

CITY OF PALM COAST, FLORIDA



STORMWATER RATE STUDY

September 2018



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



Public Resources Management Group, Inc.

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September 12, 2018

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

Subject: **Stormwater Rate Study**

Ladies and Gentlemen:

Public Resources Management Group, Inc. (“PRMG”) has completed its study of the stormwater utility rates for the City of Palm Coast, Florida (the “City”), and has summarized the results of our analyses and assumptions, which is submitted for your consideration. This report summarizes the proposed rates and financial plan for the Fiscal Year 2019 through Fiscal Year 2024 period (the “Study Period”).

To develop the proposed financial plan and rates for the City’s stormwater utility system (the “System”), we have relied upon certain information and data provided by the City including the City’s Comprehensive Annual Financial Reports; recent stormwater billing statistics; the proposed Fiscal Year 2019 operating budget; and the projected capital improvements expenditure plan. To the extent our analyses use certain data and information provided by the City in the preparation of this report, we have relied upon such information to be accurate and, consequently, we make no representations regarding its accuracy.

The proposed stormwater utility rates presented herein are intended to meet a number of goals and objectives. The most important objective of the study was to develop proposed rates that meet the expenditure requirements of the System in order to fund the anticipated operating and capital needs necessary to maintain and improve stormwater management within the City.

The other goals and objectives considered in the study include:

- Proposed rates should comply with the City’s financial policies; and
- Proposed rates should promote financial sustainability of the Stormwater System.

This report summarizes the results of our analyses and outlines our recommendations and conclusions.

Honorable Mayor and
 Members of the City Council
 City of Palm Coast, Florida
 September 12, 2018
 Page 2

As will be discussed in more detail in this report, the City Council considered three (3) capital plan options during a series of workshop presentations that were developed by City staff and the City's consulting engineers to address existing System deficiencies. The option recommended for implementation provides enhanced and accelerated funding of the Major Capital and R&R Improvements that totals \$56.6 million over the Study Period. The proposed rate option is estimated to provide total revenues of approximately \$74.7 million for the Study Period to fund the operating, debt service and Major Capital and Renewal and Replacement (R&R) Improvements identified for the plan. A copy of the workshop presentation presented on September 11, 2018 is included as Appendix A of this report.

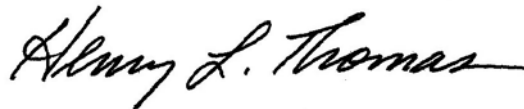
Based on the Fiscal Year 2019 Operating Budget, the proposed Major Capital and R&R Improvements and the assumptions and consideration used in preparing the System projected revenue requirements, the following table summarizes the proposed rates per equivalent residential unit (ERU):

Existing and Proposed Rates per ERU						
<u>Existing Rate</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
\$11.65	\$15.55	\$17.23	\$18.91	\$20.59	\$22.27	\$23.95
Increase per Monthly ERU	\$3.90	\$1.68	\$1.68	\$1.68	\$1.68	\$1.68

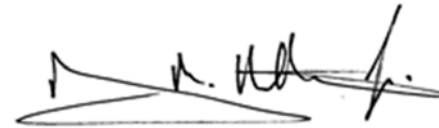
We appreciate the opportunity to be of service to the City and would like to thank you and your staff for the valuable assistance and cooperation that we received during the course of this study.

Respectfully submitted,

Public Resources Management Group, Inc.



Henry Thomas
 Senior Vice President



Murray M. Hamilton, Jr.
 Associate

HLT/mmh
 Attachments

CITY OF PALM COAST, FLORIDA
STORMWATER RATE STUDY
TABLE OF CONTENTS

Title	Page No.
Letter of Transmittal	
Table of Contents	i
List of Tables and Appendices.....	ii
Introduction.....	1
System Revenue Forecast	2
Projected Operating Expenses	3
Capital Improvements	4
Debt Service.....	6
Projected Revenue Sufficiency	7
Stormwater Reserves	8
Conclusion and Recommendations.....	8

CITY OF PALM COAST, FLORIDA
STORMWATER RATE STUDY
LIST OF TABLES AND APPENDICES

<u>Table No.</u>	<u>Description</u>
1	Projected Operating and Non-operating Revenues
2	Projected Operating Expenses – Operations and Regulatory
3	Summary of Escalation References
4	Projected Capital Improvements Program
5	Projected Existing and Proposed Debt Service Payments
6	Development of Net Revenue Requirements from Rates
7	Projected Fund Balances & Interest Income
8	Projected Debt Service Coverage

<u>Appendix No.</u>	<u>Description</u>
A	Workshop Presentation – September 11, 2018

CITY OF PALM COAST, FLORIDA
STORMWATER SYSTEM RATE STUDY

INTRODUCTION

The City's stormwater utility system (the "System") is established as a utility enterprise fund whereby monthly rates for service are intended to fund the operation, maintenance, construction, and administration of the System. The purpose of the System is to regulate, maintain, and manage stormwater run-off within the City.

The System was established to: 1) reduce undesirable stormwater impacts through stormwater runoff reduction and pollution prevention strategies; 2) maintain the integrity of the City's stormwater infrastructure; 3) minimize flooding; 4) plan for and implement future stormwater system improvements; and 5) ensure compliance with Federal, State and local stormwater management rules and regulations. These regulatory requirements include federally mandated National Pollution Discharge Elimination System ("NPDES") permit requirements. The City's NPDES permit regulates what can be discharged into fresh water areas and delegates compliance enforcement to the City and requires that the City control and reduce pollutants entering the Stormwater System from residential and commercial properties.

The City's Stormwater System consists of approximately 1,222 miles of swales, 58 miles of freshwater canals, 31 control structures, 154 miles of ditches, 26 miles of saltwater canals, and 13 freshwater lakes that comprise 111 acres. The City last increased the stormwater rates effective January 1, 2013.

Since the implementation of the existing rates, the City has made significant investments in Major Capital and R&R Improvements including:

- Replaced 43 Street Valley Gutters – Out of a total of 104
- Replaced 266 of Pipe Crossings – Out of a total of 2,525
- Replaced 12 Canal Control Structures (weirs) – Out of a total of 31
- Maintained 114 miles of Swales – Out of a total of 1,222 miles
- Pipe Lining, Emergency Pipe Replacement, and Control Structure Monitoring
- Provided weed control for all canals, but only minimal debris removal (no dredging program currently funded by the City)

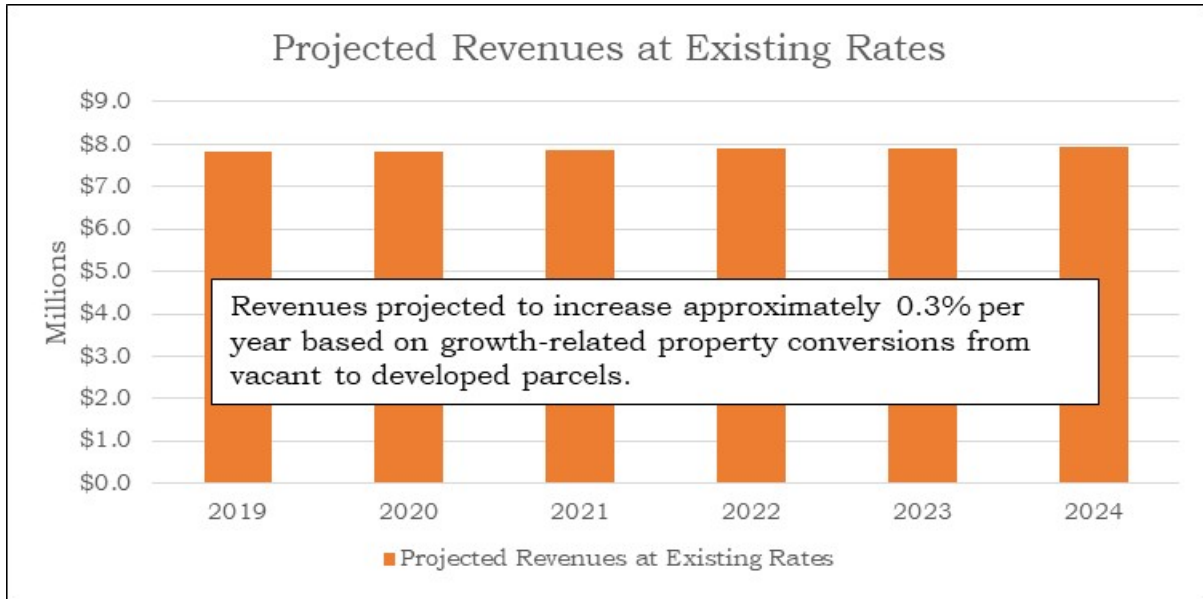
Although the City has made significant investments in the last five years without a rate increase, City staff and the City's consulting engineers have identified significant stormwater deficiencies that still need to be addressed. These deficiencies were evident during recent storm events and prolonged periods of rain that highlighted the need to address the City's aging infrastructure, which averages more than 40 years old. City staff has identified specific infrastructure and maintenance needs and developed a plan of action for accelerating Capital Improvement and R&R efforts by utilizing new LiDAR information to help evaluate the existing System and identify problem areas and opportunities to increase storage capacity. City staff have worked closely with its engineering consultants to analyze and update the City's 5 and 10 year CIP.

