	0	0
121	Total Accounts	1,462	1,472	1,482	1,492	1,499	1,504	1,509
122	ERC's per Account Factor	1.195	1.194	1.193	1.192	1.191	1.190	1.190
123	Total ERC Growth	1,747	1,757	1,768	1,778	1,785	1,790	1,796
124	Normal Monthly Avg. Use per ERC's	3,146	3,146	3,146	3,146	3,146	3,146	3,146
125	Total Wastewater Sales (000's)	65,933	66,321	66,726	67,114	67,386	67,580	67,774
Commercial - Wastewater Accounts								
126	Normal Growth	0	15	15	15	12	12	10
127	Incremental Growth	0	0	0	0	0	0	0
128	Total Accounts	1,014	1,029	1,044	1,059	1,071	1,083	1,093
129	ERC's per Account Factor	3.373	3.362	3.367	3.360	3.349	3.345	3.348
130	Total ERC Growth	3,420	3,459	3,515	3,558	3,587	3,622	3,659
131	Normal Monthly Avg. Use per ERC's	4,559	4,548	4,548	4,548	4,548	4,548	4,548
132	Total Wastewater Sales (000's)	187,103	188,789	191,800	194,159	195,761	197,665	199,703
Effluent								
133	Normal Growth	0	0	0	0	0	0	0
134	Total Annual Average Accounts	2	2	2	2	2	2	2
135	Total Effluent Sales - Dunes(000's)	715,898	715,898	715,898	715,898	715,898	715,898	715,898
136	Total Effluent Sales - Grand Haven (000's)	186,597	186,597	186,597	186,597	186,597	186,597	186,597
137	Total Effluent Sales - Other- (000's)	0	0	0	0	0	0	0
138	Total Effluent Sales (000's)	902,495	902,495	902,495	902,495	902,495	902,495	902,495
139	Total Account Growth	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
140	Total Sales Growth	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total - Wastewater System								
141	Total Annual Average Accounts	37,309	38,049	38,784	39,519	40,248	40,948	41,643
142	Total Annual Average ERCs	40,002	40,767	41,543	42,306	43,053	43,777	44,500
143	Total Wastewater Sales (000's)	2,642,902	2,645,267	2,670,870	2,699,426	2,730,853	2,761,425	2,791,912
144	Total Wastewater Sales Excluding Effluent	1,740,407	1,742,772	1,768,375	1,796,931	1,828,358	1,858,930	1,889,417
145	Average Monthly Flow Per ERC	4,486	4,500	4,500	4,500	4,500	4,500	4,500
146	Annual Wastewater Treated	2,153,475	2,201,407	2,243,307	2,284,540	2,324,855	2,363,981	2,402,997
147	Average Daily Flow (MGD)	5.90	6.03	6.15	6.26	6.37	6.48	6.58
148	Total Account Growth	N/A	725	720	717	710	688	685
149	Total ERC Growth	N/A	765	776	764	747	725	723

City of Palm Coast, Florida
Water and Wastewater Utility System

Summary of Six-Year Capital Improvement Program

Line No.	Description	Funding Source	Budget 2018	Adjustments	Adjusted 2018	2019	2020	2021	2022	2023	Total
Water System:											
Water Treatment Plant #3											
1	81010 Membrane Replacement	R&R	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	81010 Plant Expansion Design/Construction	New Debt 3	-	-	-	-	-	-	-	4,500,000	4,500,000
3	81010 Concentrate Pump	Oper-Res	-	-	-	120,000	-	-	-	-	120,000
4	TTHM Reduction System	WConn-Fee	-	-	-	-	-	-	-	-	-
5	TTHM Reduction System	Oper-Res	-	-	-	250,000	-	-	-	-	250,000
6	Concentrate Anti-Scaling Investigation	R&R	-	-	-	25,000	-	-	-	-	25,000
7	Brackish Concentrate Pipe - Design and Construction	R&R	-	-	-	-	-	-	-	-	-
8	Brackish Treatment Improvements	R&R	-	-	-	-	-	-	-	-	-
9	Total Water Treatment Plant #3		\$ -	\$ -	\$ -	\$ 395,000	\$ -	\$ -	\$ -	\$ 4,500,000	\$ 4,895,000
Wellfield and Wells											
10	81019 Wellfield Expansion WTP #3 Phase 3, Fresh	Oper-Res	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	81019 Wellfield Expansion WTP #3 Phase 3 - Brackish	Oper-Res	-	-	-	-	-	-	-	-	-
12	81019 Wellfield Expansion WTP #3 Phase 3 - Brackish/Fresh	New Debt 3	-	-	-	-	-	-	-	2,000,000	2,000,000
13	81019 Wellfield Expansion WTP #2	Oper-Res	-	-	-	-	-	-	-	-	-
14	81019 Wellfield Expansion WTP #2 - 3 additional wells	Oper-Res	100,000	-	100,000	2,900,000	-	-	-	-	3,000,000
15	81019 Well SW-43 Replacement - WTP #1	Oper-Res	280,000	-	280,000	400,000	-	-	-	-	680,000
16	81019 AWS Investigation/APT/WTP#3	R&R	-	-	-	-	-	-	-	-	-
17	81019 ASR Investigation	Reclass Oper	-	-	-	-	-	-	100,000	-	100,000
18	81019 Deep Well Investigation/test well	R&R	-	-	-	-	-	-	-	-	-
19	81019 Well Construction Replacements	R&R	300,000	-	300,000	500,000	-	-	-	-	800,000
20	81019 Well Construction Replacements	New Debt 1	-	-	-	-	500,000	500,000	-	-	1,000,000
21	81019 Well Construction Replacements	New Debt 3	-	-	-	-	-	-	600,000	600,000	1,200,000
21	North and South Wellfield Property Acquisition	WConn-Fee	-	-	-	-	-	-	-	2,000,000	2,000,000
22	Wetlands Monitoring	R&R	-	-	-	-	-	-	-	-	-
23	CUP 1947 Monitoring	R&R	-	-	-	-	-	-	-	-	-
24	Surface Water / Ground Water Interface Study	R&R	-	-	-	25,000	-	-	-	-	25,000
25	Total Wellfield and Wells		\$ 680,000	\$ -	\$ 680,000	\$ 3,825,000	\$ 500,000	\$ 500,000	\$ 700,000	\$ 4,600,000	\$ 10,805,000
Water Mains											
26	81020 Citation/Old Kings Road/SR100 Water Main Loop	WConn-Fee	\$ -	\$ -	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000
27	81020 Old Kings Road Water Main Extension to Eagle Lakes	WConn-Fee	-	-	-	150,000	-	-	-	-	150,000
28	81020 Old Kings Road Water Mains (Phase 2)	Oper-Res	-	-	-	-	-	-	-	-	-
29	81020 WM on Palm Coast Pkwy (Belle Terre Pkwy to East of I-95)	Oper-Res	-	-	-	-	-	-	-	-	-
30	81020 Matanzas Woods Pkwy Relocate	Oper-Res	-	-	-	-	-	-	-	-	-
31	81020 North Old Kings Road Water Main	R&R	-	-	-	-	-	100,000	-	-	100,000
32	81020 North Old Kings Road Water Main	WConn-Fee	-	-	-	-	-	-	-	1,000,000	1,000,000
33	81020 North Old Kings Road Extension Water Main	Oper-Res	-	-	-	500,000	-	-	-	-	500,000
34	81020 Malacompra Drainage Project water main relocate	Oper-Res	150,000	-	150,000	-	-	-	-	-	150,000
35	81020 Northern Intracoastal Crossing Upsize	Oper-Res	-	-	-	-	-	-	-	-	-
36	81020 Seminole Woods Transmission Main Connection	Oper-Res	-	-	-	-	500,000	-	-	-	500,000
37	84005 Cypress Edge Loop	Oper-Res	-	-	-	-	150,000	-	-	-	150,000
38	Total Water Mains		\$ 150,000	\$ -	\$ 150,000	\$ 2,150,000	\$ 650,000	\$ 100,000	\$ -	\$ 1,000,000	\$ 4,050,000
Water Treatment Plant #1											
39	84002 WTP No. 1 Misc. Improvements (Electrical Improvements)	R&R	\$ 100,000	\$ -	\$ 100,000	\$ 125,000	\$ 100,000	\$ 25,000	\$ 25,000	\$ -	\$ 375,000
40	Design and equip East + west MCC + Chemical BldgMCC #1#2	Oper-Res	-	-	-	-	-	-	-	-	-
41	84002 WTP No. 1 Replacement Generator and Electrical Upgrade	Oper-Res	-	-	-	-	-	-	-	-	-
42	84002 Lime Sludge Handling - Design and Facility	WConn-Fee	-	-	-	25,000	200,000	800,000	-	-	1,025,000
43	84002 Lime Sludge Handling - Design and Facility	New Debt 3	-	-	-	-	-	-	1,000,000	-	1,000,000
44	84002 Re-roof (First -Wfilter Build, HSPS, Hypo Building, Chem Build)	R&R	-	-	-	175,000	175,000	50,000	-	-	400,000
45	84002 Fuel Storage	WConn-Fee	-	-	-	-	-	-	-	300,000	300,000

City of Palm Coast, Florida
Water and Wastewater Utility System

Summary of Six-Year Capital Improvement Program

Line No.	Description	Funding Source	Budget 2018	Adjustments	Adjusted 2018	2019	2020	2021	2022	2023	Total
46	Slaker #1 Replacement	R&R	-	-	-	-	180,000	-	-	-	180,000
47	Slaker #3 Replacement	R&R	-	-	-	-	-	-	-	-	-
48	84003 Slaker #2 Replacement	R&R	180,000	-	180,000	-	-	-	-	-	180,000
49	84003 Ozone Treatment - Color, Taste and Odor	WConn-Fee	-	-	-	500,000	500,000	-	-	-	1,000,000
50	TTHM Reduction System	WConn-Fee	-	-	-	250,000	-	-	-	-	250,000
51	Total Water Treatment Plant #1		\$ 280,000	\$ -	\$ 280,000	\$ 1,075,000	\$ 1,155,000	\$ 875,000	\$ 1,025,000	\$ 300,000	\$ 4,710,000
Water Treatment Plant #2											
52	84003 Concentrate Zero Discharge Treatment	Oper-Res	\$ -	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	-
53	84003 Membrane Replacement - NF	R&R	-	-	-	-	-	600,000	-	600,000	1,200,000
54	84003 Membrane Replacement - UF	R&R	-	-	-	-	600,000	-	-	520,000	1,120,000
55	84003 UF Skids - Valve Replacement	R&R	-	-	-	-	250,000	-	-	-	250,000
56	84003 Disinfection By-Products includes reactor covers and mixing eqt	R&R	-	-	-	-	-	-	-	-	-
57	84003 Reroof	R&R	255,000	-	255,000	-	-	-	-	-	255,000
58	84003 Fuel Storage Tank	New Debt 3	-	-	-	-	-	-	300,000	-	300,000
59	84003 Ozone Treatment - Color, Taste and Odor	Oper-Res	-	-	-	-	-	-	-	-	-
60	84003 Ozone Treatment - Color, Taste and Odor	WConn-Fee	20,000	-	20,000	500,000	500,000	-	-	-	1,020,000
60	84003 Concentrate Anti-Scaling Investigation	R&R	-	-	-	25,000	-	-	-	-	25,000
61	84003 Filtrate Ammonia Reduction	New Debt 1	-	-	-	-	500,000	-	-	-	500,000
62	Total Water Treatment Plant #2		\$ 275,000	\$ -	\$ 275,000	\$ 525,000	\$ 1,850,000	\$ 600,000	\$ 300,000	\$ 1,120,000	\$ 4,670,000
General Plant R&R											
63	84004 Construction	R&R	\$ 600,000	\$ -	\$ 600,000	\$ 600,000	\$ 650,000	\$ 650,000	\$ 700,000	\$ 700,000	\$ 3,900,000
64	Total General Plant R&R		\$ 600,000	\$ -	\$ 600,000	\$ 600,000	\$ 650,000	\$ 650,000	\$ 700,000	\$ 700,000	\$ 3,900,000
Distribution System Improvements											
65	84005 Canal Crossing Replacements	R&R	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 300,000	\$ -	\$ 450,000
66	84005 Large Backflow Preventor Replacements	R&R	50,000	-	50,000	75,000	75,000	75,000	75,000	75,000	425,000
67	84005 Fixed Base Meter Reading	R&R	175,000	-	175,000	200,000	200,000	200,000	-	-	775,000
68	84005 Radio Read Metering	R&R	500,000	-	500,000	-	500,000	500,000	500,000	500,000	2,500,000
69	84005 Radio Read Metering	Oper-Res	-	-	-	500,000	-	-	-	-	500,000
70	84005 Residential and Sm Commercial Meters changeouts	R&R	80,000	-	80,000	100,000	100,000	100,000	100,000	100,000	580,000
71	84005 Construction	R&R	100,000	-	100,000	100,000	100,000	100,000	100,000	100,000	600,000
72	Meter Installations From Operating Budget	R&R	725,000	-	725,000	830,989	850,933	871,355	892,268	913,682	5,084,227
73	Total Distribution System Improvements		\$ 1,630,000	\$ -	\$ 1,630,000	\$ 1,805,989	\$ 1,825,933	\$ 1,996,355	\$ 1,967,268	\$ 1,688,682	\$ 10,914,227
74	Total Water System Improvements		\$ 3,615,000	\$ -	\$ 3,615,000	\$ 10,375,989	\$ 6,630,933	\$ 4,721,355	\$ 4,692,268	\$ 13,908,682	\$ 43,944,227

City of Palm Coast, Florida
Water and Wastewater Utility System

Summary of Six-Year Capital Improvement Program

Line No.	Description	Funding Source	Budget 2018	Adjustments	Adjusted 2018	2019	2020	2021	2022	2023	Total
119	82004 Irrigation along US#1, Palm Coast Park	R&R	-	-	-	-	-	-	-	-	-
120	82004 RCW Main Extension to the Sports Complex	WWConn-Fee	-	-	-	560,000	440,000	-	-	-	1,000,000
121	82004 Cigar Lake Water Quality Improvements-aeration	Oper-Res	100,745	-	100,745	150,000	-	-	-	-	250,745
122	Reclaimed Meters	R&R	40,000	-	40,000	50,000	50,000	50,000	50,000	50,000	290,000
123	Total Reclaimed Water Mains		\$ 160,745	\$ -	\$ 160,745	\$ 1,010,000	\$ 1,690,000	\$ 550,000	\$ 50,000	\$ 50,000	\$ 3,510,745
Wastewater Treatment Plant #2											
124	82007 Engineering Design & Construction	Existing SRF Loan	\$ 5,000,000	\$ -	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000,000
125	88015 Reclaimed Water Discharge to Wetlands Design/Const.	Existing SRF Loan	510,000	-	510,000	-	-	-	-	-	510,000
126	82007 Asset Management Plan	Oper-Res	80,000	-	80,000	-	-	-	-	-	80,000
127	WWTP #2 improvements - Discharge Automation	WWConn-Fee	-	-	-	100,000	-	-	-	-	100,000
WWTF #2 Expansion											
128	82007 Planning and Engineering (Accommodate Growth)	WWConn-Fee	-	-	-	-	350,000	-	-	-	350,000
129	82007 Planning and Engineering (Accommodate Growth)	New SRF Loan	-	-	-	-	-	350,000	-	-	350,000
130	82007 Engineering Construction (Accommodate Growth)	New SRF Loan	-	-	-	-	-	2,000,000	10,000,000	3,000,000	15,000,000
WWTF # 2 Reuse for Aquifer Recharge - Non Potable Reuse											
131	82007 Investigation	Oper-Res	-	-	-	250,000	-	-	-	-	250,000
132	82007 Land	WWConn-Fee	-	-	-	-	750,000	-	-	-	750,000
133	82007 Design and Construction	New SRF Loan	-	-	-	-	-	200,000	-	-	200,000
134	82007 Design and Construction	New SRF Loan	-	-	-	-	-	-	1,000,000	500,000	1,500,000
135	Total Wastewater Treatment Plant #2		\$ 5,590,000	\$ -	\$ 5,590,000	\$ 350,000	\$ 1,100,000	\$ 2,550,000	\$ 11,000,000	\$ 3,500,000	\$ 24,090,000
Beachside Sewer System											
136	82009 Design and Construction/phase 2	Developer	\$ -	-	-	\$ 750,000	\$ 750,000	\$ -	\$ -	\$ -	1,500,000
137	82009 Design and Construction/phase 2	WWConn-Fee	-	-	-	750,000	750,000	-	-	-	1,500,000
138	Total Beachside Sewer System		\$ -	\$ -	\$ -	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 3,000,000
Wastewater Treatment Plant #3											
139	82010 Land	R&R	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
140	Total Wastewater Treatment Plant #3		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lift Stations and Pump Stations											
141	85003 Pump Station Upgrades	R&R	\$ 100,000	\$ -	\$ 100,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 850,000
142	85003 Pump Station On-Line Generator	R&R	50,000	-	50,000	-	80,000	80,000	80,000	80,000	370,000
143	85003 Pump Station FEMA Design	R&R	100,000	-	100,000	170,000	20,000	-	-	-	290,000
144	85003 Pump Station On-Line Generator	Grant	-	-	-	1,000,000	200,000	-	-	-	1,200,000
145	85003 Pump Station On-Line Generator	Oper-Res	-	-	-	250,000	100,000	-	-	-	350,000
146	85003 Pump Station Odor Control Systems	R&R	80,000	-	80,000	100,000	100,000	100,000	100,000	100,000	580,000
147	85003 OKR Master Pump Station	R&R	-	-	-	-	-	-	-	-	-
148	88014 Belle Terre/Matanzas Woods MPS	Oper-Res	450,000	-	450,000	-	-	-	-	-	450,000
149	85003 Pump Station 34-1 Upgrade	WWConn-Fee	-	-	-	-	350,000	-	-	-	350,000
150	85003 Commerce Blvd Pump Station	Oper-Res	-	-	-	-	50,000	-	-	-	50,000
151	85003 Hargrove Pump Station	Oper-Res	-	-	-	-	50,000	-	-	-	50,000
152	85003 Woodhaven Pump Station 27-1	Oper-Res	-	-	-	-	200,000	-	-	-	200,000
153	85003 Pump Station 4-2	WWConn-Fee	-	-	-	-	-	-	-	200,000	200,000
154	85003 Pump Station 22-3 and 22-4	R&R	-	-	-	-	100,000	-	-	-	100,000
155	85003 Pump Station PS D Improvements	Oper-Res	100,000	-	100,000	500,000	-	-	-	-	600,000
155	85003 Pump Station CL-1	Oper-Res	100,000	-	100,000	-	-	-	-	-	100,000
156	85004 Pump Stations Section 25 (Parkview) (Split over 2 years)	R&R	-	-	-	-	150,000	75,000	-	-	225,000

City of Palm Coast, Florida
Water and Wastewater Utility System

Summary of Six-Year Capital Improvement Program

Line No.	Description	Funding Source	Budget 2018	Adjustments	Adjusted 2018	2019	2020	2021	2022	2023	Total
157	85004 Eductor Stations 4ea (Push out to 2021)	New Debt 1	-	-	-	-	-	1,000,000	-	-	1,000,000
158	Upgrade PS 24-2	Oper-Res	50,000	-	50,000	-	-	-	-	-	50,000
159	US #1 Master Pump	R&R	-	-	-	-	250,000	-	-	-	250,000
160	US #1 Master Pump	New SRF Loan	-	-	-	-	-	2,500,000	-	-	2,500,000
161	SCADA Conversion to Mission Communication	Oper-Res	-	-	-	250,000	-	-	-	-	250,000
162	Total Lift Stations and Pump Stations		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 2,420,000	\$ 1,800,000	\$ 3,905,000	\$ 330,000	\$ 530,000	\$ 10,015,000
General Plant R&R - Wastewater											
163	85005 Gravity Pipeline Lining	R&R	\$ 250,000	\$ -	\$ 250,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ 500,000	\$ 1,750,000
164	85005 Gravity Pipeline Lining	New Debt 1	-	-	-	-	1,000,000	1,000,000	-	-	2,000,000
165	85005 Gravity Pipeline Lining	New Debt 3	-	-	-	-	-	-	1,000,000	500,000	1,500,000
166	85005 Construction	R&R	500,000	-	500,000	-	-	-	750,000	750,000	2,000,000
167	85005 Construction	Oper-Res	-	-	-	600,000	750,000	750,000	-	-	2,100,000
167	82006 RIB Site Fencing	R&R	100,000	-	100,000	100,000	-	-	-	-	200,000
168	85005 Replace Mechanical Bar Screens at WWTP #1	R&R	-	-	-	-	-	-	-	-	-
169	85005 Replace submersible pumps	R&R	60,000	-	60,000	100,000	100,000	100,000	100,000	100,000	560,000
170	85005 PEP Replacement Pumps and Panels	R&R	225,000	-	225,000	300,000	300,000	300,000	300,000	300,000	1,725,000
171	85005 Manhole Dishes	R&R	-	-	-	20,000	-	-	-	-	20,000
172	Total General Plant R&R - Wastewater		\$ 1,135,000	\$ -	\$ 1,135,000	\$ 2,120,000	\$ 2,150,000	\$ 2,150,000	\$ 2,150,000	\$ 2,150,000	\$ 11,855,000
173	Total Wastewater System Improvements		\$ 10,394,745	\$ 10,000	\$ 10,404,745	\$ 13,326,500	\$ 14,740,000	\$ 15,955,000	\$ 16,330,000	\$ 8,980,000	\$ 79,736,245
Miscellaneous Utility Services											
Miscellaneous Utility Services(54029000-034000)											
174	89002 CUP Modification Application	Reclass Oper	\$ 89,000	\$ -	\$ 89,000	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ 289,000
175	89002 CUP Compliance Report	Reclass Oper	-	-	-	-	-	50,000	-	-	50,000
176	89002 Consultant Input on CIP Development 20161298	Reclass Oper	7,000	-	7,000	15,000	15,000	15,000	15,000	15,000	82,000
177	89002 Water Supply Facilities Work Plan	Reclass Oper	5,000	-	5,000	-	30,000	-	-	-	35,000
178	89002 Rate Study/Bond Issue/SRF Capital Financing Plan	Reclass Oper	-	-	-	-	-	-	-	-	-
179	89002 LiDAR Project	R&R	-	-	-	-	-	-	-	-	-
180	89002 Surface / Groundwater Interface Model	Reclass Oper	24,998	-	24,998	-	-	-	-	-	24,998
181	89002 Utility Admin R+R	R&R	10,000	-	10,000	30,000	30,000	30,000	30,000	30,000	160,000
182	89002 Technology Upgrades (\$35,357.68 in PO's)	R&R	100,000	-	100,000	100,000	-	-	-	-	200,000
183	89002 Inventory Storage	R&R	10,000	-	10,000	250,000	-	-	-	-	260,000
184	89002 Utility Compound Upgrade	R&R	-	-	-	-	-	-	-	-	-
185	Additional land for 2 Utility	R&R	-	-	-	-	-	-	-	-	-
186	Replace building roofs (6 Buildings)	R&R	-	-	-	150,000	150,000	150,000	30,000	30,000	510,000
187	Admin Allocation 54029099 049000	R&R	693,346	-	693,346	719,771	737,046	754,735	772,848	791,397	4,469,142
188	Machinery and Equipment From Budget	R&R	17,100	-	17,100	33,525	16,955	17,361	17,778	18,205	120,924
189	Transfer to Fleet Management - New Initial Vehicle Purchases	R&R	97,700	-	97,700	287,595	135,194	138,439	141,762	145,164	945,854
190	Transfer to Fleet Communication - New Initial Purchases	R&R	18,000	-	18,000	-	15,565	15,938	16,321	16,713	82,537
191	Total Miscellaneous Utility Services(54029000-034000)		\$ 1,072,144	\$ -	\$ 1,072,144	\$ 1,585,891	\$ 1,129,759	\$ 1,271,473	\$ 1,023,709	\$ 1,146,478	\$ 7,229,454
192	Total Miscellaneous Utility Services		\$ 1,072,144	\$ -	\$ 1,072,144	\$ 1,585,891	\$ 1,129,759	\$ 1,271,473	\$ 1,023,709	\$ 1,146,478	\$ 7,229,454
193	Total System Improvements		\$ 15,081,889	\$ 10,000	\$ 15,091,889	\$ 25,288,380	\$ 22,500,692	\$ 21,947,829	\$ 22,045,976	\$ 24,035,160	\$ 130,909,926