The goal of this rate study is to identify stormwater rates that are sufficient to recover the costs of operating the System and financing the CIP. The recommended rate adjustments outlined in this report are intended to fund the proposed Major Capital and R&R Improvements along with the projected costs of operating and maintaining the System through Fiscal Year 2024. These costs are referred to herein as the System revenue requirements. PRMG developed a financial forecast of the revenue requirements in conjunction with the City staff. The financial forecast was comprised of the following tasks: i) a forecast of customer ERUs and revenues; ii) a projection of utility operating expenses; iii) a projection of capital expenditure requirements including Major Capital and R&R Improvements; iv) a projection of existing and future debt service payments; and, v) a review of the System's overall revenue sufficiency and projected financial position.

SYSTEM REVENUE FORECAST

Projected revenues from existing rates for the Study Period were developed based on a review of the City's current ERUs billed and revenues collected. Projected revenues for Fiscal Year 2019 are estimated at \$7.8 million for the year, which includes approximately \$7.3 million in rate revenues and \$520,000 from ad valorem taxes. Based on discussions with City staff, revenues are projected to increase by approximately 0.3% per year based on estimated new property development within the System. The System's service area is limited to the City-limits and thus does not benefit from new property development outside the City limits. In addition, since property owners of vacant parcels are charged a stormwater fee today, once the parcel is developed, the System's revenues are increased only by the additional ERU value associated with the developed property, which on average is 0.3% per year System-wide. Table 1 at the end of this report provides a detailed calculation of the projected revenues under existing rates, which are summarized below:

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As shown above and on Table 1 at the end of this report, the System’s annual stormwater revenues are projected to increase from \$7,807,437 per year for Fiscal Year 2019 to \$7,924,268 for Fiscal Year 2024 based on the existing stormwater rates.

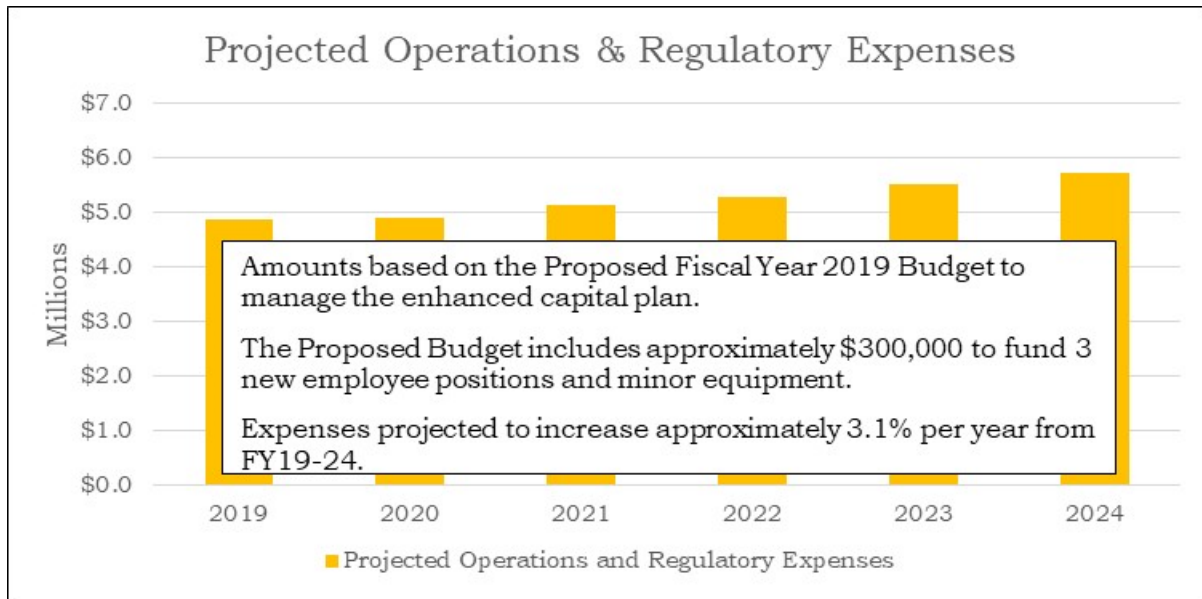
PROJECTED OPERATING EXPENSES

The proposed Fiscal Year 2019 Operating Budget ("Budget") served as the basis for the forecast of System operating expenses as shown on Table 2 at the end of this report. The proposed budget includes approximately \$300,000 to fund three new employee positions and equipment. Beyond Fiscal Year 2019, operating expenses are projected to increase from an estimated \$4,876,911 in Fiscal Year 2019 to \$5,730,391 by Fiscal Year 2024 as shown on Table 2. This amount represents an average increase in System expenses of approximately 3.1% annually. The major escalation factors utilized to develop the projections are shown on Table 3 and include:

1. Labor and Benefits – 5.0% per Year;
2. Permitting and Repairs & Maintenance – 3.0% per Year; and
3. General Inflation – Approximately 2.4% per Year based on estimates prepared by the Congressional Budget Office.

The following chart summarizes the projection of operating expenses over the Study Period as shown on Table 2 at the end of this report:

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CAPITAL IMPROVEMENTS

The City Council considered three (3) capital plan options during a series of workshop presentations, which were developed by City staff and the City’s consulting engineers to address existing System deficiencies. All options presented to the City Council were based on an enhanced CIP to address Major Capital and R&R Improvements necessary to address the service level needs of the System. The enhanced projects identified by City staff and its consulting engineers are as follows:

- Major Capital to be added:
 - Freshwater Canals – dredging, storage and detention (30-yr. program starting in FY20 at 1.8 miles per year)
 - Extending / Lining Pipes – remove fabricform and replace with concrete headwall located on Belle Terre at Buddy Taylor Middle School
 - Preliminary Design / Permitting for Canal Dredging & Capacity (complete initial design and begin construction by FY20)
 - Purchase Additional Equipment for Ditch Rehabilitation Program

- R&R Improvements to be enhanced:
 - Replace Pipes through Seawalls – 8/yr. when compared to 4/yr. current funding level (program complete FY46)
 - Clean, Inspect and Line 2 Major Pipe Crossings
 - Perform 45 Additional Pipe & Valley Gutter Replacements per year
 - Accelerate Small Diameter Pipe Lining Program
 - Replace Concrete Lined Ditch – F Section
 - Increase Level of Effort for Swale and Ditch Maintenance – Establish Ditch Spray Program