City of Palm Coast, Florida
Water and Wastewater Utility System

Summary of Six-Year Capital Improvement Program

Line No.	Description	Funding Source	Budget 2018	Adjustments	Adjusted 2018	2019	2020	2021	2022	2023	Total
FUNDING SOURCES											
WATER SYSTEM											
194	Operating Reserves	Oper-Res	\$ 530,000	\$ -	\$ 530,000	\$ 4,670,000	\$ 650,000	\$ -	\$ -	\$ -	\$ 5,850,000
196	Rate Revenues	Rate-Rev	-	-	-	-	-	-	-	-	-
197	Renewals & Replacements Fund	R&R	4,011,146	-	4,011,146	4,351,880	4,865,692	4,527,829	3,700,976	4,540,160	25,997,683
198	Water Capital Facilities Fees Fund	WConn-Fee	20,000	-	20,000	2,925,000	1,200,000	800,000	-	3,300,000	8,245,000
199	Developer	Developer	-	-	-	-	-	-	-	-	-
200	Existing Debt Proceeds	Existing Bonds	-	-	-	-	-	-	-	-	-
201	Existing SRF Proceeds	Existing SRF Loan	-	-	-	-	-	-	-	-	-
202	New Debt 1	New Debt 1	-	-	-	-	1,000,000	500,000	-	-	1,500,000
203	New Debt 2	New SRF Loan	-	-	-	-	-	-	-	-	-
204	New Debt 3	New Debt 3	-	-	-	-	-	-	1,900,000	7,100,000	9,000,000
205	Construction Fund	Construction Fund	-	-	-	-	-	-	-	-	-
206	Grants	Grant	-	-	-	-	-	-	-	-	-
207	Assessment	Assessment	-	-	-	-	-	-	-	-	-
208	Reclassify Expenditure to Operating Expenses	Reclass Oper	125,998	-	125,998	15,000	45,000	165,000	115,000	115,000	580,998
209	Total Water System		\$ 4,687,144	\$ -	\$ 4,687,144	\$ 11,961,880	\$ 7,760,692	\$ 5,992,829	\$ 5,715,976	\$ 15,055,160	\$ 51,173,681
WASTEWATER SYSTEM											
210	Operating Reserves	Oper-Res	\$ 1,692,745	\$ 10,000	\$ 1,702,745	\$ 3,633,343	\$ 1,650,000	\$ 750,000	\$ -	\$ -	\$ 7,736,088
211	Rate Revenues	Rate-Rev	-	-	-	-	-	-	-	-	-
212	Renewals & Replacements Fund	R&R	1,512,000	-	1,512,000	3,252,000	1,600,000	1,155,000	1,830,000	2,830,000	12,179,000
213	Wastewater Capital Facilities Fees Fund	WWConn-Fee	480,000	-	480,000	3,693,000	2,640,000	1,833,000	1,733,000	1,700,000	12,079,000
214	Developer	Developer	-	-	-	750,000	750,000	-	-	-	1,500,000
215	Existing Debt Proceeds	Existing Bonds	1,200,000	-	1,200,000	998,157	1,000,000	-	-	-	3,198,157
216	Existing Debt Proceeds	Existing SRF Loan	5,510,000	-	5,510,000	-	-	-	-	-	5,510,000
217	New Debt 1	New Debt 1	-	-	-	-	6,900,000	3,167,000	-	-	10,067,000
218	New Debt 2	New SRF Loan	-	-	-	-	-	9,050,000	11,100,000	3,950,000	24,100,000
219	New Debt 3	New Debt 3	-	-	-	-	-	-	1,667,000	500,000	2,167,000
220	Construction Fund	Construction Fund	-	-	-	-	-	-	-	-	-
221	Grants	Grant	-	-	-	1,000,000	200,000	-	-	-	1,200,000
222	Assessment	Assessment	-	-	-	-	-	-	-	-	-
223	Reclassify Expenditure to Operating Expenses	Reclass Oper	-	-	-	-	-	-	-	-	-
224	Total Wastewater System		\$ 10,394,745	\$ 10,000	\$ 10,404,745	\$ 13,326,500	\$ 14,740,000	\$ 15,955,000	\$ 16,330,000	\$ 8,980,000	\$ 79,736,245
COMBINED SYSTEM											
225	Operating Reserves	Oper-Res	\$ 2,222,745	\$ 10,000	\$ 2,232,745	\$ 8,303,343	\$ 2,300,000	\$ 750,000	\$ -	\$ -	\$ 13,586,088
226	Rate Revenues	Rate-Rev	-	-	-	-	-	-	-	-	-
227	Renewals & Replacements Fund	R&R	5,523,146	-	5,523,146	7,603,880	6,465,692	5,682,829	5,530,976	7,370,160	38,176,683
228	Water Capital Facilities Fees Fund	WConn-Fee	20,000	-	20,000	2,925,000	1,200,000	800,000	-	3,300,000	8,245,000
229	Wastewater Capital Facilities Fees Fund	WWConn-Fee	480,000	-	480,000	3,693,000	2,640,000	1,833,000	1,733,000	1,700,000	12,079,000
230	Developer	Developer	-	-	-	750,000	750,000	-	-	-	1,500,000
231	Existing Debt Proceeds	Existing Bonds	1,200,000	-	1,200,000	998,157	1,000,000	-	-	-	3,198,157
232	Existing SRF Proceeds	Existing SRF Loan	5,510,000	-	5,510,000	-	-	-	-	-	5,510,000
233	New Debt 1	New Debt 1	-	-	-	-	7,900,000	3,667,000	-	-	11,567,000
234	New Debt 2	New SRF Loan	-	-	-	-	-	9,050,000	11,100,000	3,950,000	24,100,000
235	New Debt 3	New Debt 3	-	-	-	-	-	-	3,567,000	7,600,000	11,167,000
236	Construction Fund	Construction Fund	-	-	-	-	-	-	-	-	-
237	Grants	Grant	-	-	-	1,000,000	200,000	-	-	-	1,200,000
238	Assessment	Assessment	-	-	-	-	-	-	-	-	-
239	Reclassify Expenditure to Operating Expenses	Reclass Oper	125,998	-	125,998	15,000	45,000	165,000	115,000	115,000	580,998
240	Total Combined System		\$ 15,081,889	\$ 10,000	\$ 15,091,889	\$ 25,288,380	\$ 22,500,692	\$ 21,947,829	\$ 22,045,976	\$ 24,035,160	\$ 130,909,926

Table 4

City of Palm Coast, Florida

Water and Wastewater Utility System

Development of Projected Cost of Operations and Maintenance

Line No.	Billing Code	Description	Adjusted 2018	Escalation Reference	Projected Fiscal Year Ending September 30,				
					2019	2020	2021	2022	2023
UTILITY ADMINISTRATION									
1	12000	Salaries And Wages	\$438,568	Labor	\$464,697	\$487,932	\$512,328	\$537,945	\$564,842
2	N/A	Additional Personnel Costs	0	Calculated	0	0	0	0	0
3	12001	Comp Earned	0	Labor	0	0	0	0	0
4	12002	Comp Used	0	Labor	0	0	0	0	0
5	12010	Car/Cell Allowance	2,770	Labor	2,840	2,982	3,131	3,288	3,452
6	14000	Overtime	5,600	Labor	6,800	7,140	7,497	7,872	8,265
7	21000	Fica Taxes	27,561	Labor	29,413	30,884	32,428	34,049	35,752
8	21100	Medicare	6,450	Labor	6,884	7,228	7,590	7,969	8,368
9	22000	Retirement Contributions	52,120	Labor	59,352	62,320	65,436	68,707	72,143
10	23000	Health Insurance	57,600	Health	68,096	70,139	72,243	74,410	76,643
11	23020	Dental Insurance	0	Health	0	0	0	0	0
12	23021	125 Benefit	0	Labor	0	0	0	0	0
13	23030	Life Insurance	1,818	Health	2,111	2,174	2,240	2,307	2,376
14	23035	Disability	1,798	Health	2,090	2,153	2,217	2,284	2,352
15	24000	Workers Compensation	4,640	Labor	4,925	5,171	5,430	5,701	5,986
16	25000	State Unemployment Comp	0	Labor	0	0	0	0	0
17	31000	Professional Services	37,500	CPI	27,000	27,648	28,312	28,991	29,687
18	34000	Other Contractual Svcs	18,730	CPI	22,170	22,702	23,247	23,805	24,376
19	40000	Travel & Per Diem	3,600	CPI	4,800	4,915	5,033	5,154	5,278
20	40040	Employee Training	0	CPI	0	0	0	0	0
21	43000	Electricity	22,735	Electric-W	25,235	26,456	27,716	29,014	30,364
22	43042	Water	0	CPI	0	0	0	0	0
23	44000	Rentals/Leases	0	CPI	3,500	3,537	3,579	3,619	3,659
24	44100	Fleet Replacement Allocation	10,152	Repair	0	0	0	0	0
25	45001	Property Insurance	4,717	Insurance	1,400	1,442	1,485	1,530	1,576
26	45002	Liability Insurance	4,994	Insurance	1,627	1,676	1,726	1,778	1,831
27	45003	Automobile Insurance	1,520	Insurance	473	487	502	517	532
28	46000	Repair And Maintenance Svcs	32,550	Repair	52,900	54,487	56,122	57,805	59,539
29	46100	Fleet Maintenance Allocation	9,631	CPI	2,833	2,918	3,006	3,096	3,189
30	46102	Fleet Comm	21,402	CPI	4,500	4,635	4,774	4,917	5,065
31	47000	Printing & Binding	3,100	CPI	3,750	3,840	3,932	4,027	4,123
32	48000	Advertising & Promotion	800	WAccounts	1,000	1,017	1,033	1,050	1,066
33	49000	Other Charges And Obligations	24,033	CPI	24,141	24,720	25,314	25,921	26,543
34	51000	Office Supplies/Equip Und\$750	4,500	CPI	6,000	6,150	6,304	6,461	6,623
35	51010	Postage	0	WAccounts	0	0	0	0	0
36	52000	Operating Supp&Equipunder\$750	34,160	M&S	34,700	35,568	36,457	37,368	38,302
37	52005	Fuel Charge	7,000	CPI	4,000	4,096	4,194	4,295	4,398
38	54000	Books, Pub, Subscrip, Membersh	4,100	Marginal	5,100	5,151	5,203	5,255	5,307
39	64000	Machinery & Equipment	0	CPI	0	0	0	0	0
40		TOTAL UTILITY ADMINISTRATION	844,149		872,337	909,568	948,477	989,135	1,031,637
54012420 CUSTOMER SERVICE									
41	12000	Salaries And Wages	\$833,898	Labor	\$862,051	\$905,154	\$950,411	\$997,932	\$1,047,828
42	N/A	Additional Personnel Costs	0	Calculated	0	0	45,274	46,360	47,473
43	12001	Comp Earned	0	Labor	0	0	0	0	0
44	12002	Comp Used	0	Labor	0	0	0	0	0
45	12010	Car/Cell Allowance	2,220	Labor	2,220	2,331	2,448	2,570	2,698
46	14000	Overtime	17,000	Labor	17,000	17,850	18,743	19,680	20,664
47	21000	Fica Taxes	52,904	Labor	54,651	57,384	60,253	63,265	66,429
48	21100	Medicare	12,382	Labor	12,787	13,426	14,098	14,803	15,543
49	22000	Retirement Contributions	102,120	Labor	103,968	109,166	114,625	120,356	126,374
50	23000	Health Insurance	211,680	Health	204,288	210,417	216,729	223,231	229,928
51	23020	Dental Insurance	0	Health	0	0	0	0	0
52	23021	125 Benefit	0	Labor	0	0	0	0	0
53	23030	Life Insurance	3,831	Health	3,953	4,072	4,194	4,320	4,449
54	23035	Disability	3,789	Health	3,913	4,030	4,151	4,276	4,404
55	24000	Workers Compensation	1,602	Labor	1,471	1,545	1,622	1,703	1,788
56	25000	State Unemployment Comp	0	Labor	0	0	0	0	0
57	34000	Other Contractual Svcs	95,575	CPI	106,256	108,806	111,417	114,092	116,830
58	40000	Travel & Per Diem	3,500	CPI	6,000	6,144	6,291	6,442	6,597
59	40040	Employee Training	500	CPI	500	512	524	537	550
60	45001	Property Insurance	8,766	Insurance	8,511	8,766	9,029	9,300	9,579
61	45002	Liability Insurance	9,280	Insurance	9,888	10,185	10,490	10,805	11,129
62	46000	Repair And Maintenance Svcs	0	Repair	0	0	0	0	0
63	47000	Printing & Binding	15,500	WAccounts	14,000	14,234	14,468	14,701	14,924
64	48000	Advertising & Promotion	0	WAccounts	0	0	0	0	0
65	51000	Office Supplies/Equip Und\$750	6,000	M&S	4,500	4,613	4,728	4,846	4,967
66	51010	Postage	158,500	WAccounts	158,800	161,456	164,108	166,746	169,279
67	52000	Operating Supp&Equipunder\$750	12,000	M&S	8,000	8,200	8,405	8,615	8,831
68	54000	Books, Pub, Subscrip, Membersh	250	Marginal	250	253	255	258	260
69	64000	Machinery & Equipment	0	CPI	0	0	0	0	0
70	93000	Interest On Customer Deposits	40,000	Marginal	60,000	60,600	61,206	61,818	62,436
71		TOTAL CUSTOMER SERVICE	1,591,297		1,643,007	1,709,142	1,823,469	1,896,654	1,972,959

Table 4

City of Palm Coast, Florida

Water and Wastewater Utility System

Development of Projected Cost of Operations and Maintenance

Line No.	Billing Code	Description	Adjusted 2018	Escalation Reference	Projected Fiscal Year Ending September 30,				
					2019	2020	2021	2022	2023
54019081		UTILITY CONST. MGT & ENG.							
72	12000	Salaries And Wages	\$0	Labor	\$360,899	\$378,944	\$397,891	\$417,786	\$438,675
73	N/A	Additional Personnel Costs	0	Calculated	0	0	0	0	0
74	12010	Car/Cell Allowance	0	Labor	1,930	2,027	2,128	2,234	2,346
75	14000	Overtime	0	Labor	2,500	2,625	2,756	2,894	3,039
76	21000	Fica Taxes	0	Labor	18,530	19,457	20,429	21,451	22,523
77	21100	Medicare	0	Labor	4,338	4,555	4,783	5,022	5,273
78	22000	Retirement Contributions	0	Labor	33,855	35,548	37,325	39,191	41,151
79	23000	Health Insurance	0	Health	38,912	40,079	41,282	42,520	43,796
80	23020	Dental Insurance	0	Health	0	0	0	0	0
81	23021	125 Benefit	0	Labor	0	0	0	0	0
82	23030	Life Insurance	0	Health	1,286	1,325	1,364	1,405	1,447
83	23035	Disability	0	Health	1,273	1,311	1,351	1,391	1,433
84	24000	Workers Compensation	0	Labor	3,487	3,661	3,844	4,037	4,238
85	34000	Other Contractual Svcs	0	CPI	11,100	11,366	11,639	11,919	12,205
86	40000	Travel & Per Diem	0	Labor	4,435	4,541	4,650	4,762	4,876
87	40040	Employee Training	0	Labor	0	0	0	0	0
88	41000	Communication Services	0	CPI	0	0	0	0	0
89	44000	Rentals/Leases	0	CPI	0	0	0	0	0
90	44100	Fleet Replacement Allocation	0	Repair	0	0	0	0	0
91	45001	Property Insurance	0	Insurance	3,242	3,339	3,439	3,543	3,649
92	45002	Liability Insurance	0	Insurance	3,767	3,880	3,996	4,116	4,240
93	45003	Automobile Insurance	0	Insurance	237	244	251	259	267
94	46000	Repair And Maintenance Svcs	0	Repair	0	0	0	0	0
95	46100	Fleet Maintenance Allocation	0	Repair	1,646	1,695	1,746	1,799	1,853
96	46102	Fleet Comm	0	Repair	0	0	0	0	0
97	51000	Office Supplies/Equip Und\$750	0	M&S	1,910	1,958	2,007	2,057	2,108
98	51010	Postage	0	WAccounts	0	0	0	0	0
99	52000	Operating Supp&Equipunder\$750	0	M&S	2,000	2,050	2,101	2,154	2,208
100	52005	Fuel Charge	0	CPI	2,445	2,504	2,564	2,625	2,688
101	91501	Transfer To Fleet Management	0	CPI	0	0	0	0	0
102	91502	Transfer to Fleet Communication	0	CPI	0	0	0	0	0
103		TOTAL UTILITY CONST. MGT & ENG.	0		497,792	521,109	545,548	571,164	598,014
		WASTEWATER PUMPING							
104	12000	Salaries And Wages	\$341,995	Labor	\$425,912	\$447,208	\$469,568	\$493,046	\$517,699
105	N/A	Additional Personnel Costs	0	Calculated	0	0	0	0	0
106	12010	Car/Cell Allowance	1,110	Labor	1,110	1,166	1,224	1,285	1,349
107	14000	Overtime	35,000	Labor	50,000	52,500	55,125	57,881	60,775
108	21000	Fica Taxes	23,069	Labor	24,797	26,037	27,339	28,706	30,141
109	21100	Medicare	5,399	Labor	5,805	6,095	6,400	6,720	7,056
110	22000	Retirement Contributions	44,513	Labor	47,056	49,409	51,879	54,473	57,197
111	23000	Health Insurance	76,800	Health	77,824	80,159	82,563	85,040	87,592
112	23020	Dental Insurance	0	Health	0	0	0	0	0
113	23021	125 Benefit	0	Labor	0	0	0	0	0
114	23030	Life Insurance	1,671	Health	1,788	1,842	1,897	1,954	2,012
115	23035	Disability	1,651	Health	1,768	1,821	1,876	1,932	1,990
116	24000	Workers Compensation	8,143	Labor	8,646	9,078	9,532	10,009	10,509
117	34000	Other Contractual Svcs	49,500	CPI	54,000	55,296	56,623	57,982	59,374
118	40000	Travel & Per Diem	3,000	Labor	6,000	6,144	6,291	6,442	6,597
119	40040	Employee Training	0	Labor	0	0	0	0	0
120	41000	Communication Services	0	CPI	0	0	0	0	0
121	44000	Rentals/Leases	3,500	CPI	3,500	3,532	3,562	3,610	3,657
122	44100	Fleet Replacement Allocation	52,062	Repair	45,036	46,387	47,779	49,212	50,688
123	45001	Property Insurance	4,569	Insurance	4,679	4,819	4,964	5,113	5,266
124	45002	Liability Insurance	4,837	Insurance	5,436	5,599	5,767	5,940	6,118
125	45003	Automobile Insurance	3,662	Insurance	2,339	2,409	2,481	2,556	2,633
126	46000	Repair And Maintenance Svcs	105,800	Repair	100,000	103,000	106,090	109,273	112,551
127	46100	Fleet Maintenance Allocation	34,387	Repair	27,323	28,143	28,987	29,857	30,752
128	46102	Fleet Comm	5,762	Repair	6,000	6,180	6,365	6,556	6,753
129	51000	Office Supplies/Equip Und\$750	24,750	M&S	0	0	0	0	0
130	51010	Postage	0	WAccounts	0	0	0	0	0
131	52000	Operating Supp&Equipunder\$750	0	M&S	35,000	35,875	36,772	37,691	38,633
132	52005	Fuel Charge	22,000	CPI	25,000	25,600	26,214	26,844	27,488
133	91501	Transfer To Fleet Management	0	CPI	0	0	0	0	0
134	91502	Transfer to Fleet Communication	0	CPI	0	0	0	0	0
135		TOTAL WASTEWATER PUMPING	853,180		959,019	998,298	1,039,299	1,082,122	1,126,831
54019082		WASTEWATER COLLECTION							
136	12000	Salaries And Wages	\$875,105	Labor	\$952,181	\$999,790	\$1,049,780	\$1,102,269	\$1,157,382
137	N/A	Additional Personnel Costs	0	Calculated	0	45,596	46,690	47,811	97,917
138	12002	Comp Used	0	Labor	0	0	0	0	0
139	12010	Car/Cell Allowance	3,260	Labor	3,260	3,423	3,594	3,774	3,963
140	14000	Overtime	55,000	Labor	75,000	78,750	82,688	86,822	91,163
141	21000	Fica Taxes	57,880	Labor	59,364	62,332	65,449	68,721	72,157
142	21100	Medicare	13,545	Labor	13,893	14,588	15,317	16,083	16,887
143	22000	Retirement Contributions	110,923	Labor	112,057	117,660	123,543	129,720	136,206
144	23000	Health Insurance	211,680	Health	194,560	200,397	206,409	212,601	218,979
145	23020	Dental Insurance	0	Health	0	0	0	0	0

Table 4

City of Palm Coast, Florida

Water and Wastewater Utility System

Development of Projected Cost of Operations and Maintenance

Line No.	Billing Code	Description	Adjusted 2018	Escalation Reference	Projected Fiscal Year Ending September 30,				
					2019	2020	2021	2022	2023
146	23021	125 Benefit	0	Labor	0	0	0	0	0
147	23030	Life Insurance	3,913	Health	4,008	4,128	4,252	4,380	4,511
148	23035	Disability	3,872	Health	3,963	4,082	4,204	4,330	4,460
149	24000	Workers Compensation	24,374	Labor	19,305	20,270	21,284	22,348	23,465
150	25000	State Unemployment Comp	0	Labor	0	0	0	0	0
151	34000	Other Contractual Svcs	281,500	CPI	424,000	434,176	444,596	455,267	466,193
152	40000	Travel & Per Diem	9,050	Labor	10,500	10,752	11,010	11,274	11,545
153	40040	Employee Training	0	Labor	0	0	0	0	0
154	43000	Electricity	272,950	Electric-S	282,000	295,643	309,730	324,234	339,313
155	44000	Rentals/Leases	1,000	S-Sales	3,500	3,537	3,579	3,619	3,659
156	44100	Fleet Replacement Allocation	274,060	Repair	280,968	289,397	298,079	307,021	316,232
157	45001	Property Insurance	17,161	Insurance	16,101	16,584	17,082	17,594	18,122
158	45002	Liability Insurance	18,167	Insurance	18,706	19,267	19,845	20,441	21,054
159	45003	Automobile Insurance	12,372	Insurance	10,204	10,510	10,825	11,150	11,485
160	46000	Repair And Maintenance Svcs	92,500	Repair	115,750	119,223	122,799	126,483	130,278
161	46100	Fleet Maintenance Allocation	232,882	Repair	204,812	210,956	217,285	223,804	230,518
162	46102	Fleet Comm	17,286	Repair	18,750	19,313	19,892	20,489	21,103
163	47000	Printing & Binding	3,000	S-Sales	3,500	3,537	3,579	3,619	3,659
164	48000	Advertising & Promotion	0	SAccounts	0	0	0	0	0
165	49000	Other Charges And Obligations	79,304	CPI	94,331	96,595	98,913	101,287	103,718
166	51010	Postage	0	WAccounts	0	0	0	0	0
167	52000	Operating Supp&Equipunder\$750	60,500	CPI	60,500	61,952	63,439	64,961	66,520
168	52005	Fuel Charge	68,000	CPI	84,200	86,221	88,290	90,409	92,579
169	52030	Chemicals	10,200	Chemical-S	18,200	19,081	19,990	20,926	21,899
170	53000	Road Material And Supplies	18,000	M&S	18,000	18,450	18,911	19,384	19,869
171	063000 81001	Impr-Reuse Water Meters	0	SAccounts	0	0	0	0	0
172	91501	Transfer To Fleet Management	0	SAccounts	0	0	0	0	0
173	91502	Transfer to Fleet Communication	0	SAccounts	0	0	0	0	0
174		Hurricane Irma Expenses	1,392,457	CPI	0	0	0	0	0
175	64000	Machinery & Equipment	0	M&S	0	0	0	0	0
176		TOTAL WASTEWATER COLLECTION	4,219,941		3,101,613	3,266,210	3,391,053	3,520,820	3,704,834
54019083		WASTEWATER TREATMENT #1							
177	12000	Salaries And Wages	\$435,387	Labor	\$501,794	\$526,884	\$553,228	\$580,889	\$609,934
178	N/A	Additional Personnel Costs	0	Calculated	0	0	0	0	0
179	12010	Car/Cell Allowance	1,240	Labor	1,240	1,302	1,367	1,435	1,507
180	14000	Overtime	60,000	Labor	65,000	68,250	71,663	75,246	79,008
181	21000	Fica Taxes	30,488	Labor	29,510	30,986	32,535	34,162	35,870
182	21100	Medicare	7,138	Labor	6,906	7,251	7,614	7,995	8,394
183	22000	Retirement Contributions	58,852	Labor	56,284	59,098	62,053	65,156	68,414
184	23000	Health Insurance	90,720	Health	87,552	90,179	92,884	95,670	98,541
185	23020	Dental Insurance	0	Health	0	0	0	0	0
186	23021	125 Benefit	0	Labor	0	0	0	0	0
187	23030	Life Insurance	1,959	Health	1,845	1,900	1,957	2,016	2,077
188	23035	Disability	1,940	Health	1,824	1,879	1,935	1,993	2,053
189	24000	Workers Compensation	12,204	Labor	8,869	9,312	9,778	10,267	10,780
190	25000	State Unemployment Comp	0	Labor	0	0	0	0	0
191	34000	Other Contractual Svcs	301,996	CPI	369,900	378,778	387,868	397,177	406,709
192	40000	Travel & Per Diem	8,000	Labor	11,600	12,180	12,789	13,428	14,100
193	43000	Electricity	480,950	Electric-S	484,000	507,416	531,593	556,487	582,366
194	44000	Rentals/Leases	1,000	S-Sales	2,500	2,527	2,556	2,585	2,613
195	44100	Fleet Replacement Allocation	25,948	Repair	27,300	28,119	28,963	29,831	30,726
196	45001	Property Insurance	11,404	Insurance	10,906	11,233	11,570	11,917	12,275
197	45002	Liability Insurance	12,072	Insurance	12,671	13,051	13,443	13,846	14,261
198	45003	Automobile Insurance	918	Insurance	715	736	759	781	805
199	46000	Repair And Maintenance Svcs	120,050	Repair	134,454	138,488	142,642	146,922	151,329
200	46100	Fleet Maintenance Allocation	15,234	Repair	12,955	13,344	13,744	14,156	14,581
201	46102	Fleet Comm	7,408	Repair	4,500	4,635	4,774	4,917	5,065
202	49000	Other Charges And Obligations	79,162	CPI	80,745	82,683	84,667	86,699	88,780
203	51000	Office Supplies/Equip Und\$750	0	Repair	0	0	0	0	0
204	51010	Books Subscriptions	300	SAccounts	500	509	519	528	537
205	52000	Operating Supp&Equipunder\$750	54,350	CPI	58,350	59,750	61,184	62,653	64,157
206	52005	Fuel Charge	15,000	CPI	12,000	12,288	12,583	12,885	13,194
207	52030	Chemicals	109,122	Chemical-S	137,778	144,444	151,326	158,413	165,779
208	54000	Transfer To Fleet Management	0	Labor	0	0	0	0	0
209	64000	Machinery & Equipment	0	M&S	0	0	0	0	0
210		TOTAL WASTEWATER TREATMENT #1	1,942,842		2,121,698	2,207,222	2,295,994	2,388,055	2,483,855

Table 4

City of Palm Coast, Florida

Water and Wastewater Utility System

Development of Projected Cost of Operations and Maintenance

Line No.	Billing Code	Description	Adjusted 2018	Escalation Reference	Projected Fiscal Year Ending September 30,				
					2019	2020	2021	2022	2023
54019084 WASTEWATER TREATMENT #2									
211	12000	Salaries And Wages	\$134,902	Labor	\$355,103	\$372,858	\$391,501	\$411,076	\$431,630
212	N/A	Additional Personnel Costs	0	Calculated	0	0	0	0	0
213	14000	Overtime	20,000	Labor	30,000	31,500	33,075	34,729	36,465
214	21000	Fica Taxes	8,456	Labor	20,308	21,323	22,390	23,509	24,685
215	21100	Medicare	1,980	Labor	4,753	4,991	5,240	5,502	5,777
216	22000	Retirement Contributions	16,277	Labor	38,652	40,585	42,614	44,745	46,982
217	23000	Health Insurance	27,360	Labor	58,368	61,286	64,351	67,568	70,947
218	23030	Life Insurance	589	Health	1,332	1,372	1,413	1,456	1,499
219	23035	Disability	582	Health	1,318	1,358	1,398	1,440	1,483
220	24000	Workers Compensation	2,868	Labor	6,413	6,734	7,070	7,424	7,795
221	34000	Other Contractual Svcs	69,500	Labor	142,500	149,625	157,106	164,962	173,210
222	40000	Travel & Per Diem	2,500	CPI	5,000	5,120	5,243	5,369	5,498
223	43000	Electricity	86,040	Electric-S	320,000	335,482	351,466	367,925	385,035
224	44000	Rentals/Leases	1,000	S-Sales	3,000	3,032	3,067	3,102	3,136
225	45001	Property Insurance	409	Insurance	2,727	2,809	2,893	2,980	3,069
226	45002	Liability Insurance	433	Insurance	3,168	3,263	3,361	3,462	3,566
227	46000	Repair And Maintenance Svcs	6,500	Repair	30,500	31,415	32,357	33,328	34,328
228	49000	Other Charges And Obligations	18,360	CPI	67,696	69,321	70,984	72,688	74,433
229	51000	Office Supplies/Equip Und\$750	500	M&S	500	513	525	538	552
230	52000	Operating Supp&Equipunder\$750	30,000	CPI	40,000	40,960	41,943	42,950	43,980
231	52005	Fuel Charge	25,000	CPI	3,000	3,072	3,146	3,221	3,299
232	52030	Chemicals	129,961	Chemical-S	209,700	219,845	230,320	241,106	252,319
233	54000	Books, Pub, Subscrip, Membersh	250	Labor	500	525	551	579	608
234	64000	Machinery & Equipment	6,500	M&S	27,025	27,701	28,393	29,103	29,831
235	91501	Transfer To Fleet Management	0	S-Sales	0	0	0	0	0
236	91502	Transfer To Fleet Communication	0	S-Sales	0	0	0	0	0
237		TOTAL WASTEWATER TREATMENT #2	589,967		1,371,563	1,434,688	1,500,410	1,568,761	1,640,125
54019086 WATER PLANT #1									
238	12000	Salaries And Wages	\$499,641	Labor	\$535,708	\$562,493	\$590,618	\$620,149	\$651,156
239	N/A	Additional Personnel Costs	0	Calculated	0	0	0	0	0
240	12010	Car/Cell Allowance	720	Labor	720	756	794	833	875
241	14000	Overtime	19,000	Labor	19,000	19,950	20,948	21,995	23,095
242	21000	Fica Taxes	32,208	Labor	34,442	36,164	37,972	39,871	41,864
243	21100	Medicare	7,539	Labor	8,060	8,463	8,886	9,330	9,797
244	22000	Retirement Contributions	62,242	Labor	65,707	68,992	72,442	76,064	79,867
245	23000	Health Insurance	100,800	Health	102,015	105,075	108,228	111,475	114,819
246	23020	Dental Insurance	0	Health	0	0	0	0	0
247	23021	125 Benefit	0	Labor	0	0	0	0	0
248	23030	Life Insurance	2,250	Health	2,411	2,483	2,558	2,635	2,714
249	23035	Disability	2,226	Health	2,384	2,456	2,529	2,605	2,683
250	24000	Workers Compensation	17,818	Labor	14,763	15,501	16,276	17,090	17,945
251	25000	State Unemployment Comp	0	Labor	0	0	0	0	0
252	34000	Other Contractual Svcs	489,430	CPI	650,405	666,015	681,999	698,367	715,128
253	40000	Travel & Per Diem	1,000	Labor	3,000	3,072	3,146	3,221	3,299
254	40040	Employee Training	0	Labor	0	0	0	0	0
255	43000	Electricity	257,600	Electric-W	257,600	267,405	278,889	290,770	303,023
256	44000	Rentals/Leases	2,150	W-Sales	2,200	2,220	2,239	2,269	2,299
257	44100	Fleet Replacement Allocation	11,467	Repair	11,467	11,811	12,165	12,530	12,906
258	45001	Property Insurance	11,478	Insurance	11,827	12,182	12,547	12,924	13,311
259	45002	Liability Insurance	12,151	Insurance	13,741	14,153	14,578	15,015	15,466
260	45003	Automobile Insurance	1,625	Insurance	1,263	1,301	1,340	1,380	1,422
261	46000	Repair And Maintenance Svcs	77,000	Repair	80,000	82,400	84,872	87,418	90,041
262	46100	Fleet Maintenance Allocation	9,969	Repair	8,563	8,820	9,084	9,357	9,638
263	46102	Fleet Comm	8,231	Repair	6,000	6,180	6,365	6,556	6,753
264	49000	Other Charges And Obligations	42,722	CPI	58,780	60,191	61,635	63,115	64,629
265	51000	Office Supplies/Equip Und\$750	1,000	M&S	1,000	1,025	1,051	1,077	1,104
266	52000	Operating Supp&Equipunder\$750	52,950	CPI	52,950	54,221	55,522	56,855	58,219
267	52005	Fuel Charge	7,000	CPI	7,000	7,168	7,340	7,516	7,697
268	52030	Chemicals	531,000	Chemical-S	531,000	556,690	583,215	610,526	638,918
269	54000	Books, Pub, Subscrip, Membersh	1,600	Labor	1,600	1,638	1,678	1,718	1,759
270		TOTAL WATER PLANT #1	2,262,817		2,483,606	2,578,826	2,678,916	2,782,662	2,890,425

Table 4

City of Palm Coast, Florida

Water and Wastewater Utility System

Development of Projected Cost of Operations and Maintenance

Line No.	Billing Code	Description	Adjusted 2018	Escalation Reference	Projected Fiscal Year Ending September 30,				
					2019	2020	2021	2022	2023
54019087		WATER PLANT #2							
271	12000	Salaries And Wages	\$547,602	Labor	\$346,259	\$363,572	\$381,751	\$400,838	\$420,880
272	N/A	Additional Personnel Costs	0	Calculated	0	0	0	0	0
273	12010	Car/Cell Allowance	1,240	Labor	1,240	1,302	1,367	1,435	1,507
274	14000	Overtime	20,000	Labor	20,000	21,000	22,050	23,153	24,310
275	21000	Fica Taxes	34,723	Labor	35,434	37,206	39,066	41,019	43,070
276	21100	Medicare	8,126	Labor	8,293	8,708	9,143	9,600	10,080
277	22000	Retirement Contributions	63,645	Labor	67,531	70,908	74,453	78,176	82,084
278	23000	Health Insurance	96,000	Health	102,015	105,075	108,228	111,475	114,819
279	23020	Dental Insurance	0	Health	0	0	0	0	0
280	23021	125 Benefit	0	Labor	0	0	0	0	0
281	23030	Life Insurance	2,298	Health	2,472	2,546	2,623	2,701	2,782
282	23035	Disability	2,273	Health	2,449	2,522	2,598	2,676	2,756
283	24000	Workers Compensation	15,047	Labor	15,159	15,917	16,713	17,548	18,426
284	34000	Other Contractual Svcs	213,100	CPI	238,220	243,937	249,792	255,787	261,926
285	40000	Travel & Per Diem	3,000	Labor	3,000	3,072	3,146	3,221	3,299
286	43000	Electricity	233,000	Electric-W	252,350	261,956	273,206	284,844	296,847
287	44000	Rentals/Leases	13,250	W-Sales	13,250	13,370	13,483	13,667	13,845
288	44100	Fleet Replacement Allocation	29,667	Repair	25,337	26,097	26,880	27,686	28,517
289	45001	Property Insurance	9,546	Insurance	10,354	10,665	10,985	11,314	11,654
290	45002	Liability Insurance	10,106	Insurance	12,028	12,389	12,761	13,143	13,538
291	45003	Automobile Insurance	612	Insurance	240	247	255	262	270
292	46000	Repair And Maintenance Svcs	47,300	Repair	47,300	48,719	50,181	51,686	53,237
293	46100	Fleet Maintenance Allocation	7,454	Repair	10,504	10,819	11,144	11,478	11,822
294	46102	Fleet Comm	9,055	Repair	5,250	5,408	5,570	5,737	5,909
295	49000	Other Charges And Obligations	45,232	Repair	61,307	63,146	65,041	66,992	69,002
296	51000	Office Supplies/Equip Und\$750	1,600	Repair	1,600	1,648	1,697	1,748	1,801
297	51010	Postage	600	WAccounts	600	610	620	630	640
298	52000	Operating Supp&Equipunder\$750	57,000	M&S	59,600	61,090	62,617	64,183	65,787
299	52005	Fuel Charge	6,300	CPI	6,300	6,451	6,606	6,765	6,927
300	52030	Chemicals	462,000	Chemical-W	415,000	430,797	449,298	468,438	488,177
301	54000	Books, Pub, Subscrip, Membersh	2,000	Labor	2,000	2,048	2,097	2,147	2,199
302	91501	Transfer To Fleet Management	0	Labor	0	0	0	0	0
303		TOTAL WATER PLANT #2	1,941,776		1,765,092	1,831,225	1,903,367	1,978,351	2,056,110
54019085		WATER PLANT #3							
304	12000	Salaries And Wages	393,613	Labor	427,484	448,858	471,301	494,866	519,609
305	N/A	Additional Personnel Costs	0	Calculated	0	0	0	0	0
306	12002	Comp Used	0	Labor	0	0	0	0	0
307	12010	Car/Cell Allowance	720	Labor	720	756	794	833	875
308	14000	Overtime	10,500	Labor	10,500	11,025	11,576	12,155	12,763
309	21000	Fica Taxes	24,681	Labor	30,248	31,760	33,348	35,016	36,767
310	21100	Medicare	5,777	Labor	7,079	7,433	7,805	8,195	8,605
311	22000	Retirement Contributions	47,679	Labor	57,766	60,654	63,687	66,871	70,215
312	23000	Health Insurance	76,800	Health	77,824	80,159	82,563	85,040	87,592
313	23020	Dental Insurance	0	Health	0	0	0	0	0
314	23021	125 Benefit	0	Labor	0	0	0	0	0
315	23030	Life Insurance	1,743	Health	2,148	2,212	2,279	2,347	2,418
316	23035	Disability	1,722	Health	2,125	2,189	2,254	2,322	2,392
317	24000	Workers Compensation	10,804	Labor	13,153	13,811	14,501	15,226	15,988
318	25000	State Unemployment Comp	0	Labor	0	0	0	0	0
319	34000	Other Contractual Svcs	72,150	CPI	87,400	89,498	91,646	93,845	96,097
320	40000	Travel & Per Diem	2,000	Labor	2,000	2,048	2,097	2,147	2,199
321	43000	Electricity	340,500	Electric-W	355,000	368,513	384,339	400,712	417,597
322	44000	Rentals/Leases	5,000	W-Sales	6,500	6,559	6,614	6,705	6,792
323	44100	Fleet Replacement Allocation	3,643	Repair	7,286	7,505	7,730	7,962	8,200
324	45001	Property Insurance	7,132	Insurance	7,295	7,514	7,739	7,971	8,211
325	45002	Liability Insurance	7,550	Insurance	8,476	8,730	8,992	9,262	9,540
326	45003	Automobile Insurance	679	Insurance	527	543	559	576	593
327	46000	Repair And Maintenance Svcs	48,000	Repair	50,100	51,603	53,151	54,746	56,388
328	46100	Fleet Maintenance Allocation	6,201	Repair	5,327	5,487	5,651	5,821	5,996
329	46102	Fleet Comm	5,762	Repair	3,750	3,863	3,978	4,098	4,221
330	49000	Other Charges And Obligations	72,054	Repair	88,029	90,670	93,390	96,192	99,077
331	51000	Office Supplies/Equip Und\$750	1,200	M&S	1,200	1,230	1,261	1,292	1,325
332	52000	Operating Supp&Equipunder\$750	56,500	CPI	56,000	57,344	58,720	60,130	61,573
333	52005	Fuel Charge	2,500	CPI	2,500	2,560	2,621	2,684	2,749
334	52030	Chemicals	132,000	Chemical-W	130,000	134,948	140,744	146,740	152,923
335	54000	Books, Pub, Subscrip, Membersh	1,500	Labor	1,500	1,536	1,573	1,611	1,649
336	64000	Machinery & Equipment	0	M&S	0	0	0	0	0
337	91501	Transfer To Fleet Management	0	W-Sales	0	0	0	0	0
338		TOTAL WATER PLANT #3	1,338,410		1,441,937	1,499,007	1,560,916	1,625,365	1,692,351