Based on the above Major Capital and R&R Improvements, Option #1 as presented to the City Council included funding of \$40.9 million in capital needs over the Study Period. In addition, City staff and its consulting engineers developed an accelerated capital plan under Option #2, which increased funding by \$23.9 million for the Study Period. The accelerated capital plan included the following additional capital projects during the Study Period:

- Major Capital additions:
 - Four Additional Wier Replacements
 - Design of 84" Pipes at Big Mulberry Creek & OKR with Box Culverts
 - Five Additional Major Pipe Replacements
 - Five Additional Pipe Linings
 - Additional Stormwater Storage / Detention within Canal System
 - Freshwater Canal Dredging – 5.4 miles per year

- R&R Improvement accelerations:
 - Pipes through Seawalls – Complete Program by 9/30/2024
 - Saltwater Canal Endwalls – Complete Program by 9/30/2024
 - Provides Contingency Funding for Future Emergency Pipe Replacements / Repairs

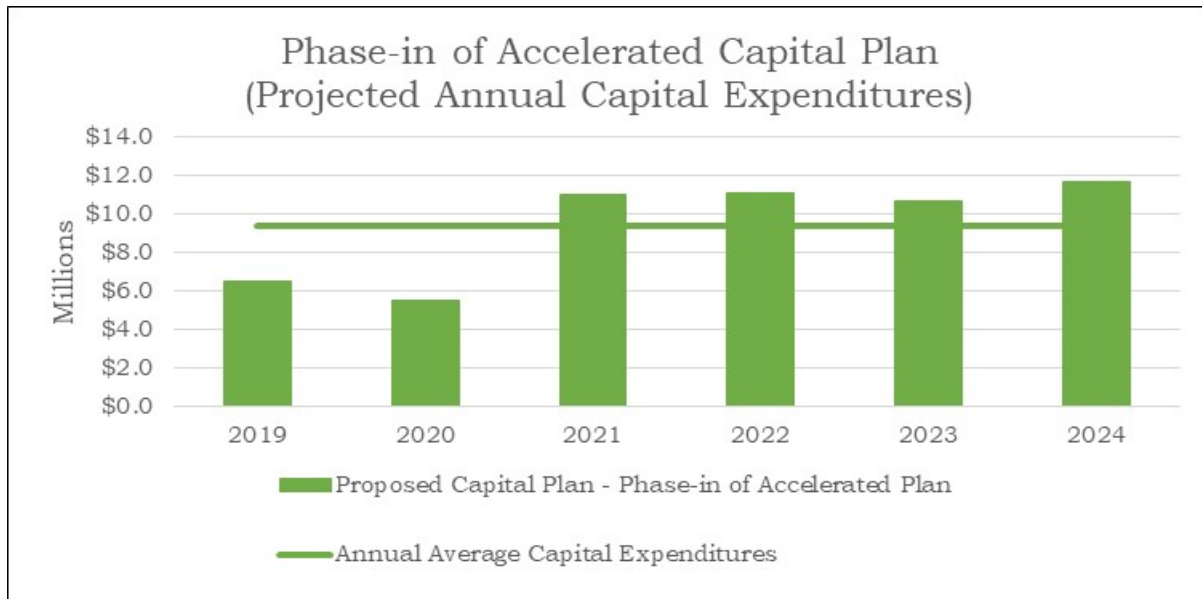
The City Council was provided a presentation on Options #1 and #2 on August 14, 2018 to discuss the enhanced and accelerated Major Capital and R&R Improvements for the Study Period. During the course of the presentation, the City Council requested a third option that accelerates the enhanced Major Capital and R&R Improvements, but which phases-in the increase in project funding over several years. The total amount of capital projects funded during the Study Period for each option reviewed are as follows:

- Option #1 - \$40.9 million
- Option #2 (Accelerated Plan) - \$64.8 million
- Option #3 (Phase-in of Accelerated Plan) - \$56.6 million

Appendix A at the end of this report provides a comparison of the projected rate study results under each capital plan option. As discussed later in this report, Option #3 is recommended for implementation by the City since this option will provide accelerated funding of the Major Capital and R&R Improvements and results in the lowest stormwater rates over the next three (3) years when compared to any other option based on phasing-in the increased level of capital expenditures. A copy of the workshop presentation presented on September 11, 2018 is included as Appendix A of this report.

As shown on Table 4 at the end of this report, the City plans to fund approximately \$56.6 million in Major Capital and R&R Funding over the Study Period, which is summarized below:

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EXISTING AND PROPOSED DEBT SERVICE

The System currently has three (3) outstanding debt obligations with annual payments of approximately \$1.4 million per year. The existing debts include a Senior Lien note with PNC Bank and two (2) Junior Lien State Revolving Fund (SRF) Loans with the Florida Department of Environmental Protection (FDEP). As shown on Table 5 at the end of this report, the existing debt service payments are reduced in the final year of the Study Period, and will be fully retired by Fiscal Year 2031.

Based on the decline in existing debt service payments during the Study Period, we recommend that the City use the available debt capacity to help phase-in stormwater rates necessary to fund the accelerated Major Capital and R&R Improvements. As shown on Tables 4 and 5, this study assumes that the City finances approximately 46% of the total capital plan or \$26.1 million. The proposed capital financing plan provides a balanced approach by using both debt and pay-go funding for Major Capital and R&R Improvements which will provide benefits over the useful life of the assets. For the purposes of this study, and based on discussions with the City's financial advisor, we used the following future loan assumptions and estimates:

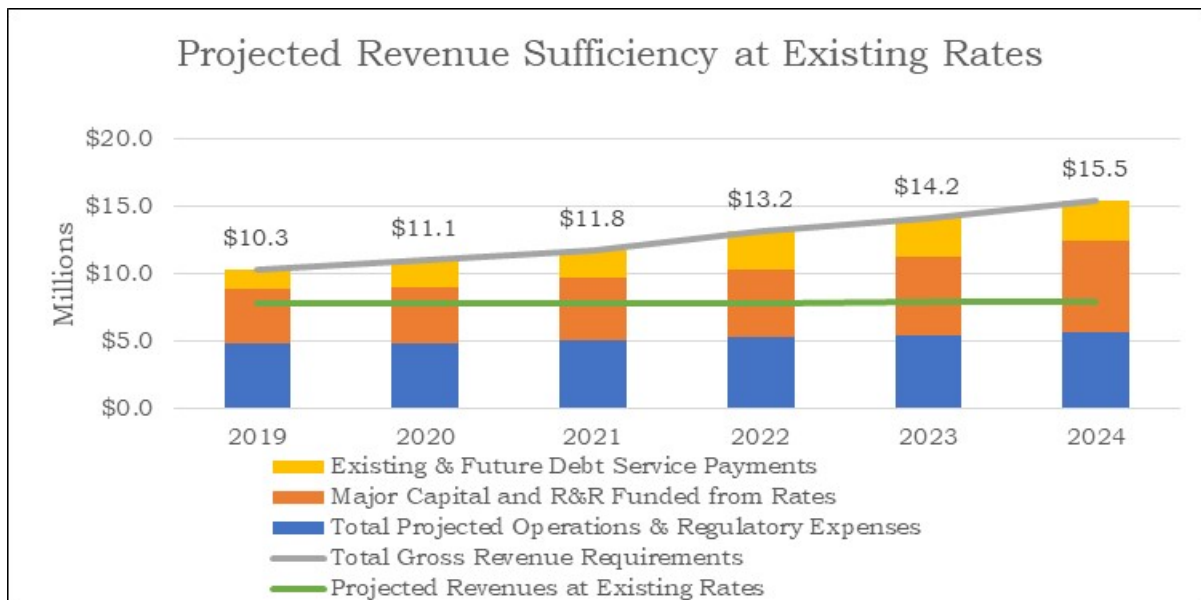
- Series 2019 Senior Lien Loan
 - Project Costs - \$7.2 million
 - Issuance Costs – 3%
 - Interest Rate – 4.0% for 20-years
 - Includes Capitalized Interest Over 12-months
 - Projected Annual Payment - \$645,000
 - First Payment Assumed FY20

- Series 2021 Senior Lien Loan
 - Project Costs - \$9.1 million
 - Issuance Costs – 3%
 - Interest Rate – 4.5% for 20-years
 - Includes Capitalized Interest Over 12-months
 - Projected Annual Payment - \$850,000
 - First Payment Assumed FY22

- Series 2023 Senior Lien Loan
 - Project Costs - \$9.8 million
 - Issuance Costs – 3%
 - Interest Rate – 5.0% for 20-years
 - Includes Capitalized Interest Over 12-months
 - Projected Annual Payment - \$975,000
 - First Payment Assumed FY24

PROJECTED REVENUE SUFFICIENCY

As shown on Table 6 at the end of this report, System revenues based on existing rates will not be adequate to fund the projected revenue requirements during the Study Period. The projected rate deficiencies are primarily attributed to the enhanced and accelerated Major Capital and R&R Improvements of the System as shown below.



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Based on the Fiscal Year 2019 Operating Budget, the proposed Major Capital and R&R Improvements and the assumptions and consideration used in preparing the System projected revenue requirements, the following table summarizes the proposed rates per equivalent residential unit (ERU):

Existing and Proposed Rates per ERU						
<u>Existing Rate</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
\$11.65	\$15.55	\$17.23	\$18.91	\$20.59	\$22.27	\$23.95
Increase per Monthly ERU	\$3.90	\$1.68	\$1.68	\$1.68	\$1.68	\$1.68

Based on the System’s projected financial requirements summarized herein, PRMG recommends the implementation of annual rate adjustments to be phased in on an annual basis over the next several years. The proposed rate adjustments are projected to recover the expenditures anticipated for the System while phasing-in the annual rate impact to its customers.

STORMWATER RESERVES

As shown on Table 7 at the end of this report, the projected ending cash reserve balance in the Operating Fund is projected to meet the City’s minimum target balance of 60 days of operating expenses. This cash balance target is based on the City’s internal cash reserve policy and allows the System flexibility with respect to unforeseen contingencies.

CONCLUSION AND RECOMMENDATIONS

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

1. The City’s existing rates for stormwater service will not be sufficient to recover the projected System revenue requirements over the Study Period, which include funding for \$56.6 million in enhanced and accelerated Major Capital and R&R Improvements.
2. The City should consider adopting the proposed stormwater rates over the Study Period, with the initial rate becoming effective on or after October 1, 2018.
3. Beginning in Fiscal Year 2025, the City Council should consider implementing an annual rate index similar to the index used for the water and wastewater system.
4. Due to the substantial amount of capital projects that the City anticipates funding during the Study Period, the City should consider reviewing its rate plan regularly to ensure that any significant changes in project costs be reflected in the rate plan.

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CITY OF PALM COAST, FLORIDA
STORMWATER RATE STUDY
LIST OF TABLES AND APPENDICES

<u>Table No.</u>	<u>Description</u>
1	Projected Operating and Non-operating Revenues
2	Projected Operating Expenses – Operations and Regulatory
3	Summary of Escalation References
4	Projected Capital Improvements Program
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7	Projected Fund Balances & Interest Income
8	Projected Debt Service Coverage

<u>Appendix No.</u>	<u>Description</u>
A	Workshop Presentation – September 11, 2018

**Table 1
City of Palm Coast, Florida
Stormwater Rate Study**

Projected Operating & Non-operating Revenues

Line No.	Description	Budgeted Revenues			Escalation Reference [3]	Projected Fiscal Year Ending September 30,					
		Adopted 2018 [1]	Adjustments	Adjusted 2018 [2]		2019 [2]	2020	2021	2022	2023	2024
Stormwater Operating & Non-operating Revenues											
Operating Revenues											
1	Stormwater Drainage Fees	\$7,270,000	(\$4,373)	\$7,265,627	Constant	\$7,265,627	\$7,265,627	\$7,265,627	\$7,265,627	\$7,265,627	\$7,265,627
2	Increase from Property Conversions [4]	0	0	0	Calculate	21,810	43,620	65,430	87,240	109,050	130,860
3	Total Operating Revenues	\$7,270,000	(\$4,373)	\$7,265,627		\$7,287,437	\$7,309,247	\$7,331,057	\$7,352,867	\$7,374,677	\$7,396,487
Other Operating and Non-Operating Revenues											
4	Ad Valorem Taxes (Payment to Offset Exempt Properties) [5]	\$502,590	\$0	\$502,590	Growth	\$520,000	\$521,556	\$523,113	\$524,669	\$526,225	\$527,781
5	Intergovernmental Revenue (General Fund) [6]	0	200,000	200,000	Eliminate	0	0	0	0	0	0
6	SJRWMD Grant	700,000	0	700,000	Eliminate	0	0	0	0	0	0
7	Use of Reserves [6]	278,956	(278,956)	0	Eliminate	0	0	0	0	0	0
8	Total Other Operating and Non-Operating Revenues	\$1,481,546	(\$78,956)	\$1,402,590		\$520,000	\$521,556	\$523,113	\$524,669	\$526,225	\$527,781
9	Total Stormwater Operating & Non-operating Revenues	\$8,751,546	(\$83,329)	\$8,668,217		\$7,807,437	\$7,830,803	\$7,854,170	\$7,877,536	\$7,900,902	\$7,924,268

Footnotes:

[1] Amounts reflect the adopted revenues for Fiscal Year 2018 as provided by City staff.

[2] Updated amounts for Fiscal Years 2018 and 2019 provided by City staff.

[3] Escalation reference and amounts derived from Table 3.

[4] Rate revenues were increased based on the average historical property conversions as follows:

	Projected Fiscal Year Ending September 30,					
	2019 [2]	2020	2021	2022	2023	2024
Parcels Converted per Year	600	600	600	600	600	600
Cumulative Parcels Converted	600	1,200	1,800	2,400	3,000	3,600
Annual Rate per Vanant Res. Parcel	\$103.45	\$103.45	\$103.45	\$103.45	\$103.45	\$103.45
Annual Rate per Developed Res. Parcel	139.80	139.80	139.80	139.80	139.80	139.80
Annual Increase per Parcel	\$36.35	\$36.35	\$36.35	\$36.35	\$36.35	\$36.35
Net Increase in Annual Revenue	\$21,810	\$43,620	\$65,430	\$87,240	\$109,050	\$130,860

[5] Amount is transferred from the General Fund to account for exempt properties.

[6] To estimate revenue sufficiency at existing rates, use of reserves to meet current year deficiencies is eliminated.