Table 4

City of Palm Coast, Florida

Water and Wastewater Utility System

Development of Projected Cost of Operations and Maintenance

Line No.	Billing Code	Description	Adjusted 2018	Escalation Reference	Projected Fiscal Year Ending September 30,				
					2019	2020	2021	2022	2023
54019088		WATER QUALITY							
339	12000	Salaries And Wages	\$276,764	Labor	\$591,218	\$620,779	\$651,818	\$684,409	\$718,629
340	N/A	Additional Personnel Costs	0	Calculated	0	0	0	0	0
341	12001	Comp Earned	0	Labor	0	0	0	0	0
342	12002	Comp Used	0	Labor	0	0	0	0	0
343	12010	Car/Cell Allowance	1,630	Labor	1,630	1,712	1,797	1,887	1,981
344	14000	Overtime	6,000	Labor	9,000	9,450	9,923	10,419	10,940
345	21000	Fica Taxes	17,636	Labor	19,489	20,463	21,487	22,561	23,689
346	21100	Medicare	4,126	Labor	4,560	4,788	5,027	5,279	5,543
347	22000	Retirement Contributions	33,935	Labor	36,870	38,714	40,649	42,682	44,816
348	23000	Health Insurance	50,400	Health	48,640	50,099	51,602	53,150	54,745
349	23020	Dental Insurance	0	Health	0	0	0	0	0
350	23021	125 Benefit	0	Labor	0	0	0	0	0
351	23030	Life Insurance	1,244	Health	1,265	1,303	1,342	1,382	1,424
352	23035	Disability	1,232	Health	1,250	1,288	1,326	1,366	1,407
353	24000	Workers Compensation	9,869	Labor	7,743	8,130	8,537	8,963	9,412
354	34000	Other Contractual Svcs	33,000	CPI	33,000	33,792	34,603	35,433	36,284
355	40000	Travel & Per Diem	2,000	Labor	2,000	2,048	2,097	2,147	2,199
356	40040	Employee Training	0	Labor	0	0	0	0	0
357	44000	Rentals/Leases	0	W-Sales	0	0	0	0	0
358	44100	Fleet Replacement Allocation	12,370	Repair	11,649	11,998	12,358	12,729	13,111
359	45001	Property Insurance	2,860	Insurance	2,800	2,884	2,971	3,060	3,151
360	45002	Liability Insurance	3,028	Insurance	3,253	3,351	3,451	3,555	3,661
361	45003	Automobile Insurance	1,587	Insurance	1,235	1,272	1,310	1,350	1,390
362	46000	Repair And Maintenance Svcs	7,000	Repair	7,000	7,210	7,426	7,649	7,879
363	46100	Fleet Maintenance Allocation	10,385	Repair	8,921	9,189	9,464	9,748	10,041
364	46102	Fleet Comm	4,116	Repair	4,500	4,635	4,774	4,917	5,065
365	47000	Printing & Binding	1,000	W-Sales	1,000	1,009	1,018	1,031	1,045
366	51000	Office Supplies/Equip Und\$750	500	M&S	500	513	525	538	552
367	52000	Operating Supp&Equip under\$750	7,000	M&S	7,800	7,995	8,195	8,400	8,610
368	52005	Fuel Charge	9,000	CPI	9,000	9,216	9,437	9,664	9,896
369	54000	Books, Pub, Subscrip, Membersh	7,200	Labor	7,200	7,560	7,938	8,335	8,752
370	91501	Transfer To Fleet Management	0	CPI	35,175	36,019	36,884	37,769	38,675
371	91502	Transfer To Fleet Communication	0	CPI	0	0	0	0	0
372		TOTAL WATER QUALITY	503,882		856,698	895,416	935,959	978,423	1,022,894
54019090		WATER DISTRIBUTION							
373	12000	Salaries And Wages	\$1,204,167	Labor	\$1,373,245	\$1,441,907	\$1,514,003	\$1,589,703	\$1,669,188
374	N/A	Additional Personnel Costs	0	Calculated	0	45,596	46,690	47,811	49,917
375	12001	Comp Earned	0	Labor	0	0	0	0	0
376	12002	Comp Used	0	Labor	0	0	0	0	0
377	12010	Car/Cell Allowance	2,480	Labor	3,400	3,570	3,749	3,936	4,133
378	14000	Overtime	90,000	Labor	100,000	105,000	110,250	115,763	121,551
379	21000	Fica Taxes	79,096	Labor	88,047	92,449	97,072	101,925	107,022
380	21100	Medicare	18,508	Labor	20,606	21,636	22,718	23,854	25,047
381	22000	Retirement Contributions	152,781	Labor	163,472	171,646	180,228	189,239	198,701
382	23000	Health Insurance	259,200	Health	326,811	336,615	346,714	357,115	367,829
383	23020	Dental Insurance	0	Health	0	0	0	0	0
384	23021	125 Benefit	0	Labor	0	0	0	0	0
385	23030	Life Insurance	5,728	Health	6,208	6,394	6,586	6,784	6,987
386	23035	Disability	5,667	Health	6,144	6,328	6,518	6,714	6,915
387	24000	Workers Compensation	35,559	Labor	38,062	38,975	39,911	40,869	41,850
388	25000	State Unemployment Comp	0	Labor	0	0	0	0	0
389	34000	Other Contractual Svcs	296,000	W-Cont Ops	393,814	366,836	375,640	384,656	393,887
390	40000	Travel & Per Diem	7,600	CPI	7,955	8,146	8,341	8,542	8,747
391	43000	Electricity	825	CPI	825	845	865	886	907
392	44000	Rentals/Leases	1,500	W-Sales	1,500	1,514	1,526	1,547	1,567
393	44100	Fleet Replacement Allocation	164,990	Repair	180,300	185,709	191,280	197,019	202,929
394	45001	Property Insurance	19,093	Insurance	19,233	19,810	20,404	21,016	21,647
395	45002	Liability Insurance	20,212	Insurance	22,345	23,015	23,706	24,417	25,149
396	45003	Automobile Insurance	10,948	Insurance	8,737	8,999	9,269	9,547	9,834
397	46000	Repair And Maintenance Svcs	107,400	Repair	118,000	121,540	125,186	128,942	132,810
398	46100	Fleet Maintenance Allocation	145,518	Repair	124,754	128,497	132,352	136,322	140,412
399	46102	Fleet Comm	20,579	Repair	24,000	24,720	25,462	26,225	27,012
400	47000	Printing & Binding	1,000	CPI	1,000	1,009	1,018	1,031	1,045
401	49000	Other Charges And Obligations	0	CPI	0	0	0	0	0
402	51000	Office Supplies/Equip Und\$750	2,500	M&S	2,500	2,563	2,627	2,692	2,760
403	51010	Postage	1,000	WAccounts	1,000	1,017	1,033	1,050	1,066
404	52000	Operating Supp&Equip under\$750	175,000	M&S	180,000	184,500	189,113	193,840	198,686
405	52005	Fuel Charge	65,000	CPI	70,000	71,680	73,400	75,162	76,966
406	54000	Books, Pub, Subscrip, Membersh	5,800	CPI	6,000	6,144	6,291	6,442	6,597
407	91501	Transfer To Fleet Management	0	CPI	0	0	0	0	0
408	91502	Transfer To Fleet Communication	0	CPI	0	0	0	0	0
409	063000 81001	Water Meter Installs	0	WAccounts	0	0	0	0	0
410	64000	Machinery & Equipment	0	M&S	0	0	0	0	0
411		TOTAL WATER DISTRIBUTION	2,898,151		3,287,958	3,426,661	3,561,952	3,703,049	3,899,159

Table 4

City of Palm Coast, Florida

Water and Wastewater Utility System

Development of Projected Cost of Operations and Maintenance

Line No.	Billing Code	Description	Adjusted 2018	Escalation Reference	Projected Fiscal Year Ending September 30,				
					2019	2020	2021	2022	2023
	54019099	UTILITY NONDEPARTMENTAL							
412		Bad Debt Expense	\$93,298	Calculated	\$94,025	\$94,550	\$95,989	\$97,408	\$98,791
413	23005	Annual Opeb Cost	0	Labor	0	0	0	0	0
414	34000	Other Contrabutions	364,800	CPI	364,800	373,555	382,521	391,701	401,102
415	32000	Accounting And Auditing	0	CPI	0	0	0	0	0
416	41100	It&C Allocation	597,657	CPI	550,062	563,263	576,782	590,625	604,800
417	49000	Other Charges And Obligations	1,959,129	CPI	1,716,721	1,757,922	1,800,112	1,843,315	1,887,555
418	59000	Depreciation	0	Constant	0	0	0	0	0
419	59001	Depreciation Exp Buildings	0	Constant	0	0	0	0	0
420	59002	Depreciation Exp-Mach And Equi	0	Constant	0	0	0	0	0
421	59003	Depreciation Exp- Improthbuildi	0	Constant	0	0	0	0	0
422	59004	Depreciation Exp- Infrastructur	0	Constant	0	0	0	0	0
423	59999	Fema Reimbursement	0	Constant	0	0	0	0	0
424	61000	Land	0	Constant	0	0	0	0	0
425	64000	Machinery & Equipment	0	M&S	0	0	0	0	0
426	64998	Capital Proj Fund Transfr	0	Calculated	0	0	0	0	0
427	64999	Contra - Machinery & Equipment	0	M&S	0	0	0	0	0
428	71000	Principal	0	Calculated	0	0	0	0	0
429	72000	Interest	0	Calculated	0	0	0	0	0
430	73000	Other Debt Service Costs	2,500	Calculated	2,500	2,500	2,500	2,500	2,500
431	73050	Bond Costs	0	Calculated	0	0	0	0	0
432	82008	Flagler Area Alliance	10,000	Constant	10,000	10,000	10,000	10,000	10,000
433	91001	Transfer To General Fund	0	Calculated	0	0	0	0	0
434	91402	Transfer To Utility Cap	0	Calculated	0	0	0	0	0
435	92001	In-Lieu-Of-Tax Trnsf To Gnl Fd	0	Calculated	0	0	0	0	0
		CIP Reclassification to OpEx - Water	125,998	Calculated	15,000	45,000	165,000	115,000	115,000
		CIP Reclassification to OpEx - Wastewater	0	Calculated	0	0	0	0	0
436	99091	Operating Contingency	440,276	Calculated	452,853	471,161	490,154	508,979	530,519
437		TOTAL UTILITY NONDEPARTMENTAL	3,593,658		3,205,960	3,317,952	3,523,058	3,559,528	3,650,266
438		Total Cost of Operations and Maintenance	\$22,580,070		\$23,608,280	\$24,595,323	\$25,708,416	\$26,644,089	\$27,769,460

Table 5
City of Palm Coast, Florida

Water and Wastewater Utility System

Escalation Factors

Line No.	Escalation Factors	Escalation Reference	Fiscal Year Ending September 30,				
			2019	2020	2021	2022	2023
1	Constant Factor	Constant	1.0000	1.0000	1.0000	1.0000	1.0000
2	Inflation (CPI)	CPI	1.0230	1.0240	1.0240	1.0240	1.0240
3	Health / Insurance	Health	1.0300	1.0300	1.0300	1.0300	1.0300
4	Insurance Property	Insurance	1.0300	1.0300	1.0300	1.0300	1.0300
5	Water Flow Growth	W-Sales	1.0222	1.0091	1.0084	1.0137	1.0130
6	Wastewater Flow Growth	S-Sales	1.0009	1.0107	1.0116	1.0112	1.0110
7	Water Meter Equivalent Growth	WERC	1.0164	1.0164	1.0158	1.0152	1.0145
8	Wastewater Meter Equivalent Growth	SERC	1.0190	1.0184	1.0176	1.0168	1.0165
9	Water Customer Growth (Accounts)	WAccounts	1.0172	1.0167	1.0164	1.0161	1.0152
10	Wastewater Customer Growth (Accounts)	SAccounts	1.0193	1.0190	1.0184	1.0174	1.0170
11	Water Customer Growth + CPI	Wgro+Cpi	1.0402	1.0407	1.0404	1.0401	1.0392
12	Wastewater Customer Growth + CPI	Sgro+Cpi	1.0423	1.0430	1.0424	1.0414	1.0410
13	Electric - Base Line	Electric-Base	1.0300	1.0300	1.0300	1.0300	1.0300
14	Electric - Water	Electric-W	1.0426	1.0381	1.0429	1.0426	1.0421
15	Electric - Sewer	Electric-S	1.0490	1.0484	1.0476	1.0468	1.0465
16	Chemical - Water	Chemical-W	1.0426	1.0381	1.0429	1.0426	1.0421
17	Chemical - Sewer	Chemical-S	1.0490	1.0484	1.0476	1.0468	1.0465
18	Labor	Labor	1.0500	1.0500	1.0500	1.0500	1.0500
19	Water Rate Revenue Growth	WRevenue	1.0020	0.9977	1.0138	1.0135	1.0129
20	Sewer Rate Revenue Growth	SRevenue	1.0165	1.0172	1.0172	1.0167	1.0160
21	Repairs and Maintenance	Repair	1.0300	1.0300	1.0300	1.0300	1.0300
22	Water Distribution Contract Operations	W-Cont Ops	1.0000	0.9315	1.0240	1.0240	1.0240
23	Indirect Cost	Indirect	1.0500	1.0500	1.0500	1.0500	1.0500
24	Marginal Adjustment	Marginal	1.0100	1.0100	1.0100	1.0100	1.0100
25	Materials and Supplies	M&S	1.0250	1.0250	1.0250	1.0250	1.0250
26	Calculated	Calculated	1.0000	1.0000	1.0000	1.0000	1.0000

Table 6

City of Palm Coast, Florida
Water and Wastewater Utility System

Line No.	Description	Fiscal Year Ending September 30,					
		2018	2019	2020	2021	2022	2023
Cost of Operation and Maintenance							
1	Utility Administration	\$844,149	\$872,337	\$909,568	\$948,477	\$989,135	\$1,031,637
2	Customer Service	1,591,297	1,643,007	1,709,142	1,823,469	1,896,654	1,972,959
3	Utility Construction Mgt & Engineering	0	497,792	521,109	545,548	571,164	598,014
4	Utility Maintenance	853,180	959,019	998,298	1,039,299	1,082,122	1,126,831
5	Wastewater Collection	4,219,941	3,101,613	3,266,210	3,391,053	3,520,820	3,704,834
6	Wastewater Treatment	2,532,809	3,493,261	3,641,910	3,796,404	3,956,816	4,123,979
7	Water Plant #1	2,262,817	2,483,606	2,578,826	2,678,916	2,782,662	2,890,425
8	Water Plant #2	1,941,776	1,765,092	1,831,225	1,903,367	1,978,351	2,056,110
9	Water Plant #3	1,338,410	1,441,937	1,499,007	1,560,916	1,625,365	1,692,351
10	Water Quality	503,882	856,698	895,416	935,959	978,423	1,022,894
11	Water Distribution	2,898,151	3,287,958	3,426,661	3,561,952	3,703,049	3,899,159
12	Other	3,593,658	3,205,960	3,317,952	3,523,058	3,559,528	3,650,266
13	Total Cost of Operations and Maintenance	22,580,070	23,608,280	24,595,323	25,708,416	26,644,089	27,769,460
Other Revenue Requirements							
Debt Service Requirement							
Senior Lien Bonds							
Existing							
14	Series 2013 Revenue Refunding Bonds	6,796,250	6,798,250	6,797,250	6,798,000	6,805,000	6,802,500
15	Series 2017 Revenue Refunding Bonds	2,518,514	2,518,306	2,521,130	2,521,887	2,519,603	2,518,327
Proposed							
16	New Debt 1	0	0	746,521	746,522	746,521	746,522
17	New Debt 2	0	0	0	0	0	0
18	New Debt 3	0	0	0	0	720,737	720,736
Subordinate Lien Debt							
Existing							
19	CenterState Note, Series 2017	1,875,183	1,875,100	1,876,169	1,875,191	1,874,520	1,875,539
20	SRF WWTP #2 WW180420	759,472	1,657,030	1,657,030	1,657,030	1,657,030	1,657,030
Proposed							
21	New Debt 1	0	0	0	0	0	0
22	New Debt 2	0	0	0	0	0	0
23	New Debt 3	0	0	0	0	0	0
24	Total Debt Service Requirement	11,949,419	12,848,686	13,598,100	13,598,630	14,323,411	14,320,654
25	Less Capacity Fees Used to Pay Debt Service	0	0	0	0	0	0
26	Adjusted Debt Service Requirement	11,949,419	12,848,686	13,598,100	13,598,630	14,323,411	14,320,654
Less Other Required Transfers							
27	General Fund Transfer	0	0	0	0	0	0
28	Transfer to R&R Fund	3,818,816	4,381,556	5,290,990	5,609,957	5,814,513	7,231,248
29	Capital Funded from Rates	0	0	0	0	0	0
30	P.I.L.O.T	746,385	797,330	849,891	883,255	917,569	953,498
31	Fleet Transfer	0	0	0	0	0	0
32	Transfer to Rate Stabilization Fund	0	0	0	0	0	0
33	Reimbursement Hydrants	0	0	0	0	0	0
34	Operating Reserves - Deposits To / (From)	0	0	0	0	0	0
36	Total Other Required Transfers	4,565,201	5,178,886	6,140,881	6,493,212	6,732,082	8,184,746
37	Gross Revenue Requirements	\$ 39,094,691	\$ 41,635,852	\$ 44,334,304	\$ 45,800,259	\$ 47,699,582	\$ 50,274,861
Less Income From Funds and Other Sources:							
38	Miscellaneous Revenues (2)	1,333,199	1,333,199	1,333,199	1,333,199	1,333,199	1,333,199
39	Connection Fees (3)	820,059	814,628	815,714	805,939	777,698	774,440
40	Transfer From Operating Reserves	0	0	0	0	0	300,000
41	Transfers From Rate Stabilization Fund	0	0	0	0	0	0
42	Interest Income (4)	359,796	313,589	236,213	214,199	218,964	243,468
43	Total Other Revenues	2,513,054	2,461,416	2,385,126	2,353,337	2,329,861	2,651,107
44	Net Revenue Requirements	\$ 36,581,637	\$ 39,174,437	\$ 41,949,178	\$ 43,446,922	\$ 45,369,721	\$ 47,623,753
45	Revenue From Existing and Approved Rate Revenue	\$ 37,319,270	\$ 37,609,906	\$ 37,819,980	\$ 38,395,496	\$ 38,963,385	\$ 39,516,529
Revenue Surplus/(Deficiency) Under Existing Rates:							
46	Amount	\$ 737,634	\$ (1,564,531)	\$ (4,129,197)	\$ (5,051,426)	\$ (6,406,335)	\$ (8,107,224)
47	Percent of Rate Revenue	1.98%	(4.16%)	(10.92%)	(13.16%)	(16.44%)	(20.52%)
Water Rate Adjustments							
48	Indexing Rate Adjustment	0.00%	2.90%	2.40%	2.40%	2.40%	2.40%
49	Additional Rate Increase Required	0.00%	3.10%	3.60%	0.00%	0.00%	0.00%
50	Projected Rate Adjustment	0.00%	6.00%	6.00%	2.40%	2.40%	2.40%
51	Months Rate Increase in Effect	12.00	12.00	12.00	12.00	12.00	12.00
Wastewater Rate Adjustments							
52	Indexing Rate Adjustment	0.00%	2.90%	2.40%	2.40%	2.40%	2.40%
53	Additional Rate Increase Required	0.00%	3.10%	3.60%	0.00%	0.00%	0.00%
54	Projected Rate Adjustment	0.00%	6.00%	6.00%	2.40%	2.40%	2.40%
55	Months Rate Increase in Effect	12.00	12.00	12.00	12.00	12.00	12.00
56	Current Year Rate Adjustments	-	2,256,594	2,405,351	1,021,576	1,048,478	1,117,381
57	Cumulative Prior Year Rate Adjustments	-	-	2,269,200	4,745,700	5,866,600	7,041,000
58	Adjusted Rate Revenue	\$ -	\$ 2,256,594	\$ 4,674,551	\$ 5,767,276	\$ 6,915,078	\$ 8,158,381
59	Total Adjusted Rate Revenue	\$ 37,319,270	\$ 39,866,500	\$ 42,494,531	\$ 44,162,773	\$ 45,878,463	\$ 47,674,909
60	Revenue Surplus / (Deficiency) After Adjustments	\$ 737,634	\$ 692,064	\$ 545,353	\$ 715,850	\$ 508,743	\$ 51,156
61	As Percent of Existing Revenue	1.98%	1.74%	1.28%	1.62%	1.11%	0.11%

City of Palm Coast, Florida

Water and Wastewater Utility System

Summary of Projected Operating Results

Line No.	Description	Fiscal Year Ending September 30,					
		2018	2019	2020	2021	2022	2023
Gross Revenues:							
Utility System Sales Revenues							
1	Water System Sales Revenues [1]	\$22,321,944	\$22,365,708	\$22,314,004	\$22,622,585	\$22,927,458	\$23,223,970
2	Wastewater System Sales Revenues [1]	14,997,326	15,244,198	15,505,976	15,772,911	16,035,927	16,292,558
3	Revenues from Anticipated Rate Adjustments [2]	0	2,256,594	4,674,551	5,767,276	6,915,078	8,158,381
4	Total Sales Revenues	37,319,270	39,866,500	42,494,531	44,162,773	45,878,463	47,674,909
Other Revenues:							
5	Miscellaneous Revenues [3]	\$1,333,199	\$1,333,199	\$1,333,199	\$1,333,199	\$1,333,199	\$1,333,199
6	Connection Fees [4]	820,059	814,628	815,714	805,939	777,698	774,440
7	Transfers from Reserves	0	0	0	0	0	300,000
8	Interest Income [5]	359,796	313,589	236,213	214,199	218,964	243,468
9	Total Other Revenues	2,513,054	2,461,416	2,385,126	2,353,337	2,329,861	2,651,107
10	Transfers From/(To) Rate Stabilization Fund [6]	\$0	\$0	\$0	\$0	\$0	\$0
11	Total Gross Revenues	39,832,324	42,327,916	44,879,657	46,516,109	48,208,324	50,326,017
Cost of Operations and Maintenance [7] [8]							
12	Utility Administration	\$844,149	\$872,337	\$909,568	\$948,477	\$989,135	\$1,031,637
13	Customer Service	1,591,297	1,643,007	1,709,142	1,823,469	1,896,654	1,972,959
14	Utility Construction Mgt & Engineering	0	497,792	521,109	545,548	571,164	598,014
15	Utility Maintenance	853,180	959,019	998,298	1,039,299	1,082,122	1,126,831
16	Wastewater Collection	4,219,941	3,101,613	3,266,210	3,391,053	3,520,820	3,704,834
17	Wastewater Treatment	2,532,809	3,493,261	3,641,910	3,796,404	3,956,816	4,123,979
18	Water Plant No. 1	2,262,817	2,483,606	2,578,826	2,678,916	2,782,662	2,890,425
19	Water Plant No. 2	1,941,776	1,765,092	1,831,225	1,903,367	1,978,351	2,056,110
20	Water Plant No. 3	1,338,410	1,441,937	1,499,007	1,560,916	1,625,365	1,692,351
21	Water Quality	503,882	856,698	895,416	935,959	978,423	1,022,894
22	Water Distribution	2,898,151	3,287,958	3,426,661	3,561,952	3,703,049	3,899,159
23	Other Expenses (Includes Indirect Cost Allocation)	3,593,658	3,205,960	3,317,952	3,523,058	3,559,528	3,650,266
24	Total Cost of Operations and Maintenance	22,580,070	23,608,280	24,595,323	25,708,416	26,644,089	27,769,460
25	Net Revenues	17,252,254	18,719,636	20,284,334	20,807,693	21,564,236	22,556,556
26	Pledged Capital Facilities Fees [9]	\$ 2,852,638	\$ 2,994,442	\$ 2,941,033	\$ 2,872,796	\$ 2,789,739	\$ 2,788,340
27	Net Revenues with Pledged Capital Facilities Fees	20,104,892	21,714,078	23,225,367	23,680,489	24,353,975	25,344,896
Senior Lien Debt Service Requirement							
Outstanding Bonds:							
28	Series 2013 Bonds	6,796,250	6,798,250	6,797,250	6,798,000	6,805,000	6,802,500
29	Series 2017 Bonds	2,518,514	2,518,306	2,521,130	2,521,887	2,519,603	2,518,327
Additional Bonds							
30	New Debt 1	0	0	746,521	746,522	746,521	746,522
31	New Debt 2	0	0	0	0	0	0
32	New Debt 3	0	0	0	0	720,737	720,736
33	Total Debt Service - Senior Lien Bonds	9,314,764	9,316,556	10,064,901	10,066,409	10,791,861	10,788,085
Net Revenue Bond Service Coverage:							
Test 1 – Net Revenue Test:							
34	Net Revenues	17,252,254	18,719,636	20,284,334	20,807,693	21,564,236	22,556,556
35	Total Bond Service Requirement	9,314,764	9,316,556	10,064,901	10,066,409	10,791,861	10,788,085
36	Bond Service Coverage (110% Required)	185.21%	200.93%	201.54%	206.70%	199.82%	209.09%

City of Palm Coast, Florida

Water and Wastewater Utility System

Summary of Projected Operating Results

Line No.	Description	Fiscal Year Ending September 30,					
		2018	2019	2020	2021	2022	2023
-OR-							
Test 2 – Net Revenue and Pledged Revenue Test:							
37	Net Revenues	17,252,254	18,719,636	20,284,334	20,807,693	21,564,236	22,556,556
38	Total Bond Service Requirement	9,314,764	9,316,556	10,064,901	10,066,409	10,791,861	10,788,085
39	Bond Service Coverage (105% Required)	185.21%	200.93%	201.54%	206.70%	199.82%	209.09%
-AND-							
40	Net Revenues and Pledged Capital Facilities Fees [10]	20,104,892	21,714,078	23,225,367	23,680,489	24,353,975	25,344,896
41	Total Bond Service Requirement	9,314,764	9,316,556	10,064,901	10,066,409	10,791,861	10,788,085
42	Bond Service Coverage (120% Required)	215.84%	233.07%	230.76%	235.24%	225.67%	234.93%
Subordinate Debt (SRF Loan) Bond Service Coverage: [11]							
Net Revenues Available After Payment of							
43	Senior Lien Bond Service	7,937,490	9,403,080	10,219,433	10,741,284	10,772,375	11,768,471
44	Total Capital Facilities Fees	2,852,638	2,994,442	2,941,033	2,872,796	2,789,739	2,788,340
45	(Less) Senior Lien Bond Service Coverage	(1,862,953)	(1,863,311)	(2,012,980)	(2,013,282)	(2,158,372)	(2,157,617)
Adjusted Pledged Revenues Available for Bond Service							
46	After Payment of Senior Lien Bonds	8,927,175	10,534,211	11,147,486	11,600,798	11,403,742	12,399,194
Subordinate Debt Service Requirement:							
47	Existing Subordinate Debt Service	2,634,655	3,532,130	3,533,199	3,532,221	3,531,550	3,532,569
Proposed SRF Debt Service [12]							
48	New Debt 1	0	0	0	0	0	0
	New Debt 2	0	0	0	0	0	0
49	New Debt 3	0	0	0	0	0	0
50	Total Subordinate Bond Service	2,634,655	3,532,130	3,533,199	3,532,221	3,531,550	3,532,569
51	SRF Loan Bond Service Coverage (115% Required)	338.84%	298.24%	315.51%	328.43%	322.91%	351.00%
Less Other Required Transfers							
52	Bond Service Reserve Account [13]	0	0	0	0	0	0
53	Renewal, Replacement and Improvement Fund [14]	1,909,408	1,991,616	2,116,396	2,243,983	2,325,805	2,410,416
54	Other	0	0	0	0	0	0
55	Total Other Required Transfers	1,909,408	1,991,616	2,116,396	2,243,983	2,325,805	2,410,416
Excess of Net Revenues Above Required Transfers							
56	Without Capital Facilities Fees [15]	3,393,427	3,879,334	4,569,838	4,965,080	4,915,020	5,825,486
57	Total System Capital Facilities Fees	2,852,638	2,994,442	2,941,033	2,872,796	2,789,739	2,788,340
Total Amount Available for Capital Expenditures and							
58	Other Purposes (Includes Capital Facilities Fees) [16]	6,246,065	\$6,873,776	\$7,510,871	\$7,837,876	\$7,704,759	\$8,613,826

Footnotes on Page 3 of 3.