Table 2
City of Palm Coast, Florida
Stormwater Rate Study

Projected Operating Expenses - Operations and Regulatory

Line No.	Description	Projected Fiscal Year Ending September 30,							
		Budget 2018 [1]	Budget 2019 [1]	Escalation Reference [2]	2020	2021	2022	2023	2024
Stormwater Operating Expenses									
Operating Expenses									
1	CM&E Personnel	\$682,826	\$1,164,759	Labor	\$1,194,647	\$1,254,379	\$1,317,098	\$1,382,953	\$1,452,101
2	Public Works Personnel	1,654,036	1,592,741	Labor	1,610,218	1,690,729	1,775,265	1,864,029	1,957,230
3	Inmate Crew	62,500	62,500	Inflation	64,000	65,536	67,109	68,719	70,369
4	Other Operating Expenditures	1,625,304	1,725,911	Inflation	1,767,333	1,809,749	1,853,183	1,897,659	1,943,203
5	Debt Service [3]	0	0	Eliminate	0	0	0	0	0
6	Contingency Reserve	0	0	Calculated	0	0	0	0	0
7	Total Operating Expenses	\$4,024,666	\$4,545,911		\$4,636,198	\$4,820,393	\$5,012,655	\$5,213,361	\$5,422,903
Professional Services									
8	LIDAR (cost share)	\$37,503	\$0	Inflation	\$0	\$0	\$0	\$0	\$0
9	Stormwater Rate Study (Engineering Consultant)	20,000	0	Input	0	26,214	0	0	0
10	City-Wide Infrastructure Stormwater Master Plan	90,000	210,000	Inflation	153,600	157,286	161,061	164,927	168,885
11	Stormwater Capital Projects Design Services	10,000	50,000	Inflation	51,200	52,429	53,687	54,976	56,295
12	Total Professional Services	\$157,503	\$260,000		\$204,800	\$235,930	\$214,748	\$219,902	\$225,180
MS4 Permitting Program									
13	Misc. Expenses	\$60,000	\$0	Permitting	\$0	\$0	\$0	\$0	\$0
14	Program Management	0	35,000	Permitting	36,050	37,132	38,245	39,393	40,575
15	Water Quality Monitoring	0	36,000	Permitting	37,080	38,192	39,338	40,518	41,734
16	Mapping and Data Collection/Maintenance	0	0	Permitting	0	0	0	0	0
17	Total MS4 Permitting Program	\$60,000	\$71,000		\$73,130	\$75,324	\$77,584	\$79,911	\$82,308
18	Sub-total Operations and Regulatory	\$4,242,169	\$4,876,911		\$4,914,128	\$5,131,647	\$5,304,987	\$5,513,174	\$5,730,391
Adjustments									
19	Operating Contingency [4]	0.0%	\$0		\$0	\$0	\$0	\$0	\$0
20	Allowance for Bad Debt [5]	0.0%	0		0	0	0	0	0
21	Total Adjustments		\$0		\$0	\$0	\$0	\$0	\$0
22	Total Stormwater Operating Expenses	\$4,242,169	\$4,876,911		\$4,914,128	\$5,131,647	\$5,304,987	\$5,513,174	\$5,730,391
			15.0%		0.8%	4.4%	3.4%	3.9%	3.9%

Footnotes:

[1] Amounts provided by City staff.

[2] The escalation references and amounts are derived from Table 3.

[3] Amount reflected on Table 5.

[4] To account for unforeseen expenses, a contingency of __% of expenses was assumed for each fiscal year.

[5] To provide an allowance for delinquent accounts, bad debt expenses is estimated at __% of annual revenues.

Table 3
City of Palm Coast, Florida
Stormwater Rate Study

Summary of Escalation References

Line No.	Description	Reference	Escalation Factors				
			2020	2021	2022	2023	2024
Annual Adjustments							
1	Constant Factor	Constant	1.0000	1.0000	1.0000	1.0000	1.0000
2	Inflation - CPI	Inflation	1.0240	1.0240	1.0240	1.0240	1.0240
3	Inflation - Marginal	Margin	1.0050	1.0050	1.0050	1.0050	1.0050
4	Labor and Benefits	Labor	1.0500	1.0500	1.0500	1.0500	1.0500
5	Permitting	Permitting	1.0300	1.0300	1.0300	1.0300	1.0300
6	Repair and Maintenance	Repair	1.0300	1.0300	1.0300	1.0300	1.0300
7	Capital Projects	Capital	1.0300	1.0300	1.0300	1.0300	1.0300
8	Property Conversion Growth	Growth	1.0030	1.0030	1.0030	1.0030	1.0030
9	Additional	Add-2	1.0000	1.0000	1.0000	1.0000	1.0000
Cumulative Adjustments							
10	Constant Factor	Constant	1.0000	1.0000	1.0000	1.0000	1.0000
11	Inflation - CPI	Inflation	1.0240	1.0486	1.0737	1.0995	1.1259
12	Inflation - Marginal	Margin	1.0050	1.0100	1.0151	1.0202	1.0253
13	Labor and Benefits	Labor	1.0500	1.1025	1.1576	1.2155	1.2763
14	Permitting	Permitting	1.0300	1.0609	1.0927	1.1255	1.1593
15	Repair and Maintenance	Repair	1.0300	1.0609	1.0927	1.1255	1.1593
16	Capital Projects	Capital	1.0300	1.0609	1.0927	1.1255	1.1593
17	Property Conversion Growth	Growth	1.0030	1.0060	1.0090	1.0120	1.0150
18	Additional	Add-2	1.0000	1.0000	1.0000	1.0000	1.0000