City of Palm Coast, Florida

Water and Wastewater Utility System

Summary of Projected Operating Results

Footnotes:

- [1] Amounts shown include sales revenues based upon projected customer and usage statistics shown on Table 2.
- [2] Represents additional sales revenues related to adopted and anticipated water and wastewater rate adjustments for the forecast period.
- [3] Amounts shown include anticipated miscellaneous and customer requested service charges (establishment of account, turn on/turn off, restoration of service, meter tests, etc.).
- [4] Amounts shown reflect miscellaneous revenues associated with meter installations and meter tap fees collected from new customer connections.
- [5] Amounts shown reflect estimated interest income earned on projected balances of the various funds created by the Bond Resolution, including the Revenue Fund and Surplus Fund (Operating Reserves), Renewal, Replacement and Improvement Fund, and Bond service Fund. Interest earned on the Water and Sewer Capital Facilities Fee (Impact Fee) Funds and the Project Fund have not been recognized since such earning are restricted to such funds.
- [6] No transfers to or from the Rate Stabilization Fund are anticipated over the Forecast Period.
- [7] Amounts shown do not include depreciation and amortization expenses which are a non-cash expense and not considered a Cost of Operations and Maintenance in accordance with the provisions of the Bond Resolution.
- [8] Amounts derived from Table 4.
- [9] Amounts based on estimated Expansion Percentage determine the Water and Sewer System Capital Facilities Fees Bond Service Component.
- [10] As defined in the Bond Resolution, the debt service coverage test (rate covenant) includes a two-part calculation.
The debt service coverage test is shown below:
Test No. 1 - Net Revenues Only
Required Coverage - 1.10

Test No. 2 - Net Revenues and Capital Facilities Fees Only
Net Revenues Only - Required Coverage - 1.05
AND Net Revenues and Capital Facilities Fees - Required Coverage - 1.20
- [11] Pursuant to the SRF Loan Agreement, Pledged revenues for SRF Loan repayment is after the recognition of payment of Senior Lien Bonds, including coverage. For purposes of this Report a 10% coverage allowance on the Senior Lien Bonds was recognized because the City is projected to meet Test 1 of the Senior Lien Coverage Test.
- [12] Represents anticipated future debt service from the SRF administered by the Florida Department of Environmental Protection (FDEP).
- [13] Bond Service Reserve Requirement is assumed to be fully funded or secured by a Reserve Fund Insurance Policy throughout the forecast period, therefore no deposits are recognized as being required.
- [14] Amount shown reflects the annual transfer to the Renewal, Replacement and Improvement Fund in the amount equal to 5% of the water and wastewater system's Gross Revenues for the immediately preceding fiscal year as stated in the provisions of the Bond Resolution.
- [15] Amounts shown reflect additional rate covenant test whereby the Net Revenues of the System must fund the payment of the Bond Service required transfer to the Reserve Fund and the Renewal, Replacement, and Improvement Fund, and subordinated debt.
- [16] Amounts shown represent sum of excess Net Revenues above required transfers and includes Water and Sewer System Capital Facilities Fees.

City of Palm Coast, Florida

Water and Wastewater Utility System

Projected Cash Balances and Interest Earnings

Line No.	Description	Fund Restriction	Fiscal Year Ending September 30,					
			2018	2019	2020	2021	2022	2023
SUMMARY (Ending Balance)								
1	Operating Reserves	Unrestricted	\$ 19,229,251	\$ 11,710,416	\$ 10,052,835	\$ 10,120,606	\$ 10,736,454	\$ 10,599,977
2	R&R Fund	Unrestricted	6,684,128	3,461,803	2,287,101	2,214,230	2,497,766	2,358,855
3	Sinking Fund	Unrestricted	2,987,355	3,212,172	3,399,525	3,399,658	3,580,853	3,580,164
4	Rate Stabilization Fund	Unrestricted	-	-	-	-	-	-
5	Prior Bond Proceeds	Restricted	1,998,157	1,000,000	0	0	0	0
6	Debt Service Reserve	Unrestricted	-	-	-	-	-	-
7	Construction Fund - New Bonds	Restricted	-	-	3,667,000	-	7,600,000	-
8	Construction Fund - SRF	Restricted	-	-	-	-	-	-
9	Customer Deposits	Restricted	3,754,001	3,791,541	3,829,457	3,867,751	3,906,429	3,945,493
10	Water Impact Fee	Restricted	2,742,112	1,593,908	2,132,680	3,036,867	4,706,451	3,079,634
11	Wastewater Impact Fee	Restricted	2,903,178	1,642,193	1,388,274	1,889,875	2,428,235	2,998,762
12	Total Ending Balances		\$ 40,298,182	\$ 26,412,033	\$ 26,756,872	\$ 24,528,986	\$ 35,456,188	\$ 26,562,885
Operating Reserve Account								
13	Beginning Balance (2)		\$ 20,636,320	\$ 19,229,251	\$ 11,710,416	\$ 10,052,835	\$ 10,120,606	\$ 10,736,454
14	Transfers In / Out - Operating Surplus / Deficiency		737,634	692,064	545,353	715,850	508,743	51,156
15	Transfers In OKR Loan Repayment		88,042	92,444	97,066	101,920	107,106	112,367
16	Transfers Out - SRF Debt Service Reserve		0	0	0	0	0	0
17	Transfers Out - CIP		2,232,745	8,303,343	2,300,000	750,000	0	0
18	Transfers Out - 'Projected Op Results'		0	0	0	0	0	300,000
19	Interest Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
20	Interest Income		199,328	154,698	108,816	100,867	104,285	109,682
	Recognition of Interest Income							
21	to Fund Revenue Requirements		199,328	154,698	108,816	100,867	104,285	109,682
22	Ending Balance		19,229,251	11,710,416	10,052,835	10,120,606	10,736,454	10,599,977
		Days						
24	Target - 90 Days (O&M Expense)	90	5,567,689	5,821,220	6,064,600	6,339,062	6,569,775	6,847,264
25	Estimated Days of Reserve (O&M Expense)		311	181	149	144	147	139
	Above Minimum Target		Yes	Yes	Yes	Yes	Yes	Yes
Renewal and Replacement Fund								
28	Beginning Balance		\$ 8,388,458	\$ 6,684,128	\$ 3,461,803	\$ 2,287,101	\$ 2,214,230	\$ 2,497,766
29	Transfers In		3,818,816	4,381,555	5,290,990	5,609,957	5,814,513	7,231,248
30	Transfers Out - CIP		(5,523,146)	(7,603,880)	(6,465,692)	(5,682,829)	(5,530,976)	(7,370,160)
31	Interest Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
32	Interest Income		130,594	126,768	93,401	79,335	78,870	97,985
	Recognition of Interest Income							
33	to Fund Revenue Requirements		130,594	126,768	93,401	79,335	78,870	97,985
34	Ending Balance		6,684,128	3,461,803	2,287,101	2,214,230	2,497,766	2,358,855
Sinking Fund								
38	Principal and Interest Payment		\$ 11,949,419	\$ 12,848,686	\$ 13,598,100	\$ 13,598,630	\$ 14,323,411	\$ 14,320,654
39	Average Balance		2,987,355	3,212,172	3,399,525	3,399,658	3,580,853	3,580,164
40	Interest Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
41	Interest Income		29,874	32,122	33,995	33,997	35,809	35,802
	Recognition of Interest Income							
42	to Fund Revenue Requirements		29,874	32,122	33,995	33,997	35,809	35,802
Rate Stabilization Fund								
45	Beginning Balance		-	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
46	Transfers In		0	0	0	0	0	0
47	Transfers Out - Operations		0	0	0	0	0	0
48	Interest Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
49	Interest Income		0	0	0	0	0	0
	Recognition of Interest Income							
50	to Fund Revenue Requirements		0	0	0	0	0	0
51	Ending Balance		0	0	0	0	0	0
Prior Bond Proceeds								
55	Beginning Balance		\$ 3,198,157	\$ 1,998,157	\$ 1,000,000	\$ 0	\$ 0	\$ 0
56	Transfers In		0	0	0	0	0	0
57	Transfers Out		1,200,000	998,157	1,000,000	0	0	0
58	Interest Rate		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
59	Interest Income		0	0	0	0	0	0
	Recognition of Interest Income							
60	to Fund Revenue Requirements		0	0	0	0	0	0
61	Ending Balance		1,998,157	1,000,000	0	0	0	0

City of Palm Coast, Florida

Water and Wastewater Utility System

Projected Cash Balances and Interest Earnings

Line No.	Description	Fund Restriction	Fiscal Year Ending September 30,					
			2018	2019	2020	2021	2022	2023
Debt Service Reserve								
65	Beginning Balance		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
66	New Debt 1		0	0	0	0	0	0
67	New Debt 3		0	0	0	0	0	0
68	Transfers Out		0	0	0	0	0	0
69	Interest Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
70	Interest Income		0	0	0	0	0	0
	Recognition of Interest Income							
71	to Fund Revenue Requirements		0	0	0	0	0	0
72	Ending Balance		0	0	0	0	0	0
Construction Fund - Bonds								
76	Beginning Balance		\$ 0	\$ 0	\$ 0	\$ 3,667,000	\$ 0	\$ 7,600,000
77	Transfer In - New Debt 1		0	0	11,567,000	0	0	0
78	Transfer In - New Debt 3		0	0	0	0	11,167,000	0
79	Transfer In - Debt Service Reserve		0	0	0	0	0	0
80	Transfer Out - CIP New Debt 1		0	0	7,900,000	3,667,000	0	0
81	Transfer Out - CIP New Debt 3		0	0	0	0	3,567,000	7,600,000
82	Transfer Out - CIP Miscellaneous		0	0	0	0	0	0
88	Interest Rate		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
89	Interest Income		0	0	0	0	0	0
	Recognition of Interest Income							
90	to Fund Revenue Requirements		0	0	0	0	0	0
91	Ending Balance		0	0	3,667,000	0	7,600,000	0
Construction Fund - SRF								
95	Beginning Balance		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
96	Transfer In - Transfer Out - Other		5,510,000	0	0	9,050,000	11,100,000	3,950,000
97	Transfer In - Debt Service Reserve		0	0	0	0	0	0
98	Transfer Out - Transfer Out - Other		5,510,000	0	0	9,050,000	11,100,000	3,950,000
99	Transfer Out - Prior Construction		0	0	0	0	0	0
100	Transfer Out - CIP Miscellaneous		0	0	0	0	0	0
106	Interest Rate		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
107	Interest Income		0	0	0	0	0	0
	Recognition of Interest Income							
108	to Fund Revenue Requirements		0	0	0	0	0	0
109	Ending Balance		0	0	0	0	0	0
Customer Deposits								
110	Beginning Balance		\$ 3,716,833	\$ 3,754,001	\$ 3,791,541	\$ 3,829,457	\$ 3,867,751	\$ 3,906,429
111	Transfers In		0	0	0	0	0	0
112	Transfers Out		0	0	0	0	0	0
113	Interest Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
114	Interest Income		37,168	37,540	37,915	38,295	38,678	39,064
	Recognition of Interest Income							
115	to Fund Revenue Requirements		0	0	0	0	0	0
116	Ending Balance		3,754,001	3,791,541	3,829,457	3,867,751	3,906,429	3,945,493
Water Capacity Fees								
120	Beginning Balance		\$ 1,069,736	\$ 2,742,112	\$ 1,593,908	\$ 2,132,680	\$ 3,036,867	\$ 4,706,451
121	Transfers In		1,673,411	1,755,224	1,720,232	1,678,468	1,631,060	1,634,446
122	Transfers Out - Capital Projects		20,000	2,925,000	1,200,000	800,000	0	3,300,000
123	Transfers Out - To Pay Debt Service		0	0	0	0	0	0
124	Interest Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
125	Interest Income		18,964	21,572	18,540	25,719	38,524	38,737
	Recognition of Interest Income							
126	to Fund Revenue Requirements		0	0	0	0	0	0
127	Ending Balance		2,742,112	1,593,908	2,132,680	3,036,867	4,706,451	3,079,634
Wastewater Capacity Fees								
131	Beginning Balance		\$ 1,069,736	\$ 2,903,178	\$ 1,642,193	\$ 1,388,274	\$ 1,889,875	\$ 2,428,235
132	Transfers In (Conn. Fees & Sys. Dev. Charges)		2,293,676	2,409,401	2,371,003	2,318,292	2,249,877	2,243,527
133	Transfers In (Beachside Dev. Charges)		0	0	0	0	0	0
134	Transfers Out - Capital Projects		480,000	3,693,000	2,640,000	1,833,000	1,733,000	1,700,000
135	Transfers Out - To Pay Debt Service		0	0	0	0	0	0
136	Interest Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
137	Interest Income		19,766	22,614	15,077	16,309	21,483	27,000
	Recognition of Interest Income							
138	to Fund Revenue Requirements		0	0	0	0	0	0
139	Ending Balance		2,903,178	1,642,193	1,388,274	1,889,875	2,428,235	2,998,762

City of Palm Coast, Florida

Water and Wastewater Utility System

Projected Cash Balances and Interest Earnings

Line No.	Description	Fund Restriction	Fiscal Year Ending September 30,					
			2018	2019	2020	2021	2022	2023
Total Unrestricted Interest Income								
143	Water System	Unrestricted	\$ 179,898	\$ 156,794	\$ 118,106	\$ 107,099	\$ 109,482	\$ 121,734
144	Wastewater System	Unrestricted	179,898	156,794	118,106	107,099	109,482	121,734
145	Total		<u>359,796</u>	<u>313,589</u>	<u>236,213</u>	<u>214,199</u>	<u>218,964</u>	<u>243,468</u>
Total Restricted Interest Income								
146	Water System	Restricted	\$ 37,949	\$ 40,863	\$ 35,766	\$ 40,161	\$ 49,342	\$ 52,401
147	Wastewater System	Restricted	37,949	40,863	35,766	40,161	49,342	52,401
148	Total		<u>75,898</u>	<u>81,726</u>	<u>71,533</u>	<u>80,323</u>	<u>98,685</u>	<u>104,801</u>

City of Palm Coast, Florida
Water and Wastewater Utility System

Summary and Functionalization of Existing Utility Fixed Assets

Line No.	Description	Type	Book Value	Adjustments	Adj Amt	Water System						Wastewater				Other Developer Contrib.		
						Supply	Treatment	Trans.	Distribution	Fire Hydrants	Meters	Treatment	Effl./Recl.	Trans.	Collection and Lift Stations		Indirect	General Pfl.
1	GITTLER PROPERTY	Dev. Contrib.	\$ 37,817	\$ -	\$ 37,817	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,817
2	CGSR,LLC PROPERTY PUMP	Indirect	14,500	-	14,500	0	0	0	0	0	0	0	0	0	0	14,500	0	0
3	CINNAMON GROVE, LLCPRO	Indirect	14,500	-	14,500	0	0	0	0	0	0	0	0	0	0	14,500	0	0
4	BEACHSIDE LAND PURCHASE	W-Trans.	582,144	-	582,144	0	0	582,144	0	0	0	0	0	0	0	0	0	0
5	LAND	Land	12,196,800	-	12,196,800	986,633	1,992,524	290,159	486,367	0	0	6,351,987	0	624,731	743,341	0	721,052	0
6	LAND - WELL SITE CONTR	Dev. Contrib.	15,031	-	15,031	0	0	0	0	0	0	0	0	0	0	0	0	15,031
7	EASEMENT FOR CITATION	Dev. Contrib.	35,000	-	35,000	0	0	0	0	0	0	0	0	0	0	0	0	35,000
8	CARTER PARK LIFT STATI	Lift Stations	2,380	-	2,380	0	0	0	0	0	0	0	0	2,380	0	0	0	0
9	PC PARK CDD LIFT STATI	Lift Stations	3,927	-	3,927	0	0	0	0	0	0	0	0	3,927	0	0	0	0
10	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
11	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
12	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
13	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
14	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
15	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
16	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
17	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
18	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
19	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
20	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
21	RAYONIER WELL SITE DON	Dev. Contrib.	1,500	-	1,500	0	0	0	0	0	0	0	0	0	0	0	0	1,500
22	LAND - WELL SITE CONTR	Dev. Contrib.	2,609	-	2,609	0	0	0	0	0	0	0	0	0	0	0	0	2,609
23	LAND - WELL SITE CONTR	Dev. Contrib.	2,609	-	2,609	0	0	0	0	0	0	0	0	0	0	0	0	2,609
24	LAND - WELL SITE CONTR	Dev. Contrib.	2,609	-	2,609	0	0	0	0	0	0	0	0	0	0	0	0	2,609
25	ADMIN BUILDING IMPROVE	General	75,014	-	75,014	0	0	0	0	0	0	0	0	0	0	0	75,014	0
26	UTILITY STORAGE BUILDI	General	183,640	-	183,640	0	0	0	0	0	0	0	0	0	0	0	183,640	0
27	UTILITY STORAGE BUILDI	General	64,437	-	64,437	0	0	0	0	0	0	0	0	0	0	0	64,437	0
28	WATER DIST	W-Distribution	1,063,000	-	1,063,000	0	0	0	1,063,000	0	0	0	0	0	0	0	0	0
29	UTILITY MAINTENANCE	WW-Treatment	105,000	-	105,000	0	0	0	0	0	105,000	0	0	0	0	0	0	0
30	CHEMICAL BUILDING	WW-Treatment	16,000	-	16,000	0	0	0	0	0	16,000	0	0	0	0	0	0	0
31	EQUIPMENT SHED	WW-Treatment	14,750	-	14,750	0	0	0	0	0	14,750	0	0	0	0	0	0	0
32	GAS/DIESEL PUMPS	General	75,000	-	75,000	0	0	0	0	0	0	0	0	0	0	75,000	0	0
33	WASTEWATER PLANT	WW-Treatment	2,251,000	-	2,251,000	0	0	0	0	0	2,251,000	0	0	0	0	0	0	0
34	HEADWORKS	WW-Treatment	699,000	-	699,000	0	0	0	0	0	699,000	0	0	0	0	0	0	0
35	UNDERGROUND STORAGE TA	WW-Treatment	5,000	-	5,000	0	0	0	0	0	5,000	0	0	0	0	0	0	0
36	SLUDGE BUILDING	WW-Treatment	737,000	-	737,000	0	0	0	0	0	737,000	0	0	0	0	0	0	0
37	CHLORINATION BUILDING	WW-Treatment	69,000	-	69,000	0	0	0	0	0	69,000	0	0	0	0	0	0	0
38	DECHLORINATION BULDIN	WW-Treatment	96,000	-	96,000	0	0	0	0	0	96,000	0	0	0	0	0	0	0
39	WWTP SHOP	WW-Treatment	85,000	-	85,000	0	0	0	0	0	85,000	0	0	0	0	0	0	0
40	STORAGE TANK	WW-Treatment	1,661,000	-	1,661,000	0	0	0	0	0	1,661,000	0	0	0	0	0	0	0
41	EFFLUENT PUMP STATION	Effl./IQ	24,000	-	24,000	0	0	0	0	0	0	24,000	0	0	0	0	0	0
42	STORAGE BUILDING	WW-Treatment	518,000	-	518,000	0	0	0	0	0	518,000	0	0	0	0	0	0	0
43	OXIDATION DITCH SOUTH	WW-Treatment	1,255,000	-	1,255,000	0	0	0	0	0	1,255,000	0	0	0	0	0	0	0
44	OXIDATION DITCH NORTH	WW-Treatment	1,255,000	-	1,255,000	0	0	0	0	0	1,255,000	0	0	0	0	0	0	0
45	CLARIFIER 1	WW-Treatment	379,000	-	379,000	0	0	0	0	0	379,000	0	0	0	0	0	0	0
46	CLARIFIER 2	WW-Treatment	379,000	-	379,000	0	0	0	0	0	379,000	0	0	0	0	0	0	0
47	CLARIFIER 3	WW-Treatment	379,000	-	379,000	0	0	0	0	0	379,000	0	0	0	0	0	0	0
48	CLARIFIER 4	WW-Treatment	379,000	-	379,000	0	0	0	0	0	379,000	0	0	0	0	0	0	0
49	DIGESTOR 1	WW-Treatment	109,000	-	109,000	0	0	0	0	0	109,000	0	0	0	0	0	0	0
50	DIGESTOR 2	WW-Treatment	109,000	-	109,000	0	0	0	0	0	109,000	0	0	0	0	0	0	0
51	DIGESTOR 3	WW-Treatment	109,000	-	109,000	0	0	0	0	0	109,000	0	0	0	0	0	0	0
52	DIGESTOR 4	WW-Treatment	109,000	-	109,000	0	0	0	0	0	109,000	0	0	0	0	0	0	0
53	WATER TREATMENT PLANT	W-Treatment	3,932,000	-	3,932,000	0	3,932,000	0	0	0	0	0	0	0	0	0	0	0
54	WTP #1 SHOP	W-Treatment	52,000	-	52,000	0	52,000	0	0	0	0	0	0	0	0	0	0	0
55	HIGH SERVICE PUMP STAT	W-Treatment	404,000	-	404,000	0	404,000	0	0	0	0	0	0	0	0	0	0	0
56	CHLORINATION BUILDING	W-Treatment	85,000	-	85,000	0	85,000	0	0	0	0	0	0	0	0	0	0	0
57	2.5 MG STORAGE TANK	W-Treatment	780,000	-	780,000	0	780,000	0	0	0	0	0	0	0	0	0	0	0
58	1 MG STORAGE TANK	W-Treatment	474,000	-	474,000	0	474,000	0	0	0	0	0	0	0	0	0	0	0
59	LIME SILO 1	W-Treatment	284,000	-	284,000	0	284,000	0	0	0	0	0	0	0	0	0	0	0
60	LIME SILO 2	W-Treatment	284,000	-	284,000	0	284,000	0	0	0	0	0	0	0	0	0	0	0
61	LIME SILO 3	W-Treatment	284,000	-	284,000	0	284,000	0	0	0	0	0	0	0	0	0	0	0
62	TREATMENT BASIN 1	W-Treatment	211,000	-	211,000	0	211,000	0	0	0	0	0	0	0	0	0	0	0
63	TREATMENT BASIN 2	W-Treatment	211,000	-	211,000	0	211,000	0	0	0	0	0	0	0	0	0	0	0
64	TREATMENT BASIN 3	W-Treatment	211,000	-	211,000	0	211,000	0	0	0	0	0	0	0	0	0	0	0
65	TREATMENT BASIN 4	W-Treatment	211,000	-	211,000	0	211,000	0	0	0	0	0	0	0	0	0	0	0
66	TREATMENT BASIN 5	W-Treatment	211,000	-	211,000	0	211,000	0	0	0	0	0	0	0	0	0	0	0
67	TREATMENT BASIN 6	W-Treatment	211,000	-	211,000	0	211,000	0	0	0	0	0	0	0	0	0	0	0
68	SLUDGE THICKENER 1	WW-Treatment	188,000	-	188,000	0	0	0	0	0	188,000	0	0	0	0	0	0	0
69	SLUDGE THICKENER 2	WW-Treatment	188,000	-	188,000	0	0	0	0	0	188,000	0	0	0	0	0	0	0
70	WASHWATER RECOVERY BAS	WW-Treatment	242,000	-	242,000	0	0	0	0	0	242,000	0	0	0	0	0	0	0
71	GENERATOR HOUSING	WW-Treatment	5,000	-	5,000	0	0	0	0	0	5,000	0	0	0	0	0	0	0
72	UNDERGROUND STORAGE TA	WW-Treatment	25,000	-	25,000	0	0	0	0	0	25,000	0	0	0	0	0	0	0
73	FUEL TANK/PUMP	WW-Treatment	15,000	-	15,000	0	0	0	0	0	15,000	0	0	0	0	0	0	0
74	WATER TREATMENT PLANT	W-Treatment	6,															