**Table 4
City of Palm Coast, Florida
Stormwater Rate Study**

Projected Capital Improvement Program - Future Dollars

Line No.	Description	Escalation Reference	Funding Source	Projected Fiscal Year Ending September 30, - Future Dollars [1]							Totals
				Budgeted 2018	Budgeted 2019	2020	2021	2022	2023	2024	
Capital Expenditures											
<u>Saltwater Canal System</u>											
1	Pipes Thru Seawalls	Input	Rates	\$15,000	\$15,000	\$16,500	\$18,150	\$19,965	\$21,962	\$119,405	\$225,982
2	Fleming Ct	Capital	Rates	35,000	0	0	0	0	0	0	35,000
3	Canal End Seawalls	Input	Rates	0	35,000	38,500	42,350	46,585	51,245	162,298	375,978
4	Additional Projects	Capital	Rates	0	0	0	0	0	0	0	0
5	Additional Projects	Capital	Rates	0	0	0	0	0	0	0	0
6	Additional Projects	Capital	Rates	0	0	0	0	0	0	0	0
7	Additional Projects	Capital	Rates	0	0	0	0	0	0	0	0
8	Total - Saltwater Canal System			\$50,000	\$50,000	\$55,000	\$60,500	\$66,550	\$73,207	\$281,703	\$636,960
<u>Freshwater Canal System & Lakes</u>											
Lake Maintenance											
9	Lake Weed Control	Capital	Rates	\$600	\$600	\$618	\$637	\$656	\$675	\$696	\$4,482
10	Stormwater Sys. Lakes included in Canal Maintenance	Capital	Rates	0	0	0	0	0	0	0	0
11	Total - Lake Maintenance			\$600	\$600	\$618	\$637	\$656	\$675	\$696	\$4,482
Water Control Structures											
12	Annual Telemetry Subscription (Includes Pump St. SCADA)	Capital	Rates	\$4,800	\$6,600	\$8,652	\$10,185	\$11,146	\$12,155	\$12,520	\$66,058
13	Upgrade Bulldog Drive to Mission Communication Unit	Capital	Rates	35,000	1,000	1,030	1,061	1,093	1,126	1,159	41,469
14	Water Control Equipment Replacement	Capital	Rates	2,500	30,000	36,050	37,132	38,245	1,126	1,159	146,212
15	Pump Station Maintenance & Repair	Capital	Rates	7,000	10,000	10,300	10,609	10,927	11,255	11,593	71,684
16	Water Control SCADA Support & Service	Capital	Rates	0	15,000	15,450	15,914	16,391	16,883	17,389	97,027
17	Structure Repairs	Capital	Rates	10,000	20,000	20,600	21,218	21,855	22,510	23,185	139,368
18	W-1 Weir	Capital	Rates	216,638	0	0	0	0	0	0	216,638
19	L-1 Weir	Capital	Rates	350,000	0	0	0	0	0	0	350,000
20	K-1 Weir	Capital	Rates	350,000	0	0	0	0	0	0	350,000
21	L-4 Weir (Royal Palm Parkway)	Capital	Debt1	0	720,000	0	0	0	0	0	720,000
22	K-6 (Replace/relocate weir (next roadway -Smith Trail) & replace X-drains - 3ea. 66")	Capital	Debt1	0	0	906,400	0	0	0	0	906,400
23	P-1 (west side of Belle Terre south of Pine Grove) (Replace/relocate weir & pedestrian bridge - extend pipes approx. 50-ft each side (3 ea. 90"))	Capital	Debt2	0	0	0	106,090	1,562,600	0	0	1,668,690
24	B-1, B-2, & B-3 (Pop offs for Bellaire Waterway - Graham Swamp)	Capital	Rates	0	0	0	0	0	112,551	231,855	344,406
25	Total - Water Control Structures			\$975,938	\$802,600	\$998,482	\$202,209	\$1,662,257	\$177,606	\$298,860	\$5,117,952
Freshwater Canal Pipe Crossings (Replacements)											
26	W-1 (Belle Terre @ BTMS) (to be done with water control structure W-1)	Capital	Rates	\$80,053	\$950,000	\$0	\$0	\$0	\$0	\$0	\$1,030,053
27	M-2 (OKR @ Big Mulberry Creek) - 5 - 84" 120 LF - Replace with new box culverts per OKR widening Project design	Capital	Debt1	0	750,000	0	0	0	0	0	750,000
28	L-2 Bridge 735504 (Sesame @ Citation) - Transportation project	Capital	Rates	0	0	0	0	0	0	0	0
29	R-1 Bridge 734076 (Belle Terre @ Royal Palms) - Transportation Project	Capital	Rates	0	0	0	0	0	0	0	0
30	Projects to be Determined	Input	Rates	0	0	162,890	467,425	467,664	656,586	579,637	2,334,202
31	Total - Freshwater Canal Pipe Crossings (Replacements)			\$80,053	\$1,700,000	\$162,890	\$467,425	\$467,664	\$656,586	\$579,637	\$4,114,255
Freshwater Canal Pipe Crossings (Inspections & Linings)											
FDOT Bridge Insp. Prgrm (22 Culvert Xings that may be classified as bridges by FDOT - would be inspected bi-annually by FDOT - not additional cost after initial load rating)											
32	W-2 Walker Waterway @ Pine Lakes Pkwy - 2 - 48" - 160 L.F. Ea.	Capital	Rates	\$0	\$13,200	\$13,596	\$0	\$0	\$0	\$0	\$26,796
33	Crandal Cove - 3 Ea. 66" x 48" arch length 100'	Capital	Rates	0	125,000	0	0	0	0	0	125,000
34	Florida Park North (No of Foster Ln) - 1 Ea. 48" Length 155' Round	Capital	Rates	0	0	41,200	0	0	0	0	41,200
35	K-2 (7 Oaks Waterway at Sesame Blvd) (3 Ea. 60" Length 80') - Extended as part of Sesame Path	Capital	Rates	0	0	0	95,481	0	0	0	95,481
36	K-4 (7 Oaks Waterway at Seminole Woods) (2 Ea. 54" Length 80' Round) - Extended as part of Seminole Path	Capital	Rates	0	0	0	0	54,636	0	0	54,636
37	I-2 (Iroquois Waterway Seminole Woods) (6 Ea. - 66" Length 120' Round)	Capital	Debt3	0	0	0	0	0	405,183	0	405,183
38	PA-1 (Belle Terre @ Parkview Waterway) (3 Ea. - 84" Length 155' Round)	Capital	Debt3	0	0	0	0	0	0	431,250	431,250
39	3-72" ACMP Sesame Blvd @ Seminole Waterway	Capital	Debt1	0	148,500	0	0	0	0	0	148,500
40	Contingency (Emergency Linings)	Input	Rates	0	283,000	300,000	300,000	300,000	350,000	347,782	1,880,782

**Table 4
City of Palm Coast, Florida
Stormwater Rate Study**

Projected Capital Improvement Program - Future Dollars

Line No.	Description	Escalation Reference	Funding Source	Projected Fiscal Year Ending September 30, - Future Dollars [1]							Totals
				Budgeted 2018	Budgeted 2019	2020	2021	2022	2023	2024	
42	Future Linings	Capital	Rates	0	0	0	0	0	0	0	0
43	Total - Freshwater Canal Pipe Crossings (Inspections & Linings)			\$0	\$641,700	\$354,796	\$395,481	\$354,636	\$755,183	\$779,032	\$3,280,828
Freshwater Canal Maintenance and Improvements											
44	Freshwater Alternative Treatments	Capital	Rates	\$0	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510	\$23,185	\$129,368
45	Freshwater Canal Weed Control	Capital	Rates	452,388	500,000	515,000	530,450	546,364	562,754	579,637	3,686,593
46	Canal Clearing (Removal of Trees & Underbrush)	Capital	Rates	5,000	5,000	5,150	5,305	5,464	5,628	5,796	37,343
47	Sediment Removal	Capital	Rates	12,800	5,000	5,150	5,305	5,464	5,628	5,796	45,143
48	Freshwater Canal Dredging - 1 of 4	Input	Rates	0	0	275,000	275,000	275,000	275,000	1,006,804	2,106,804
49	Freshwater Canal Dredging - 2 of 4	Input	Debt1	0	0	0	0	0	0	0	0
50	Freshwater Canal Dredging - 3 of 4	Capital	Debt2	0	0	0	2,500,000	2,500,000	0	0	5,000,000
51	Freshwater Canal Dredging - 4 of 4	Capital	Debt3	0	0	0	0	0	2,500,000	2,500,000	5,000,000
52	Total - Freshwater Canal Maintenance and Improvements			\$470,188	\$530,000	\$820,900	\$3,337,278	\$3,354,147	\$3,371,520	\$4,121,218	\$16,005,251
Freshwater Canal Storage and Detention											
53	No. Side London Waterway / 34.8 acres - 53 Luther Dr. (Phase II) - 1 of 2	Input	Rates	\$0	\$0	\$350,000	\$350,000	\$0	\$0	\$0	\$700,000
54	No. Side London Waterway / 34.8 acres - 53 Luther Dr. (Phase II) - 2 of 2	Input	Debt1	0	0	0	3,410,000	0	0	0	3,410,000
55	Projects to be Determined - 1 of 3	Capital	Rates	0	0	0	0	403,999	476,119	550,403	1,430,521
56	Projects to be Determined - 2 of 3	Capital	Debt2	0	0	0	371,315	2,000,000	0	0	2,371,315
57	Projects to be Determined - 3 of 3	Capital	Debt3	0	0	0	0	0	2,000,000	2,000,000	4,000,000
58	Total - Freshwater Canal Storage and Detention			\$0	\$0	\$350,000	\$4,131,315	\$2,403,999	\$2,476,119	\$2,550,403	\$11,911,836
59	Total - Freshwater Canal System & Lakes			\$1,526,779	\$3,674,900	\$2,687,686	\$8,534,345	\$8,243,359	\$7,437,689	\$8,329,846	\$40,434,604
<u>Stormwater Ditches and Swales</u>											
Swale & Ditch Pipe Projects											
60	Pipe Replacements & Valley Gutters	Input	Rates	\$519,258	\$575,000	\$632,500	\$687,750	\$874,182	\$900,407	\$927,419	\$5,116,516
61	Pipe Linings (residential/commercial areas without adequate access for replacement)	Input	Rates	105,742	250,000	283,250	292,000	360,600	405,183	475,302	2,172,077
62	Concrete Lined Ditch (F-section)	Input	Debt1	0	45,000	450,000	0	0	0	0	495,000
63	Emergency Pipe Replacements	Input	Rates	575,000	125,000	128,750	130,000	136,591	140,689	144,909	1,380,939
64	Total - Swale & Ditch Pipe Projects			\$1,200,000	\$995,000	\$1,494,500	\$1,109,750	\$1,371,373	\$1,446,279	\$1,547,630	\$9,164,532
Swale Maintenance Rehab and Renewal											
65	Swale Maintenance and Rehab.	Capital	Rates	\$450,000	\$400,000	\$412,000	\$477,405	\$491,727	\$506,479	\$521,673	\$3,259,284
66	Driveway Replacements	Capital	Rates	50,000	50,000	25,750	10,609	10,927	11,255	11,593	170,134
67	Total - Swale Maintenance Rehab and Renewal			\$500,000	\$450,000	\$437,750	\$488,014	\$502,654	\$517,734	\$533,266	\$3,429,418
Capacity Improvements											
68	Modeling Improvement Projects	Input	Rates	\$0	\$0	\$283,250	\$300,000	\$398,845	\$750,000	\$510,081	\$2,242,176
69	Total - Capacity Improvements			\$0	\$0	\$283,250	\$300,000	\$398,845	\$750,000	\$510,081	\$2,242,176
Ditch Maintenance Program											
70	Ditch Maintenance and Rehab. - 1 of 2	Capital	Rates	\$0	\$200,000	\$231,750	\$212,180	\$163,909	\$112,551	\$115,927	\$1,036,317
71	Ditch Maintenance and Rehab. - 2 of 2	Capital	Debt1	0	250,000	0	0	0	0	0	250,000
72	Clearing Equipment (Purchase FY19) - 1 of 2	Capital	Rates	0	97,930	98,561	101,518	104,563	107,700	110,931	621,203
73	Clearing Equipment (Purchase FY19) - 2 of 2	Capital	Debt1	0	540,000	0	0	0	0	0	540,000
74	Total - Ditch Maintenance Program			\$0	\$1,087,930	\$330,311	\$313,698	\$268,472	\$220,251	\$226,858	\$2,447,520
Spray Program											
75	Spray Equipment (Purchase FY19)	Capital	Rates	\$0	\$80,000	\$12,360	\$12,731	\$13,113	\$13,506	\$13,911	\$145,621
76	Spray Staffing or Contractor	Capital	Rates	0	160,000	211,150	217,485	224,009	230,729	237,651	1,281,024
77	Spraying Chemicals	Capital	Rates	0	20,000	20,600	21,218	21,855	22,510	23,185	129,368
78	Total - Spray Program			\$0	\$260,000	\$244,110	\$251,434	\$258,977	\$266,745	\$274,747	\$1,556,013
79	Total - Stormwater Ditches and Swales			\$1,700,000	\$2,792,930	\$2,789,921	\$2,462,896	\$2,800,321	\$3,201,009	\$3,092,582	\$18,839,659
80	Total Capital Expenditures			\$3,276,779	\$6,517,830	\$5,532,607	\$11,057,741	\$11,110,230	\$10,711,905	\$11,704,131	\$59,911,223

Table 4
City of Palm Coast, Florida
Stormwater Rate Study

Projected Capital Improvement Program - Future Dollars

Line No.	Description	Escalation Reference	Funding Source	Projected Fiscal Year Ending September 30, - Future Dollars [1]							Totals
				Budgeted 2018	Budgeted 2019	2020	2021	2022	2023	2024	
Funding Sources											
81	Rate Revenues		Rates	\$3,276,779	\$4,064,330	\$4,176,207	\$4,670,336	\$5,047,630	\$5,806,722	\$6,772,881	\$33,814,885
82	Renewal and Replacement Fund		RR	0	0	0	0	0	0	0	0
83	System Upgrade & Improvement Fund		Capital	0	0	0	0	0	0	0	0
84	Community Redevelopment Agency (CRA Fund)		CRA-Fund	0	0	0	0	0	0	0	0
85	Other Interfund Transfers		Other	0	0	0	0	0	0	0	0
86	Grants / Other Contributions		Grants	0	0	0	0	0	0	0	0
87	Sr. New Debt 1		Debt1	0	2,453,500	1,356,400	3,410,000	0	0	0	7,219,900
88	Sr. New Debt 2		Debt2	0	0	0	2,977,405	6,062,600	0	0	9,040,005
89	Sr. New Debt 3		Debt3	0	0	0	0	0	4,905,183	4,931,250	9,836,433
90	Sr. New Debt 4		Debt4	0	0	0	0	0	0	0	0
91	Jr. New Debt 5		Debt5	0	0	0	0	0	0	0	0
92	Jr. New Debt 6		Debt6	0	0	0	0	0	0	0	0
93	Jr. New Debt 7		Debt7	0	0	0	0	0	0	0	0
94	Jr. New Debt 8		Debt8	0	0	0	0	0	0	0	0
95	Total Funding Sources			<u>\$3,276,779</u>	<u>\$6,517,830</u>	<u>\$5,532,607</u>	<u>\$11,057,741</u>	<u>\$11,110,230</u>	<u>\$10,711,905</u>	<u>\$11,704,131</u>	<u>\$59,911,223</u>

Footnotes:

[1] Amounts provided by City staff in current dollars which were adjusted by the cumulative inflationary adjustments shown on Table 3.

Table 5
City of Palm Coast, Florida
Stormwater Rate Study

Projection of Existing and Proposed Debt Service Payments

Line No.	Description	Projected Fiscal Year Ending September 30,						
		2018	2019	2020	2021	2022	2023	2024
Existing Debt Service								
<u>Senior Lien</u>								
PNC Bank Loan								
1	Total Annual Debt Service	\$869,106	\$869,340	\$869,151	\$869,539	\$869,480	\$869,975	\$0
2	Total Senior Lien Debt Service	\$869,106	\$869,340	\$869,151	\$869,539	\$869,480	\$869,975	\$0
<u>Junior Lien</u>								
SRF Loan SW903040 (To FY26)								
3	Total Annual Debt Service	\$303,170	\$303,170	\$303,170	\$303,170	\$303,170	\$303,170	\$303,170
SRF Loan SW903070 (To FY30)								
4	Total Annual Debt Service	\$182,632	\$182,632	\$182,632	\$182,632	\$182,632	\$182,632	\$182,632
5	Total Junior Lien Debt Service	\$485,802	\$485,802	\$485,802	\$485,802	\$485,802	\$485,802	\$485,802
6	Total Existing Debt Service	\$1,354,908	\$1,355,142	\$1,354,953	\$1,355,341	\$1,355,282	\$1,355,777	\$485,802
Proposed Debt Service								
<u>Senior Lien</u>								
Sr. New Debt 1								
7	Total Annual Debt Service	\$0	\$0	\$644,133	\$644,133	\$644,133	\$644,133	\$644,133
Sr. New Debt 2								
8	Total Annual Debt Service	\$0	\$0	\$0	\$0	\$849,262	\$849,262	\$849,262
Sr. New Debt 3								
9	Total Annual Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$972,254
Sr. New Debt 4								
10	Total Annual Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	Total Senior Lien Debt Service	\$0	\$0	\$644,133	\$644,133	\$1,493,394	\$1,493,394	\$2,465,648
<u>Junior Lien</u>								
Jr. New Debt 5								
12	Total Annual Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Jr. New Debt 6								
13	Total Annual Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Jr. New Debt 7								
14	Total Annual Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Jr. New Debt 8								
15	Total Annual Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	Total Junior Lien Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	Total Proposed Debt Service	\$0	\$0	\$644,133	\$644,133	\$1,493,394	\$1,493,394	\$2,465,648
18	Total Senior Lien Debt Service	\$869,106	\$869,340	\$1,513,283	\$1,513,671	\$2,362,874	\$2,363,369	\$2,465,648
19	Total Junior Lien Debt Service	\$485,802	\$485,802	\$485,802	\$485,802	\$485,802	\$485,802	\$485,802
20	Total Debt Service	\$1,354,908	\$1,355,142	\$1,999,085	\$1,999,473	\$2,848,676	\$2,849,171	\$2,951,450