City of Palm Coast, Florida
Water and Wastewater Utility System

Summary and Functionalization of Existing Utility Fixed Assets

Line No.	Description	Type	Book Value	Adjustments	Adj Amt	Water System					Wastewater			Indirect	General Plt.	Other Developer Contrib.	
						Supply	Treatment	Trans.	Distribution	Fire Hydrants	Meters	Treatment	EM/Recl.				Trans.
169	FINISHED WATER MAIN WE	W-Treatment	3,405,958	-	3,405,958	0	3,405,958	0	0	0	0	0	0	0	0	0	0
170	CONCENTRATE MAIN WTP3	W-Treatment	1,372,389	-	1,372,389	0	1,372,389	0	0	0	0	0	0	0	0	0	0
171	WATER QUALITY IMPROVEM	W-Treatment	80,375	-	80,375	0	80,375	0	0	0	0	0	0	0	0	0	0
172	FINISHED WATER MAIN WT	W-Treatment	615,000	-	615,000	0	615,000	0	0	0	0	0	0	0	0	0	0
173	WATER/SEWER/REUSE DEVE	Effl.-IQ	1,206,770	-	1,206,770	0	0	0	0	0	0	1,206,770	0	0	0	0	0
174	WATER METER INSTALLS F	Meters	479,547	-	479,547	0	0	0	0	479,547	0	0	0	0	0	0	0
175	PEP SERVICE INSTALLS F	Lift Stations	384,186	-	384,186	0	0	0	0	0	0	0	0	384,186	0	0	0
176	WATER MAIN IMPROVEMENT	W-TRWD	696,354	-	696,354	0	0	284,796	411,559	0	0	0	0	0	0	0	0
177	SUPPLY MAIN	Supply	1,572,501	-	1,572,501	1,572,501	0	0	0	0	0	0	0	0	0	0	0
178	WATER QUALITY IMPROVEM	W-Treatment	489,693	-	489,693	0	489,693	0	0	0	0	0	0	0	0	0	0
179	WATER/SEWER/REUSE DEVE	Effl.-IQ	39,195	-	39,195	0	0	0	0	0	0	39,195	0	0	0	0	0
180	WATER DISTRIBUTION IMPRO	W-Distribution	404,772	-	404,772	0	0	404,772	0	0	0	0	0	0	0	0	0
181	PEP SERVICE INSTALLS F	WW-Treatment	105,012	-	105,012	0	0	0	0	0	105,012	0	0	0	0	0	0
182	WATER MAIN IMPROVEMENT	W-Treatment	874,546	-	874,546	0	874,546	0	0	0	0	0	0	0	0	0	0
183	WATER QUALITY IMPROVEM	W-Treatment	181,320	-	181,320	0	181,320	0	0	0	0	0	0	0	0	0	0
184	SEWER COLLECTION DEVE	SGC	128,058	-	128,058	0	0	0	0	0	0	0	0	128,058	0	0	0
185	WATER DISTRIBUTION IMPRO	W-Distribution	384,523	-	384,523	0	0	0	384,523	0	0	0	0	0	0	0	0
186	PEP TANK INSTALLS FY 1	SGC	225,662	-	225,662	0	0	0	0	0	0	0	0	225,662	0	0	0
187	LIFT STATION IMPROVEME	Lift Stations	141,286	-	141,286	0	0	0	0	0	0	0	0	141,286	0	0	0
188	WATER MAIN IMPROVEMENT	W-Treatment	196,082	-	196,082	0	196,082	0	0	0	0	0	0	0	0	0	0
189	WATER QUALITY IMPROV F	W-Treatment	252,332	-	252,332	0	252,332	0	0	0	0	0	0	0	0	0	0
190	WATER/SEWER DEVELOPER	General	60,420	-	60,420	0	0	0	0	0	0	0	0	0	60,420	0	0
191	WATER METER INSTALLS F	Meters	421,291	-	421,291	0	0	0	0	421,291	0	0	0	0	0	0	0
192	PEP SERVICE INSTALLS F	WW-Treatment	315,949	-	315,949	0	0	0	0	0	315,949	0	0	0	0	0	0
193	LIFT STATION REPLACEME	Lift Stations	229,797	-	229,797	0	0	0	0	0	0	0	0	229,797	0	0	0
194	WATER MAIN IMPROVEMENT	W-Distribution	71,172	-	71,172	0	0	0	71,172	0	0	0	0	0	0	0	0
195	WATER/SEWER/RECLAIM DE	Effl.-IQ	485,248	-	485,248	0	0	0	0	0	0	485,248	0	0	0	0	0
196	WATER METER INSTALLS F	Meters	518,220	-	518,220	0	0	0	0	518,220	0	0	0	0	0	0	0
197	PEP SERVICE INSTALLS F	SGC	1,479,417	-	1,479,417	0	0	0	0	0	0	0	0	1,479,417	0	0	0
198	WASTEWATER PLANT IMPRO	WW-Treatment	436,193	-	436,193	0	0	0	0	0	436,193	0	0	0	0	0	0
199	BEACHSIDE SEWER SYSTEM	WW-Trans.	2,696,388	-	2,696,388	0	0	0	0	0	0	0	2,696,388	0	0	0	0
200	WATER MAIN IMPROVEMENT	W-Distribution	203,372	-	203,372	0	0	203,372	0	0	0	0	0	0	0	0	0
201	WATER QUALITY IMPROVEM	W-Treatment	838,313	-	838,313	0	838,313	0	0	0	0	0	0	0	0	0	0
202	BEACH HAVEN UNIT 2 WTR	W-Distribution	145,961	-	145,961	0	0	0	145,961	0	0	0	0	0	0	0	0
203	PC LANDING APTS-LANDIN	W-Distribution	93,107	-	93,107	0	0	0	93,107	0	0	0	0	0	0	0	0
204	COUNTRY CLUB HARBOR UT	W-Distribution	243,457	-	243,457	0	0	0	243,457	0	0	0	0	0	0	0	0
205	OLD A1A WATERMAIN & CO	W-Distribution	45,572	-	45,572	0	0	0	45,572	0	0	0	0	0	0	0	0
206	WELL IMPROVEMENT	Supply	515,010	-	515,010	515,010	0	0	0	0	0	0	0	0	0	0	0
207	PEP SERVICE INSTALLS F	SGC	1,589,703	-	1,589,703	0	0	0	0	0	0	0	0	1,589,703	0	0	0
208	IMPR-WATER PLANT #3	W-Treatment	3,537,388	-	3,537,388	0	3,537,388	0	0	0	0	0	0	0	0	0	0
209	WATER TREATMENT PLANT IMPROVEMENT	W-Treatment	11,649,053	-	11,649,053	11,649,053	0	0	0	0	0	0	0	0	0	0	0
210	WATER MAIN IMPROVEMENT	W-Distribution	34,055	-	34,055	0	0	0	34,055	0	0	0	0	0	0	0	0
211	SEAGATE - PARK PLACE S	W-Distribution	474,914	-	474,914	0	0	0	474,914	0	0	0	0	0	0	0	0
212	PINE LAKES & WYNNFIELD	W-Distribution	23,676	-	23,676	0	0	0	23,676	0	0	0	0	0	0	0	0
213	HEARTLAND DENTAL-PROFE	W-Distribution	21,417	-	21,417	0	0	0	21,417	0	0	0	0	0	0	0	0
214	HLPC - HIDDEN LAKES PH	W-Distribution	438,736	-	438,736	0	0	0	438,736	0	0	0	0	0	0	0	0
215	GRAND HAVEN COMMERCIAL	W-Distribution	54,301	-	54,301	0	0	0	54,301	0	0	0	0	0	0	0	0
216	JTL DEV - GRAND LANDIN	W-Distribution	131,579	-	131,579	0	0	0	131,579	0	0	0	0	0	0	0	0
217	JTL DEV - GRAND LANDIN	W-Distribution	238,767	-	238,767	0	0	0	238,767	0	0	0	0	0	0	0	0
218	JTL DEV - GRAND LANDIN	W-Distribution	182,647	-	182,647	0	0	0	182,647	0	0	0	0	0	0	0	0
219	SE CLINE-REPLAT GRAND	W-Distribution	22,889	-	22,889	0	0	0	22,889	0	0	0	0	0	0	0	0
220	HSC PC - DOLLAR GENERA	W-Distribution	14,213	-	14,213	0	0	0	14,213	0	0	0	0	0	0	0	0
221	WATER TREATMENT PLANT IMPROVEMENT	W-Treatment	528,428	-	528,428	0	528,428	0	0	0	0	0	0	0	0	0	0
222	PEP SERVICE INSTALLS F	SGC	731,737	-	731,737	0	0	0	0	0	0	0	0	731,737	0	0	0
223	WATER TREATMENT PLANT IMPROVEMENT	W-Treatment	2,559,789	-	2,559,789	0	2,559,789	0	0	0	0	0	0	0	0	0	0
224	WATER TREATMENT PLANT IMPROVEMENT	W-Treatment	9,968,715	-	9,968,715	0	9,968,715	0	0	0	0	0	0	0	0	0	0
224	RAW WATER MAIN	Supply	4,578,736	-	4,578,736	4,578,736	0	0	0	0	0	0	0	0	0	0	0
225	WATER QUALITY IMPROVEM	W-Treatment	743,217	-	743,217	0	743,217	0	0	0	0	0	0	0	0	0	0
226	SENSUS METERING + 50 R	General	23,000	-	23,000	0	0	0	0	0	0	0	0	0	0	23,000	0
227	RD4000 SYSTEM	General	5,265	-	5,265	0	0	0	0	0	0	0	0	0	0	5,265	0
228	KOMATSU	General	27,218	-	27,218	0	0	0	0	0	0	0	0	0	0	27,218	0
229	WELLS RTU #2	General	8,086	-	8,086	0	0	0	0	0	0	0	0	0	0	8,086	0
230	WELLS RTU #3	General	8,086	-	8,086	0	0	0	0	0	0	0	0	0	0	8,086	0
231	100HP VERTICAL HOLLOW	General	10,950	-	10,950	0	0	0	0	0	0	0	0	0	0	10,950	0
232	10 TON SPLIT AIR CONDI	General	7,890	-	7,890	0	0	0	0	0	0	0	0	0	0	7,890	0
233	AIR CONDITIONER-4 TON	General	1,586	-	1,586	0	0	0	0	0	0	0	0	0	0	1,586	0
234	AIR CONDITIONER-2 TON	General	2,450	-	2,450	0	0	0	0	0	0	0	0	0	0	2,450	0
235	PLASA MACHINE	General	2,150	-	2,150	0	0	0	0	0	0	0	0	0	0	2,150	0
236	DIGITAL MONITOR MODULE	General	1,385	-	1,385	0	0	0	0	0	0	0	0	0	0	1,385	0
237	DIGITAL MONITOR MODULE	General	1,385	-	1,385	0	0	0	0	0	0	0	0	0	0	1,385	0
238	AUTO GUN	General	874	-	874	0	0	0	0	0	0	0	0	0	0	874	0
239	METER FLOW RECORDER	General	2,697	-	2,697	0	0	0	0	0	0	0	0	0	0	2,697	0
240	OUTDOOR PIPE RACKS	General	8,850	-	8,850	0	0	0	0	0	0	0	0	0	0	8,850	0
241	10 TON TRANE HEAT PUMP	General	7,285	-	7,285	0	0	0	0	0	0	0	0	0	0	7,285	0
242	GASBOY 1000 WITH PEDAS	General	7,258	-	7,258	0	0	0	0	0	0	0	0	0	0	7,258	0
243	T90 TRAILER MOUNTED GE	General	26,395	-	26,395	0	0	0	0	0	0	0	0	0	0	26,395	0
244	SOLAR MESSAGE BOARD	General	15,055	-	15,055	0	0	0	0	0	0	0	0	0	0	15,055	0
245	THOMPSON OPEN TRASH PU	General	34,015	-	34,015	0	0	0	0	0	0	0	0	0	0	34,015	0
246	UTILITY CUST SVCE PHON	General	38,195	-	38,195	0	0	0	0	0	0	0	0	0	0	38,195	0
247	MAGNUM GENERATOR SKID	General	19,445	-	19,445	0	0	0	0	0	0	0	0	0	0	19,445	0
248	ANALYTICAL RESIDUAL SU	General	5,830	-	5,830	0	0	0	0	0	0	0	0	0	0	5,830	0
249	GENERATOR TRAILER MOUN	General	18,786	-	18,786	0	0	0	0	0	0	0	0	0	0	18,786	0
250	SENSUS RADIO READ DEVI	Meters	5,000	-	5,000	0	0	0	0	5,000	0	0	0	0	0	0	0
251	SENSUS RADIO READ DEVI	Meters	5,000	-	5,000	0	0	0	0	5,000	0	0	0	0	0	0	0

City of Palm Coast, Florida
Water and Wastewater Utility System

Summary and Functionalization of Existing Utility Fixed Assets

Line No.	Description	Type	Book Value	Adjustments	Adj Amt	Water System					Wastewater				Indirect	General Pft.	Other Developer Contrib.	
						Supply	Treatment	Trans.	Distribution	Fire Hydrants	Meters	Treatment	EPL/Recd.	Trans.				Collection and Lift Stations
252	SENSUS RADIO READ DEVI	Meters	5,000	-	5,000	0	0	0	0	0	5,000	0	0	0	0	0	0	
253	SENSUS RADIO READ DEVI	Meters	5,000	-	5,000	0	0	0	0	0	5,000	0	0	0	0	0	0	
254	SENSUS RADIO READ DEVI	Meters	5,000	-	5,000	0	0	0	0	0	5,000	0	0	0	0	0	0	
255	VIDEO INSPECTION COMPO	General	61,843	-	61,843	0	0	0	0	0	0	0	0	0	0	61,843	0	
256	CCTV CAMERA	General	10,123	-	10,123	0	0	0	0	0	0	0	0	0	0	10,123	0	
257	CAMERA FOR PIPE INSPEC	General	18,900	-	18,900	0	0	0	0	0	0	0	0	0	0	18,900	0	
258	TOWABLE PUMP	General	9,975	-	9,975	0	0	0	0	0	0	0	0	0	0	9,975	0	
259	PIPE RANGER WHEELED TR	General	15,515	-	15,515	0	0	0	0	0	0	0	0	0	0	15,515	0	
260	PUMP	General	5,865	-	5,865	0	0	0	0	0	0	0	0	0	0	5,865	0	
261	REPLACEMENT PUMP	General	5,806	-	5,806	0	0	0	0	0	0	0	0	0	0	5,806	0	
262	BOOM FOR F350 #20551	General	11,006	-	11,006	0	0	0	0	0	0	0	0	0	0	11,006	0	
263	REFRIDGERATED SAMPLER	General	13,437	-	13,437	0	0	0	0	0	0	0	0	0	0	13,437	0	
264	PROJECTOR & SCREEN	General	7,450	-	7,450	0	0	0	0	0	0	0	0	0	0	7,450	0	
265	GATOR 4X4	General	7,264	-	7,264	0	0	0	0	0	0	0	0	0	0	7,264	0	
266	DIGITAL COPIER	General	9,433	-	9,433	0	0	0	0	0	0	0	0	0	0	9,433	0	
267	BUSH HOG MOWER	General	11,894	-	11,894	0	0	0	0	0	0	0	0	0	0	11,894	0	
268	SUBMERSIBLE PUMP	General	6,397	-	6,397	0	0	0	0	0	0	0	0	0	0	6,397	0	
269	SUBMERSIBLE PUMP	General	6,397	-	6,397	0	0	0	0	0	0	0	0	0	0	6,397	0	
270	GATOR XUV620J	General	9,129	-	9,129	0	0	0	0	0	0	0	0	0	0	9,129	0	
271	LATERAL CAMERA	General	10,540	-	10,540	0	0	0	0	0	0	0	0	0	0	10,540	0	
272	GATOR XUV 620J 4X4	General	9,047	-	9,047	0	0	0	0	0	0	0	0	0	0	9,047	0	
273	GATOR	General	9,175	-	9,175	0	0	0	0	0	0	0	0	0	0	9,175	0	
274	HYDRAULIC BROOM	General	5,000	-	5,000	0	0	0	0	0	0	0	0	0	0	5,000	0	
275	4RBS TRAILER	General	8,571	-	8,571	0	0	0	0	0	0	0	0	0	0	8,571	0	
276	CR5 PLATE COMPACTOR	General	8,200	-	8,200	0	0	0	0	0	0	0	0	0	0	8,200	0	
277	TRAILER MOUNTED PUMP	General	37,428	-	37,428	0	0	0	0	0	0	0	0	0	0	37,428	0	
278	WEBER CR3 PLATE COMPAC	General	7,511	-	7,511	0	0	0	0	0	0	0	0	0	0	7,511	0	
279	SELF PAYMENT KIOSK	General	1,035	-	1,035	0	0	0	0	0	0	0	0	0	0	1,035	0	
280	TRANE 3 TON AC UNIT	General	12,799	-	12,799	0	0	0	0	0	0	0	0	0	0	12,799	0	
281	800 MHZ COMMUNICATION	General	183,864	-	183,864	0	0	0	0	0	0	0	0	0	0	183,864	0	
282	800 MHZ COMMUNICATION	General	8,953	-	8,953	0	0	0	0	0	0	0	0	0	0	8,953	0	
283	MAGNUM LIGHT TOWER MOD	General	7,289	-	7,289	0	0	0	0	0	0	0	0	0	0	7,289	0	
284	800 MHZ SYSTEM	General	41,967	-	41,967	0	0	0	0	0	0	0	0	0	0	41,967	0	
285	TRENCH SHORING BOXES	General	19,150	-	19,150	0	0	0	0	0	0	0	0	0	0	19,150	0	
286	SUBTOTAL EXISTING FIXED ASSETS				305,981,017	26,986,810	127,926,085	14,303,011	14,762,308	-	1,584,508	61,740,681	21,364,901	17,440,588	17,825,195	29,000	2,064,634	113,675
287	TOTAL ASSETS FOR IMPACT FEE DETERMINATION				\$ 305,981,017	\$ 26,986,810	\$ 127,926,085	\$ 14,303,011	\$ 14,762,308	\$ -	\$ 1,584,508	\$ 61,740,681	\$ 21,364,901	\$ 17,440,588	\$ 17,825,195	\$ 29,000	\$ 2,064,634	\$ 113,675

**City of Palm Coast, Florida
Water and Wastewater Utility System**

Determination of Water Plant Capacity

Line No.		Water System
1	Existing Permitted Plant Capacity of System (MDF-MGD) (1)	15.384
2	Adjustment to Reflect Average Daily Flow of Water Treatment System (MGD) (2)	(4.395)
3	Adjusted Treatment Plant Capacity (ADF)	<u>10.989</u>
4	Average Daily Flow - Existing System (3)	<u>8.113</u>
5	Remaining Capacity (ADF) at Existing Plant	2.876
6	Percent of Total Capacity Remaining	26.17%
7	Percent of Total Capacity Recognized	26.17%
Capital Costs of Existing Facilities		
8	Existing Facility Costs (4)	\$ 154,912,895
9	Additional Costs (5)	16,455,000
10	Less Assumed Retirements (5)	(3,781,227)
11	Less Grant Funds (6)	-
12	Total Applicable Capital Costs of Existing Facilities	<u>\$ 167,586,669</u>
13	Estimated Amount Allocable to Future Growth	<u>\$ 43,857,431</u>

MDF = Maximum Daily Flow

ADF = Annual Average Daily Flow

Footnotes on page 2 of 2.

**City of Palm Coast, Florida
Water and Wastewater Utility System**

Determination of Water Plant Capacity

Footnotes:

- (1) Amounts reflect MDF treatment capacity of facilities as provided by the City's Consulting Engineers.
- (2) With respect to the water facilities and based on discussions with the City's Consulting Engineers, the plant capacity is expressed on a maximum daily flow basis to be consistent with the level of service requirements for the water system.

A summary of the seven Fiscal Year actual water flows is summarized below.

	<u>Annual Average Daily Demand (MGD)</u>	<u>Maximum Day Demand (MGD)</u>	<u>Peaking Peaking Factor</u>
Fiscal Year 2012	7.179	9.501	1.323
Fiscal Year 2013	7.037	9.436	1.341
Fiscal Year 2014	6.891	9.423	1.367
Fiscal Year 2015	6.960	9.247	1.329
Fiscal Year 2016	7.720	10.955	1.419
Fiscal Year 2017	8.113	10.528	1.298
six-Year Maximum			1.419
six -Year Average			1.346
Factor Used in Study			<u>1.400</u>

- (3) Reflects the average daily flow experienced by the City's water treatment facilities for the six fiscal years period ended 2017 as shown below:

	<u>Water</u>
Average Period AADF (*)	8.113

(*) Reference is made to Footnote 2 for applicable average daily flow data.

- (4) Amounts derived from Appendix A; reflects only water supply or production and treatment facility costs accounted for within the water system operations.
- (5) Amounts shown reflects i) upgrades and additions to existing plant which has additional capacity to serve future development and has been recognized in the determination of the average capital cost to serve system growth and ii) facility additions which are allocable to both existing and new users of the water system.
- (6) Based on discussions with the City, no grant funds were received for existing water supply and treatment facilities that would serve as a funding credit in the determination of the water capital facilities fees.

City of Palm Coast, Florida
Water and Wastewater Utility System

Determination of Wastewater Plant Capacity

Line No.		Wastewater System
1	Existing Permitted Plant Capacity of System (ADF-MGD) (1)	6.83
2	Average Daily Flow - Existing System (3)	5.975
3	Remaining Capacity (ADF) at Existing Plant	0.855
4	Percent of Total Capacity Remaining	12.52%
Capital Costs of Existing Facilities		
5	Existing Facility Costs (4)	\$ 83,105,581
6	Additional Costs (5)	11,319,245
7	Less Assumed Retirements (5)	(3,721,106)
8	Less Grant Funds (6)	-
9	Total Applicable Capital Costs of Existing Facilities	\$ 90,703,720
10	Estimated Amount Allocable to Future Growth	\$ 11,354,565

ADF = Annual Average Daily Flow

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**City of Palm Coast, Florida
Water and Wastewater Utility System**

Determination of Wastewater Plant Capacity

Footnotes:

- (1) Amount reflect ADF treatment capacity of facilities as provided by the City's Consulting Engineers.
- (2) With respect to the existing wastewater facilities and based on discussions with the City's Consulting Engineers, the plant capacity is expressed on a annual average daily flow basis. The plant capacity of the wastewater system is consistent with the level of service requirements for the wastewater system.

A summary of the six Fiscal Year actual wastewater flows is summarized below.

	<u>Average Daily Demand (MGD)</u>
Fiscal Year 2012	5.430
Fiscal Year 2013	5.719
Fiscal Year 2014	5.886
Fiscal Year 2015	5.975
Fiscal Year 2016	5.787
Fiscal Year 2017	5.899
six-Year Maximum	5.975
six -Year Average	5.783
Factor Used in Study	5.975

- (3) Reflects the maximum average daily flow experienced by the City's wastewater treatment facilities for the six Fiscal Years:

	<u>Wastewater</u>
Average Period ADF (*)	5.975

(*) Reference is made to Footnote 2 for applicable average daily flow data.

- (4) Amounts derived from Appendix A; reflects only wastewater treatment and effluent disposal and associated reclaimed facility costs accounted for within the wastewater system operations.
- (5) Amounts shown reflects; i) upgrades and additions to existing plant which has additional capacity to serve future development and has been recognized in the determination of the average capital cost to serve system growth and ii) facility additions which are allocable to both existing and new users of the wastewater system.
- (6) Based on discussions with the City, no grant funds were received for existing wastewater treatment facilities that would serve as a funding credit in the determination of the wastewater capital facilities fees.

Table 12

City of Palm Coast, Florida
Water and Wastewater Utility System

Water Capital Improvement Program Reconized in System Capital Facilities Fees [1]

Water Treatment Plant #2																			
48	Concentrate Zero Discharge Treatment	Treatment	0.00%	100.00%	0.00%	0.00%	30.00	-	-	-	-	-	-	-	-	-			
49	Membrane Replacement - NF (Moved to 2021)	Treatment	0.00%	0.00%	100.00%	0.00%	15.00	1,200,000	-	-	1,200,000	1,200,000	-	-	-	1,200,000	770,234		
50	Membrane Replacement - UF (Moved to 2020)	Treatment	0.00%	0.00%	100.00%	0.00%	15.00	1,120,000	-	-	1,120,000	1,120,000	-	-	-	1,120,000	718,885		
51	UF Skids - Valve Replacement	Treatment	0.00%	0.00%	100.00%	0.00%	30.00	250,000	-	-	250,000	250,000	-	-	-	250,000	102,997		
52	Disinfection By-Products includes reactor covers and mixing equip.	Treatment	0.00%	100.00%	0.00%	0.00%	20.00	-	-	-	-	-	-	-	-	-	-		
53	Reroof	Treatment	0.00%	0.00%	100.00%	0.00%	20.00	255,000	-	-	255,000	255,000	-	-	-	255,000	141,187		
54	Fuel Storage Tank	Treatment	0.00%	100.00%	0.00%	0.00%	30.00	300,000	-	-	300,000	300,000	-	-	-	300,000	-		
55	Ozone Treatment - Color, Taste and Odor	Treatment	0.00%	100.00%	0.00%	0.00%	20.00	1,020,000	-	-	1,020,000	1,020,000	-	-	-	1,020,000	-		
56	Concentrate Anti-Scaling Investigation	Treatment	0.00%	100.00%	0.00%	0.00%	20.00	25,000	(25,000)	-	-	-	-	-	-	-	-		
57	Filtrate Ammonia Reduction	Treatment	0.00%	100.00%	0.00%	0.00%	20.00	500,000	-	-	500,000	500,000	-	-	-	500,000	-		
58	General Plant Renewal and Replacement	Other	0.00%	0.00%	100.00%	0.00%	30.00	3,900,000	-	-	3,900,000	-	-	-	3,900,000	3,900,000	-		
Distribution System Improvements																			
59	Canal Crossing Replacements	Distribution	0.00%	0.00%	100.00%	0.00%	30.00	450,000	-	-	450,000	-	-	-	450,000	450,000	-		
60	Large Backflow Preventor Replacements	Distribution	0.00%	0.00%	100.00%	0.00%	20.00	425,000	-	-	425,000	-	-	-	425,000	425,000	-		
61	Fixed Base Meter Reading	Distribution	0.00%	100.00%	0.00%	0.00%	20.00	775,000	-	-	775,000	-	-	-	775,000	775,000	-		
62	Radio Read Metering	Distribution	0.00%	100.00%	0.00%	0.00%	20.00	1,000,000	-	-	1,000,000	-	-	-	1,000,000	1,000,000	-		
63	Radio Read Metering	Distribution	0.00%	100.00%	0.00%	0.00%	20.00	2,000,000	-	-	2,000,000	-	-	-	2,000,000	2,000,000	-		
64	Residential and Sm Commercial Meters changeouts	Distribution	0.00%	0.00%	100.00%	0.00%	20.00	580,000	-	-	580,000	-	-	-	580,000	580,000	-		
65	Construction	Other	0.00%	0.00%	100.00%	0.00%	20.00	600,000	-	-	600,000	-	-	-	600,000	600,000	-		
66	Meter Installations From Operating Budget	Other	0.00%	0.00%	100.00%	0.00%	20.00	5,721,527	-	-	5,721,527	-	-	-	5,721,527	5,721,527	-		
Miscellaneous Utility Services(54029000-034000)																			
67	CUP Modification Application	Other	0.00%	100.00%	0.00%	0.00%	40.00	144,500	(144,500)	-	-	-	-	-	-	-	-		
68	CUP Compliance Report	Other	0.00%	100.00%	0.00%	0.00%	40.00	25,000	(25,000)	-	-	-	-	-	-	-	-		
69	Consultant Input on CIP Development 20161298	Other	0.00%	0.00%	100.00%	0.00%	40.00	41,000	(41,000)	-	-	-	-	-	-	-	-		
70	Water Supply Facilities Work Plan	Other	0.00%	0.00%	100.00%	0.00%	40.00	17,500	(17,500)	-	-	-	-	-	-	-	-		
71	Rate Study/Bond Issue/SRF Capital Financing Plan	Other	0.00%	0.00%	100.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-		
72	Surface / Groundwater Interface Model	Other	0.00%	0.00%	100.00%	0.00%	40.00	12,499	(12,499)	-	-	-	-	-	-	-	-		
73	Utility Admin R+R	Other	0.00%	0.00%	100.00%	0.00%	40.00	80,000	-	-	80,000	-	-	-	80,000	80,000	-		
74	Technology Upgrades (\$35,357.68 in PO's)	Other	0.00%	0.00%	100.00%	0.00%	40.00	100,000	-	-	100,000	-	-	-	100,000	100,000	-		
75	Inventory Storage	Other	0.00%	0.00%	100.00%	0.00%	40.00	130,000	(130,000)	-	-	-	-	-	-	-	-		
76	Utility Compound Upgrade	Other	0.00%	0.00%	100.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-		
77	Additional land for 2 Utility	Other	0.00%	0.00%	100.00%	0.00%	9,999.00	-	-	-	-	-	-	-	-	-	-		
78	Replace bundling roofs (6 Buildings)	Other	0.00%	0.00%	100.00%	0.00%	20.00	255,000	-	-	255,000	-	-	-	255,000	255,000	-		
79	Admin Allocation 54029099 049000	Other	0.00%	0.00%	100.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-		
80	Machinery and Equipment From Budget	Other	0.00%	0.00%	100.00%	0.00%	20.00	71,996	-	-	71,996	-	-	-	71,996	71,996	-		
81	Transfer to Fleet Management - New Initial Vehicle Purchases	Other	0.00%	100.00%	0.00%	0.00%	10.00	913,929	-	-	913,929	-	-	-	913,929	913,929	-		
82	Transfer to Fleet Communication - New Initial Purchases	Other	0.00%	100.00%	0.00%	0.00%	10.00	41,268	-	-	41,268	-	-	-	41,268	41,268	-		
83	TOTAL POTABLE WATER PROJECTS							\$ 46,414,219	\$ (495,499)	\$ 0	\$ 45,918,720	\$ 16,455,000	\$ 8,500,000	\$ 4,050,000	\$ 0	\$ 16,913,720	\$ 45,918,720	\$ 3,781,227	\$ 191,598
84	PERCENT OF TOTAL							100.00%	35.84%	18.51%	8.82%	0.00%	36.83%	100.00%	8.23%	0.42%			

Footnotes
[1] Based on Capital Improvement Plan as provided by the City for Fiscal Years 2018 through 2023.

Table 13

City of Palm Coast, Florida
Water and Wastewater Utility System

Wastewater Capital Improvement Program Recognized in System Capital Facilities Fees (1)

Line No.	Project Description	Type	Purpose				Average Service Life	Estimated Capital Cost FY 2018 - 2023	Adjustments	Adjustments Related to Future Projects	Net Applicable Expenditures	Functional Category				Retirement Adjustment		
			Expansion	Existing		Future						Wastewater Treatment	Transmission		Collection Other	Total	Treatment	Transmission
				New	Replace								Existing	Expansion				
WASTEWATER SYSTEM																		
Pretreatment Effluent Pumping System																		
1	System Upgrades	Collection	0.00%	100.00%	0.00%	0.00%	30.00	\$ 1,802,045	\$ -	\$ -	\$ 1,802,045	\$ -	\$ -	\$ -	\$ -	\$ 1,802,045	\$ -	
2	PEP Tanks	Collection	0.00%	67.00%	33.00%	0.00%	30.00	1,200,000	-	-	1,200,000	-	-	-	-	1,200,000	-	
3	PEP Tanks New	Collection	0.00%	100.00%	0.00%	0.00%	30.00	6,832,000	-	-	6,832,000	-	-	-	-	6,832,000	-	
4	PEP Tanks Replacement	Collection	0.00%	0.00%	100.00%	0.00%	30.00	667,000	-	-	667,000	-	-	-	-	667,000	-	
5	PEP Tanks Replacement	Collection	0.00%	0.00%	100.00%	0.00%	30.00	1,334,000	-	-	1,334,000	-	-	-	-	1,334,000	-	
6	PEP Tanks Replacement	Collection	0.00%	0.00%	100.00%	0.00%	30.00	1,167,000	-	-	1,167,000	-	-	-	-	1,167,000	-	
Wastewater Treatment Plant #1																		
7	Headworks Coating Rehab	Treatment	0.00%	0.00%	100.00%	0.00%	30.00	300,000	-	-	300,000	300,000	-	-	-	300,000	123,596	
8	Clarifiers #7 & #8 Rehab	Treatment	0.00%	0.00%	100.00%	0.00%	30.00	903,000	-	-	903,000	903,000	-	-	-	903,000	372,024	
9	Headworks Screening	Treatment	0.00%	0.00%	100.00%	0.00%	20.00	-	-	-	-	-	-	-	-	-	-	
10	Centrifuge Replacement (Replace with Belt Press)	Treatment	0.00%	0.00%	100.00%	0.00%	30.00	2,000,000	-	-	2,000,000	2,000,000	-	-	-	2,000,000	823,974	
11	Biosolids Treatment Disposal Improvements	Treatment	0.00%	0.00%	100.00%	0.00%	30.00	512,000	-	-	512,000	512,000	-	-	-	512,000	210,937	
12	Biosolids Treatment Disposal Improvements	Treatment	0.00%	0.00%	100.00%	0.00%	30.00	2,000,000	-	-	2,000,000	2,000,000	-	-	-	2,000,000	823,974	
13	New Administration Building	Treatment	0.00%	100.00%	0.00%	0.00%	30.00	550,000	-	-	550,000	-	-	-	-	550,000	-	
14	New Genset and Above Ground Fuel Storage Tank	Treatment	0.00%	100.00%	0.00%	0.00%	40.00	900,000	-	-	900,000	900,000	-	-	-	900,000	-	
15	Property Acquisition - Mosquito Control Property	Treatment	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
16	Expand Odor Control System	Treatment	0.00%	100.00%	0.00%	0.00%	30.00	233,500	-	-	233,500	233,500	-	-	-	233,500	-	
17	Difused air	Treatment	0.00%	0.00%	100.00%	0.00%	20.00	250,000	-	-	250,000	-	-	-	-	250,000	138,419	
18	Difused air	Treatment	0.00%	0.00%	100.00%	0.00%	20.00	2,000,000	-	-	2,000,000	2,000,000	-	-	-	2,000,000	1,107,352	
19	SCADA Conversion to Mission Communication	Collection	0.00%	0.00%	100.00%	0.00%	20.00	-	-	-	-	-	-	-	-	-	-	
Force Mains																		
20	OKR Force Mains (Phase 2)	Trans	0.00%	100.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
21	Old Kings Road (Phase 3)	Trans	0.00%	100.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
22	Pine Lakes to WWTP #2	Trans	0.00%	100.00%	0.00%	0.00%	40.00	121,843	-	-	121,843	-	-	-	-	121,843	-	
23	Pine Lakes to WWTP #2	Trans	0.00%	100.00%	0.00%	0.00%	40.00	1,998,157	-	-	1,998,157	-	-	-	-	1,998,157	-	
24	Phase 1 PS 27-1 to Palm Coast Park	Trans	0.00%	100.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
25	Phase 2 PS 23-3 to Gravity on Pine Lakes	Trans	0.00%	100.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
26	Phase 2 PS 23-4 to Gravity on Pine Lakes	Trans	0.00%	100.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
27	White View, PS 24-2 to Old Kings Road	Trans	0.00%	100.00%	0.00%	0.00%	40.00	880,000	-	-	880,000	-	-	-	-	880,000	-	
28	Belle Terre Relocate	Trans	0.00%	50.00%	50.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
29	Matanzas Relocate	Trans	0.00%	50.00%	50.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
30	Ravenwood to WWTP #2 on US1	Trans	0.00%	100.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
31	WTP #2 Concentrate Line Conversion	Treatment	0.00%	100.00%	0.00%	0.00%	40.00	220,000	-	-	220,000	220,000	-	-	-	220,000	-	
32	Force Main from Pump Station 4-2 or PS E	Trans	0.00%	100.00%	0.00%	0.00%	40.00	550,000	-	-	550,000	-	-	-	-	550,000	-	
33	Force Main from Pump Station D (CL1) to WWTP	Trans	0.00%	100.00%	0.00%	0.00%	40.00	1,000,000	-	-	1,000,000	-	-	-	-	1,000,000	-	
34	Phase 1 PS G to Headworks	Trans	0.00%	100.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
Reclaimed Water Mains																		
35	Seminole Blvd Reclaimed Water Main	Treatment	100.00%	0.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
36	Matanzas Wood Pkwy Reclaimed Water Main, ph1 & ph2	Treatment	100.00%	0.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
37	Old Kings Road Phase 2	Treatment	100.00%	0.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
38	16" Discharge with study	Treatment	100.00%	0.00%	0.00%	0.00%	40.00	270,000	-	-	270,000	-	270,000	-	-	270,000	-	
39	16" Discharge with study	Treatment	100.00%	0.00%	0.00%	0.00%	40.00	1,700,000	-	-	1,700,000	-	1,700,000	-	-	1,700,000	-	
40	WTP #3 Concentrate Pipe Investigation for SS Discharge	Treatment	100.00%	0.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
41	Irrigation along US#1, Palm Coast Park	Treatment	100.00%	0.00%	0.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	
42	RCW Main Extension to the Sports Complex	Treatment	0.00%	100.00%	0.00%	0.00%	40.00	1,000,000	-	-	1,000,000	1,000,000	-	-	-	1,000,000	-	
43	Cigar Lake Water Quality Improvements-aeration	Treatment	0.00%	50.00%	50.00%	0.00%	40.00	250,745	-	-	250,745	250,745	-	-	-	250,745	38,434	
44	Reclaimed Meters	Other	0.00%	50.00%	50.00%	0.00%	40.00	290,000	-	-	290,000	-	-	-	-	290,000	-	
Wastewater Treatment Plant #2																		
45	Engineering Design & Construction	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	5,000,000	(5,000,000)	-	-	-	-	-	-	-	-	
46	Reclaimed Water Discharge to Wetlands Design/Const.	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	570,000	(570,000)	-	-	-	-	-	-	-	-	
47	Asset Management Plan	Other	100.00%	0.00%	0.00%	0.00%	30.00	80,000	-	-	80,000	-	-	-	-	80,000	-	
48	WWTP #2 improvements - Discharge Automation	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	100,000	-	-	100,000	-	100,000	-	-	100,000	-	
49	Planning and Engineering (Accommodate Growth)	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	350,000	-	-	350,000	-	350,000	-	-	350,000	-	
50	Planning and Engineering (Accommodate Growth)	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	350,000	-	-	350,000	-	350,000	-	-	350,000	-	
51	Engineering Construction (Accommodate Growth)	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	15,000,000	-	-	15,000,000	-	15,000,000	-	-	15,000,000	-	
52	Reuse for Aquifer Recharge - Non Potable Reuse	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	-	-	-	-	-	-	-	-	-	-	
53	Investigation	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	250,000	-	-	250,000	-	250,000	-	-	250,000	-	
54	Land	Treatment	100.00%	0.00%	0.00%	0.00%	-	750,000	-	-	750,000	-	750,000	-	-	750,000	-	
55	Design and Construction	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	200,000	-	-	200,000	-	200,000	-	-	200,000	-	
56	Design and Construction	Treatment	100.00%	0.00%	0.00%	0.00%	30.00	1,500,000	-	-	1,500,000	-	1,500,000	-	-	1,500,000	-	
Beachside Sewer																		
57	Design and Construction/phase 2	Trans	0.00%	100.00%	0.00%	0.00%	40.00	1,500,000	(750,000)	-	750,000	-	750,000	-	-	750,000	-	
58	Design and Construction/phase 2	Trans	0.00%	100.00%	0.00%	0.00%	40.00	1,500,000	(750,000)	-	750,000	-	750,000	-	-	750,000	-	
Lift Stations and Pump Stations																		
59	Pump Station Upgrades	Trans	0.00%	0.00%	100.00%	0.00%	20.00	850,000	-	-	850,000	-	850,000	-	-	850,000	470,624	
60	Pump Station On-Line Generator	Trans	0.00%	0.00%	100.00%	0.00%	20.00	370,000	-	-	370,000	-	370,000	-	-	370,000	204,860	
61	Pump Station FEMA Design	Trans	0.00%	0.00%	100.00%	0.00%	20.00	290,000	-	-	290,000	-	290,000	-	-	290,000	160,566	
62	Pump Station On-Line Generator	Trans	0.00%	0.00%	100.00%	0.00%	20.00	1,200,000	-	-	1,200,000	-	1,200,000	-	-	1,200,000	664,411	
63	Pump Station On-Line Generator	Trans	0.00%	0.00%	100.00%	0.00%	20.00	350,000	-	-	350,000	-	350,000	-	-	350,000	193,787	
64	Pump Station Odor Control Systems	Trans	0.00%	0.00%	100.00%	0.00%	20.00	580,000	-	-	580,000	-	580,000	-	-	580,000	321,132	
65	OKR Master Pump Station	Trans	0.00%	0.00%	100.00%	0.00%	20.00	-	-	-	-	-	-	-	-	-	-	
66	Belle Terre/Matanzas Woods MPS	Trans	0.00%	100.00%	0.00%	0.00%	20.00	450,000	-	-	450,000	-	450,000	-	-	450,000	-	
67	Pump Station 34-1 Upgrade	Trans	0.00%	0.00%	100.00%	0.00%	20.00	350,000	-	-	350,000	-	350,000	-	-	350,000	193,787	
68	Commerce Blvd Pump Station	Trans	0.00%	0.00%	100.00%	0.00%	20.00	50,000	-	-	50,000	-	50,000	-	-	50,000	27,684	
69	Hargrove Pump Station	Trans	0.00%	0.00%	100.00%	0.00%	20.00	50,000	-	-	50,000	-	50,000	-	-	50,000		

Table 13

City of Palm Coast, Florida
Water and Wastewater Utility System

Wastewater Capital Improvement Program Recognized in System Capital Facilities Fees (U)

Line No.	Project Description	Type	Purpose				Average Service Life	Estimated Capital Cost FY 2018 - 2023	Adjustments	Adjustments Related to Future Projects	Net Applicable Expenditures	Functional Category				Retirement Adjustment			
			Expansion	Existing		Future						Wastewater Treatment		Transmission		Collection Other	Total	Treatment	Transmission
				New	Replace							Existing	Expansion	Existing	Expansion				
87	Replace submersible pumps	Collection	0.00%	0.00%	100.00%	0.00%	20.00	560,000	-	-	560,000	-	-	-	-	560,000	560,000	-	-
88	PEP Replacement Pumps and Panels	Collection	0.00%	0.00%	100.00%	0.00%	30.00	1,725,000	-	-	1,725,000	-	-	-	-	1,725,000	1,725,000	-	-
89	Manhole Disks	Collection	0.00%	0.00%	100.00%	0.00%	40.00	20,000	-	-	20,000	-	-	-	-	20,000	20,000	-	-
Miscellaneous Utility Services																			
90	CUP Modification Application	Other	0.00%	0.00%	100.00%	0.00%	40.00	144,500	(144,500)	-	-	-	-	-	-	-	-	-	-
91	CUP Compliance Report	Other	0.00%	0.00%	100.00%	0.00%	40.00	25,000	(25,000)	-	-	-	-	-	-	-	-	-	-
92	Consultant Input on CIP Development 20161298	Other	0.00%	0.00%	100.00%	0.00%	40.00	41,000	(41,000)	-	-	-	-	-	-	-	-	-	-
93	Water Supply Facilities Work Plan	Other	0.00%	0.00%	100.00%	0.00%	40.00	17,500	(17,500)	-	-	-	-	-	-	-	-	-	-
94	Rate Study/Bond Issue/SRF Capital Financing Plan	Other	0.00%	0.00%	100.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	-	-
95	LiDAR Project	Other	0.00%	0.00%	100.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	-	-
96	Surface / Groundwater Interface Model	Other	0.00%	0.00%	100.00%	0.00%	40.00	12,499	-	-	12,499	-	-	-	-	12,499	12,499	-	-
97	Utility Admin R-R	Other	0.00%	0.00%	100.00%	0.00%	40.00	80,000	-	-	80,000	-	-	-	-	80,000	80,000	-	-
98	Technology Upgrades (\$35,357.68 in POs)	Other	0.00%	0.00%	100.00%	0.00%	40.00	100,000	(100,000)	-	-	-	-	-	-	-	-	-	-
99	Inventory Storage	Other	0.00%	0.00%	100.00%	0.00%	40.00	130,000	(130,000)	-	-	-	-	-	-	-	-	-	-
100	Utility Compound Upgrade	Other	0.00%	0.00%	100.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	-	-
101	Additional land for 2 Utility	Other	0.00%	0.00%	100.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	-	-
102	Replace building roofs (6 Buildings)	Other	0.00%	0.00%	100.00%	0.00%	40.00	255,000	(255,000)	-	-	-	-	-	-	-	-	-	-
103	Admin Allocation 54029099 049000	Other	0.00%	0.00%	100.00%	0.00%	40.00	-	-	-	-	-	-	-	-	-	-	-	-
104	Machinery and Equipment From Budget	Other	0.00%	0.00%	100.00%	0.00%	40.00	71,996	-	-	71,996	-	-	-	-	71,996	71,996	-	-
105	Transfer to Fleet Management - New Initial Vehicle Purchases	Other	0.00%	0.00%	100.00%	0.00%	40.00	913,929	-	-	913,929	-	-	-	-	913,929	913,929	-	-
106	Transfer to Fleet Communication - New Initial Purchases	Other	0.00%	0.00%	100.00%	0.00%	40.00	41,268	-	-	41,268	-	-	-	-	41,268	41,268	-	-
107	TOTAL WASTEWATER PROJECTS							\$ 81,783,983	\$ (7,783,000)	\$ 0	\$ 94,000,983	\$ 11,319,245	\$ 20,470,000	\$ 16,065,000	\$ 0	\$ 26,146,738	\$ 74,000,983	\$ 3,721,106	\$ 3,773,300
108	PERCENT OF TOTAL							100.00%			13.30%	27.66%	21.71%	0.00%		35.33%	100.00%	5.03%	5.10%

Based on Capital Improvement Plan as provided by the City for Fiscal Years 2018 through 2023.

**City of Palm Coast, Florida
Water and Wastewater Utility System**

Development of Water System Capital Facilities Fee

Line No.	Description	Amount
	Total Estimated Cost of Existing Water Production and Treatment Facilities:	
1	Cost of Existing Facilities (1)	\$154,912,895
2	Additional Costs Capitalized to Plant in Service (2)	16,455,000
3	Less Anticipated Retirements (3)	(3,781,227)
4	Less Receipt of Grant Funds (4)	-
5	Subtotal Water Production and Treatment Facilities	<u>\$167,586,669</u>
6	Existing Nominal Plant Capacity (MGD) (MDF) (5)	15.384
7	Existing Nominal Plant Capacity (MGD) (ADF) (5) (6)	10.989
8	ERC Factor - GPD (7)	225
9	Estimated ERCs to be Served by Existing Facilities	48,838
10	Percent Remaining Capacity of Existing Facilities	26.17%
11	Estimated Future ERCs to be Served by Existing Facilities	12,781
12	Allocation of Existing Facilities to Incremental Growth	\$43,857,431
13	Rate per ERC Associated with Existing Facilities	3,431
	Total Estimated Cost of Additional Water Production and Treatment Facilities: (8)	
14	Cost of Additional Water Production/Treatment Facilities	\$8,500,000
15	New Plant Capacity (MGD) (MDF)	3,000
16	New Plant Capacity (MGD) (ADF) (6)	2,143
17	Estimated ERCs to be Served by Additional Facilities	9,524
18	Rate per ERC Associated with Additional Facilities	892.48
19	Rate per ERC Allocable to Water Production/Treatment Facilities	<u>\$2,347.35</u>
	Primary Transmission System: (9)	
20	Existing Facilities (10)	\$14,303,011
21	Additional Costs Capitalized to Plant in Service (2)	4,050,000
22	Less Anticipated Retirements (3)	(191,598)
23	Less Receipt of Grant Funds (4)	-
24	Total Primary Transmission Facility Costs	<u>\$18,161,413</u>
25	Total Nominal Plant Capacity (MGD) (ADF) (Line 7 + Line 15)	13.13
26	ERC Factor - GPD (7)	225
27	Total Estimated ERCs served by Transmission Facilities	<u>58,362</u>
28	Net Rate per ERC of Primary Transmission Facilities	<u>\$311.19</u>
29	Total Combined Rate per ERC before Rate Adjustment	\$2,658.54
30	Rate Adjustment	0.00
31	Total Combined Rate per ERC After Rate Adjustment	<u>2,658.54</u>
32	Rounded Rate per ERC	\$2,658.00
33	Cost Per Gallon	<u><u>\$11.813</u></u>
	Florida Water Star Certified Properties	
34	Adjustment Factor for Florida Water Star Certificate	-20%
35	Adjusted Rate for Florida Water Star Certified Property	
35	Rounded Rate per ERC	\$2,125.40
36	Cost Per Gallon	<u><u>\$9.451</u></u>

MDF = Maximum Daily Flow

ADF = Average Daily Flow

ERC = Equivalent Residential Connection

GPD = Gallons per Day

Footnotes on Page 2 of 2.

**City of Palm Coast, Florida
Water and Wastewater Utility System**

Development of Water System Capital Facilities Fee

Footnotes:

- (1) Amount reflects estimated water production and treatment assets currently in service.
- (2) Amounts shown reflects net recognized additions to the water production and treatment facilities or transmission facilities, where applicable (total projected cost addition less the estimated retirement value of the assets currently in service for projects which represent plant replacements).
- (3) Amounts reflect estimated fixed asset retirements due to imposition of the capital improvement plan of the City which recognizes the replacement of such assets and which are recognized in the total treatment and/or transmission function.
- (4) The City reports that no grant funds have been received to finance the water production, treatment or backbone transmission system as of the date of this report.
- (5) Amount shown derived from information provided by the City's Consulting Engineers; and includes the following facilities:

	MDF-MGD Capacity
Palm Coast WTP #1	6.000
Palm Coast WTP #2	6.384
Palm Coast WTP #3	3.000
 Total Plant Capacity - Maximum Daily Basis	 <u>15.384</u>

- (6) The average daily flow was calculated assuming a maximum daily flow to average daily flow factor of 1.40 based to be consistent with the actual flow relationships occurring during a recently completed six (6) Fiscal Year period.
- (7) The level of service factor for an ERC reflects capacity requirements expressed on an average daily water demand basis; the factor was based on the capacity planning assumptions provided by the City's Consulting Engineers.
- (8) Amount based on discussions with the City and as reflected in the City's Six-Year Capital Improvement Plan as prepared by the City's Consulting Engineers and provided by the City. The additions to plant capacity are summarized below:

	Amount	
	MDF-MGD	Period
Palm Coast WTP No.1	0.000	N/A
Palm Coast WTP No. 2	0.000	N/A
Palm Coast WTP No. 3	3.000	2023
 Total Plant Capacity Expansion - Maximum Daily Basis	 <u>3.000</u>	

- (9) Amounts do not include the estimated cost of on-site capital expenditures such as meters, hydrants, services, and on-site (local) distribution utility plant facilities or general plant assets (vehicles, equipment, etc.); such amounts are i) generally provided by the developer or owners of property which specifically benefit from such facilities or ii) funded by a separate and distinct fee (e.g., - meter installation charge).
- (10) Amounts reflects cost of water transmission and storage utility plant in service.

**City of Palm Coast, Florida
Water and Wastewater Utility System**

Development of Wastewater System Capital Facilities Fee

Line No.	Description	Amount
	Total Estimated Cost of Existing Wastewater Treatment/Disposal Facilities:	
1	Cost of Existing Facilities (1)	\$ 83,105,581
2	Additional Costs Capitalized to Plant in Service (2)	11,319,245
3	Less Anticipated Retirements (3)	(3,721,106)
4	Less Receipt of Grant Funds (4)	-
5	Subtotal Wastewater Treatment/Disposal Facilities	<u>\$90,703,720</u>
6	Existing Plant Capacity (MGD) (ADF) (5)	6.830
7	ERC Factor - GPD (6)	180
8	Estimated ERCs to be Served by Existing Facilities	37,944
9	Percent Remaining Capacity of Existing Facilities	12.52%
10	Estimated Future ERCs to be Served by Existing Facilities	4,750
11	Allocation of Existing Facilities to Incremental Growth	\$ 11,354,565
12	Rate per ERC Associated with Existing Facilities	\$2,390.43
	Total Estimated Cost of Additional Wastewater Treatment/Disposal Facilities: (7)	
13	Initial WWTP #2 Expansion	\$ 32,005,518
14	Second Phase of WWTP #2 Expansion	20,470,000
15	Total Estimated Cost of Additional Wastewater	<u>52,475,518</u>
16	New Plant Capacity (MGD) (ADF) (7)	4.000
17	Estimated ERCs to be Served by Additional Facilities	22,222
18	Rate per ERC Associated with Additional Facilities	2,361.42
19	Rate per ERC for Wastewater Treatment/Disposal Facilities	<u>\$2,366.54</u>
	Primary Transmission System: (8)	
20	Existing Facilities (9)	\$17,440,588
21	Additional Costs Capitalized to Plant in Service (2)	16,065,000
22	Less Anticipated Retirements (3)	(3,773,300)
23	Less Receipt of Grant Funds	-
24	Total Primary Transmission Facility Costs	<u>29,732,288</u>
25	Total Existing and New Plant Capacity (MGD) (ADF) (Line 6 + Line 13)	10.83
26	ERC Factor - GPD (6)	180
27	Total Estimated ERCs served by Transmission Facilities	<u>60,167</u>
28	Rate per ERC of Primary Transmission Facilities	<u>\$494.16</u>
29	Total Combined Rate per ERC before Rate Adjustment	\$2,860.70
30	Rate Adjustment	0.00
31	Total Combined Rate per ERC After Rate Adjustment	<u>2,860.70</u>
32	Rounded Rate per ERC	\$2,860.00
33	Cost Per Gallon	<u><u>\$15.89</u></u>

ADF = Average Daily Flow

ERC = Equivalent Residential Connection

GPD = Gallons Per Day

Footnotes on Page 2 of 2.

**City of Palm Coast, Florida
Water and Wastewater Utility System**

Development of Wastewater System Capital Facilities Fee

Footnotes:

- (1) Amounts reflects estimated wastewater treatment and effluent disposal assets currently in service.
- (2) Amounts shown reflect net recognized additions to the wastewater treatment and effluent disposal facilities or transmission facilities, where applicable (total projected cost addition less the estimated retirement value of the assets currently in service for projects which represent plant replacements).
- (3) Amounts reflect estimated fixed asset retirements due to imposition of the capital improvement plan of the City which recognizes the replacement of such assets and which are recognized in the total treatment and/or transmission function.
- (4) The City reports that no grant funds have been received to finance the wastewater treatment or backbone transmission system as of the date of this report.
- (5) Amount shown derived from information provided by the City's Consulting Engineers and summarized below:

	<u>Capacity - MGD</u>
	<u>AADF</u>
Palm Coast WWTP # 1	6.830
Palm Coast WWTP (AADF)	0.000
Total Plant Capacity	<u>6.830</u>

- (6) The level of service factor for an ERC reflects capacity requirements expressed on an average daily wastewater demand basis; the factor was based on the capacity planning assumptions provided by the City's Consulting Engineers.
- (7) Amounts were based on discussions with the City and as reflected in the City's Six-Year Capital Improvement Plan as prepared by the City's Consulting Engineers and provided by the City. The additions to plant capacity are summarized below:

	<u>Capacity</u>	<u>Period</u>
	MGD	
WWTP No. 2 Initial Expansion ADF	2.000	2018
WWTP No. 2 Second Expansion ADF	2.000	2023
Adjusted Capacity - Average Daily Basis	<u>4.000</u>	

- (8) Amounts do not include the estimated cost of retail on-site capital expenditures such as manholes, local lift stations, service laterals, and on-site (local) collection utility plant facilities or general plant assets (vehicles, equipment, etc.); such amounts are i) generally provided by the developer or owners of property which specifically benefit from such facilities or ii) funded by a separate and distinct fee (e.g., - wastewater tap charge).
- (9) Amounts reflects cost of wastewater transmission and master pumping station utility plant in service.

Table 16
City of Palm Coast, Florida
Water and Wastewater Utility 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	8,000 Gallons	10,000 Gallons	15,000 Gallons	20,000 Gallons	25,000 Gallons
City of Palm Coast									
1	Existing Rates	\$16.11	\$24.83	\$33.55	\$52.31	\$61.91	\$92.51	\$123.11	\$162.36
	Proposed Rates	\$17.08	\$26.32	\$35.56	\$55.45	\$65.63	\$98.08	\$130.53	\$172.13
Other Florida Utilities:									
2	Brevard County	\$16.48	\$16.48	\$21.39	\$41.03	\$55.29	\$90.94	\$139.39	\$194.64
3	City of Daytona Beach [2]	16.37	21.76	32.54	54.10	64.88	91.83	118.78	145.73
4	City of Edgewater	11.72	15.66	28.76	59.91	76.31	127.51	178.71	229.91
5	City of Melbourne	8.00	17.14	26.28	44.56	53.70	76.55	99.40	122.25
6	City of Ormond Beach	15.08	15.08	21.44	35.34	42.88	61.73	80.58	99.43
7	City of Palm Bay [2]	14.01	21.41	28.81	46.94	56.56	86.16	123.16	160.16
8	City of Port Orange	9.90	12.86	20.62	36.14	43.90	71.76	113.30	166.90
9	City of Port St. Lucie	10.51	18.89	27.27	47.87	58.81	89.94	123.59	157.24
10	City of St. Augustine	12.89	18.47	27.09	50.41	62.07	100.57	139.07	186.02
11	City of South Daytona	14.23	19.75	30.79	53.36	65.38	95.43	125.48	155.53
12	St. Johns County	12.39	18.67	24.95	39.88	47.74	80.84	113.94	161.94
13	City of Titusville [2]	9.79	16.13	22.47	39.92	49.44	81.09	141.29	201.49
14	New Smyrna Beach Utilities Commission	11.65	13.51	15.68	22.08	26.00	35.80	47.45	59.10
15	Volusia County - Softened	13.92	21.80	29.68	48.17	57.87	82.92	110.57	170.22
14	JEA (City of Jacksonville) [2]	12.60	15.20	17.80	26.34	32.28	47.13	61.98	91.83
15	Flagler County - (Beverly Beach)	28.88	41.96	55.04	81.20	94.28	126.98	159.68	192.38
16	City of West Melbourne	13.88	26.38	39.13	65.43	79.03	114.43	150.18	185.93
17	Other Florida Utilities' Average	\$13.66	\$19.48	\$27.63	\$46.63	\$56.85	\$85.98	\$119.21	\$157.69

Footnotes:

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect June 2018 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] Utilities currently have proposed rate increases that are not reflected in the current rates above.

Table 17
City of Palm Coast, Florida
Water and Wastewater Utility 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	8,000 Gallons	10,000 Gallons	15,000 Gallons	20,000 Gallons	25,000 Gallons
City of Palm Coast									
1	Existing Rates	\$15.81	\$24.01	\$32.21	\$48.61	\$48.61	\$48.61	\$48.61	\$48.61
	Proposed Rates	16.76	25.46	34.16	51.56	51.56	51.56	51.56	51.56
Other Florida Utilities:									
2	Brevard County	\$21.22	\$30.18	\$39.14	\$57.06	\$66.02	\$74.98	\$74.98	\$74.98
3	City of Daytona Beach [2]	13.58	22.85	41.39	78.47	97.01	143.36	189.71	236.06
4	City of Edgewater	17.00	30.38	43.76	70.52	83.90	117.35	150.80	184.25
5	City of Melbourne	11.83	25.53	39.23	66.63	80.33	114.58	148.83	183.08
6	City of Ormond Beach	18.79	18.79	27.65	45.37	54.23	76.38	98.53	120.68
7	City of Palm Bay [2]	19.73	31.15	42.57	65.41	76.83	76.83	76.83	76.83
8	City of Port Orange	11.70	20.40	29.10	46.50	55.20	63.90	63.90	63.90
9	City of Port St. Lucie	13.89	28.39	42.89	71.89	71.89	71.89	71.89	71.89
10	City of St. Augustine	13.17	26.11	39.05	64.93	77.87	77.87	77.87	77.87
11	City of South Daytona	15.37	22.45	36.61	65.62	81.16	120.01	158.86	197.71
12	St. Johns County	14.55	23.75	32.95	51.35	60.55	60.55	60.55	60.55
13	City of Titusville [2]	14.26	29.36	44.46	74.66	89.76	127.51	127.51	127.51
14	New Smyrna Beach Utilities Commission	18.61	26.75	34.89	51.17	59.31	79.66	100.01	120.36
15	Volusia County - Softened	21.93	30.99	40.05	58.17	67.23	85.35	85.35	85.35
14	JEA (City of Jacksonville) [2]	14.10	24.72	35.34	58.74	71.52	103.47	135.42	135.42
15	Flagler County - (Beverly Beach)	14.42	23.86	33.30	52.18	61.62	85.22	108.82	132.42
16	City of West Melbourne	13.87	23.73	33.59	53.31	63.17	87.82	112.47	137.12
17	Other Florida Utilities' Average	\$15.77	\$25.85	\$37.41	\$60.70	\$71.62	\$92.16	\$108.37	\$122.70

Footnotes:

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect June 2018 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] Utilities currently have proposed rate increases that are not reflected in the current rates above.

Table 18
City of Palm Coast, Florida
Water and Wastewater Utility System

Comparison of Typical Monthly Residential Bills for Combined 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	8,000 Gallons	10,000 Gallons	15,000 Gallons	20,000 Gallons	25,000 Gallons
City of Palm Coast									
1	Existing Rates	\$31.92	\$48.84	\$65.76	\$100.92	\$110.52	\$141.12	\$171.72	\$210.97
2	Proposed Rates	\$33.84	\$51.78	\$69.72	\$107.01	\$117.19	\$149.64	\$182.09	\$223.69
Other Florida Utilities:									
3	Brevard County	\$37.70	\$46.66	\$60.53	\$98.09	\$121.31	\$165.92	\$214.37	\$269.62
4	City of Daytona Beach [2]	29.95	44.61	73.93	132.57	161.89	235.19	308.49	381.79
5	City of Edgewater	28.72	46.04	72.52	130.43	160.21	244.86	329.51	414.16
6	City of Melbourne	19.83	42.67	65.51	111.19	134.03	191.13	248.23	305.33
7	City of Ormond Beach	33.87	33.87	49.09	80.71	97.11	138.11	179.11	220.11
8	City of Palm Bay [2]	33.74	52.56	71.38	112.35	133.39	162.99	199.99	236.99
9	City of Port Orange	21.60	33.26	49.72	82.64	99.10	135.66	177.20	230.80
10	City of Port St. Lucie	24.40	47.28	70.16	119.76	130.70	161.83	195.48	229.13
11	City of St. Augustine	26.06	44.58	66.14	115.34	139.94	178.44	216.94	263.89
12	City of South Daytona	29.60	42.20	67.40	118.98	146.54	215.44	284.34	353.24
13	St. Johns County	26.94	42.42	57.90	91.23	108.29	141.39	174.49	222.49
14	City of Titusville [2]	24.05	45.49	66.93	114.58	139.20	208.60	268.80	329.00
15	New Smyrna Beach Utilities Commission	30.26	40.26	50.57	73.25	85.31	115.46	147.46	179.46
16	Volusia County - Softened	35.85	52.79	69.73	106.34	125.10	168.27	195.92	255.57
15	JEA (City of Jacksonville) [2]	26.70	39.92	53.14	85.08	103.80	150.60	197.40	227.25
16	Flagler County - (Beverly Beach)	43.30	65.82	88.34	133.38	155.90	212.20	268.50	324.80
17	City of West Melbourne	27.75	50.11	72.72	118.74	142.20	202.25	262.65	323.05
18	Other Florida Utilities' Average	\$29.43	\$45.33	\$65.04	\$107.33	\$128.47	\$178.14	\$227.58	\$280.39

Footnotes:

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect June 2018 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] Utilities currently have proposed rate increases that are not reflected in the current rates above.

Table 19
City of Palm Coast, Florida
Water and Wastewater Utility System

Comparison of Residential Capital Facilities Fees for Water and Wastewater Service [1]

Line No.	Description	Residential Connection for a 5/8" or 3/4" Meter		
		Water	Wastewater	Combined
<u>City of Palm Coast</u>				
1	Existing Rates	\$ 2,356	\$ 2,609	\$ 4,965
2	Proposed	2,658	2,860	\$ 5,518
<u>Other Florida Utilities:</u>				
3	Brevard County	\$ 1,903	\$ 2,257	\$ 4,160
4	City of Daytona Beach [2]	1,461	1,660	3,121
5	City of Edgewater	1,612	2,227	3,839
6	City of Melbourne	1,540	2,210	3,750
7	City of Ormond Beach	2,543	2,477	5,020
8	City of Palm Bay [2]	2,451	3,139	5,591
9	City of Port Orange	1,555	1,540	3,095
10	City of Port St. Lucie	1,360	2,080	3,440
11	City of St. Augustine	1,785	2,342	4,127
12	City of South Daytona	625	625	1,250
13	St. Johns County	1,953	2,472	4,425
14	City of Titusville [2]	1,500	2,070	3,570
15	New Smyrna Beach Utilities Commission	1,340	1,290	2,630
16	Volusia County - Softened	1,546	2,936	4,482
15	JEA (City of Jacksonville) [2]	1,257	2,052	3,309
16	Flagler County - (Beverly Beach)	2,780	2,500	5,280
17	City of West Melbourne	4,576	3,000	7,576
18	Other Florida Utilities' Average	\$ 1,870	\$ 2,169	\$ 4,039

Footnotes:

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect June 2018 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 will implement a rate revision within the next twelve months.