Table 6
City of Palm Coast, Florida
Stormwater Rate Study

Development of Net Revenue Requirements from Rates

Line No.	Description	Projected Fiscal Year Ending September 30,						
		2018	2019	2020	2021	2022	2023	2024
Projected Operations & Regulatory Expenses								
1	Stormwater Management Expenses	\$4,242,169	\$4,876,911	\$4,914,128	\$5,131,647	\$5,304,987	\$5,513,174	\$5,730,391
2	Budget Adjustments (If any)	0	0	0	0	0	0	0
3	Total Projected Operations & Regulatory Expenses	\$4,242,169	\$4,876,911	\$4,914,128	\$5,131,647	\$5,304,987	\$5,513,174	\$5,730,391
Other Revenue Requirements								
Debt Service								
4	Existing	\$1,354,908	\$1,355,142	\$1,354,953	\$1,355,341	\$1,355,282	\$1,355,777	\$485,802
5	Proposed	0	0	644,133	644,133	1,493,394	1,493,394	2,465,648
6	Total Debt Service	\$1,354,908	\$1,355,142	\$1,999,085	\$1,999,473	\$2,848,676	\$2,849,171	\$2,951,450
7	Capital Funded From Rates	\$3,276,779	\$4,064,330	\$4,176,207	\$4,670,336	\$5,047,630	\$5,806,722	\$6,772,881
8	Transfer to RR&I Fund	0	0	0	0	0	0	0
9	Transfer to System Upgrade & Improvement Fund	0	0	0	0	0	0	0
10	Transfer to (from) Operating Fund	0	0	0	0	0	0	0
11	Total Other Revenue Requirements	\$4,631,687	\$5,419,472	\$6,175,292	\$6,669,809	\$7,896,306	\$8,655,893	\$9,724,331
12	Gross Revenue Requirements	\$8,873,856	\$10,296,383	\$11,089,420	\$11,801,456	\$13,201,294	\$14,169,067	\$15,454,722
Less Income and Funds from Other Sources								
13	Other Operating Revenues	\$1,402,590	\$520,000	\$521,556	\$523,113	\$524,669	\$526,225	\$527,781
14	Unrestricted Interest Income	2,700	2,400	3,400	4,500	6,800	7,800	8,800
15	Net Revenue Requirements	\$7,468,566	\$9,773,983	\$10,564,464	\$11,273,843	\$12,669,825	\$13,635,042	\$14,918,141
Projected Revenues								
16	Revenues at Existing Rates	\$7,265,627	\$7,287,437	\$7,309,247	\$7,331,057	\$7,352,867	\$7,374,677	\$7,396,487
17	Prior Year Rate Adjustment	0	0	2,446,872	3,511,356	4,582,130	5,659,194	6,742,549
18	Total Applicable Rate Revenue	\$7,265,627	\$7,287,437	\$9,756,119	\$10,842,413	\$11,934,997	\$13,033,871	\$14,139,036
Current Year Rate Adjustments								
19	Current Year Rate Adjustment	0.0%	33.5%	10.8%	9.8%	8.9%	8.2%	7.5%
	Effective Month	N/A	October	October	October	October	October	October
20	% of Current Year Effective	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
21	Total Revenue from Current Year Adjustments	\$0	\$2,439,571	\$1,054,037	\$1,057,182	\$1,060,328	\$1,063,473	\$1,066,618
22	Total Revenue from Rates	\$7,265,627	\$9,727,008	\$10,810,156	\$11,899,595	\$12,995,325	\$14,097,344	\$15,205,654
23	Revenue Surplus/(Deficiency)	(\$202,939)	(\$46,974)	\$245,692	\$625,752	\$325,500	\$462,302	\$287,513
24	Surplus/(Deficiency) - Percent of Rate Revenues	(2.8%)	(0.5%)	2.3%	5.3%	2.5%	3.3%	1.9%
Available Cash Balances - Year End Balance								
		Fiscal Year Ending September 30,						
25		2018	2019	2020	2021	2022	2023	2024
26	Operating Fund	\$297,062	\$250,087	\$495,780	\$1,121,532	\$1,447,032	\$1,909,333	\$2,196,846
27	Renewal & Replacement Fund	0	0	0	0	0	0	0
28	System Upgrade & Improvement Fund	0	0	0	0	0	0	0
29	Total Available Cash Balances	\$297,062	\$250,087	\$495,780	\$1,121,532	\$1,447,032	\$1,909,333	\$2,196,846
Unrestricted Operating Fund								
30	Days of Operating Expenses - Calculated	26	19	37	80	100	126	140
31	Days of Operating Expenses - Target	60	60	60	60	60	60	60
32	Existing Rate per ERU per Month	\$11.65	\$11.65	\$11.65	\$11.65	\$11.65	\$11.65	\$11.65
33	Proposed Rate per ERU per Month	\$11.65	\$15.55	\$17.23	\$18.91	\$20.59	\$22.27	\$23.95
34	Proposed Rate per ERU per Year	\$139.80	\$186.60	\$206.76	\$226.92	\$247.08	\$267.24	\$287.40

Table 7
City of Palm Coast, Florida
Stormwater Rate Study

Projected Fund Balances & Interest Income

Line No.	Description	Projected Fiscal Year Ending September 30,						
		2018	2019	2020	2021	2022	2023	2024
OPERATING FUND								
1	Beginning Balance [1]	\$500,000	\$297,062	\$250,087	\$495,780	\$1,121,532	\$1,447,032	\$1,909,333
Non-operating Transfers (Beginning Balances):								
2	Additional Transfer to R&R Fund	0	0	0	0	0	0	0
3	Additional Transfer to Capital Fund	0	0	0	0	0	0	0
4	Net Amount Available for Operations	\$500,000	\$297,062	\$250,087	\$495,780	\$1,121,532	\$1,447,032	\$1,909,333
5	Transfers In	7,265,627	9,727,008	10,810,156	11,899,595	12,995,325	14,097,344	15,205,654
6	Transfers Out	7,468,566	9,773,983	10,564,464	11,273,843	12,669,825	13,635,042	14,918,141
7	Transfers In (Out) from Rates	0	0	0	0	0	0	0
8	Interest Rate (Short Term)	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
9	Interest Income	1,000	700	900	2,000	3,200	4,200	5,100
10	Recognition of Interest in Revenue Requirements	1,000	700	900	2,000	3,200	4,200	5,100
11	Ending Balance	\$297,062	\$250,087	\$495,780	\$1,121,532	\$1,447,032	\$1,909,333	\$2,196,846
DEBT SERVICE SINKING FUND								
12	Annual Debt Service	1,354,908	1,355,142	1,999,085	1,999,473	2,848,676	2,849,171	2,951,450
13	Average Balance	677,454	677,571	999,543	999,737	1,424,338	1,424,586	1,475,725
14	Interest Rate (Short Term)	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
15	Interest Income	1,700	1,700	2,500	2,500	3,600	3,600	3,700
16	Recognition of Interest in Revenue Requirements	1,700	1,700	2,500	2,500	3,600	3,600	3,700
RENEWAL AND REPLACEMENT FUND								
17	Beginning Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	Transfers In	0	0	0	0	0	0	0
19	Transfers Out	0	0	0	0	0	0	0
20	Interest Rate (Short Term)	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
21	Interest Income	0	0	0	0	0	0	0
22	Recognition of Interest in Revenue Requirements	0	0	0	0	0	0	0
23	Ending Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SYSTEM UPGRADE & IMPROVEMENT FUND								
24	Beginning Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25	Transfers In	0	0	0	0	0	0	0
26	Transfers Out	0	0	0	0	0	0	0
27	Interest Rate (Short Term)	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
28	Interest Income	0	0	0	0	0	0	0
29	Recognition of Interest in Revenue Requirements	0	0	0	0	0	0	0
30	Ending Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0
31	TOTAL UNRESTRICTED INTEREST INCOME	\$2,700	\$2,400	\$3,400	\$4,500	\$6,800	\$7,800	\$8,800
32	TOTAL RESTRICTED INTEREST INCOME	\$0	\$0	\$0	\$0	\$0	\$0	\$0

APPENDIX A



Stormwater Rate Study

Summary of Rate Options



Presented on: September 11, 2018

Presented by: Public Resources Management Group, Inc.

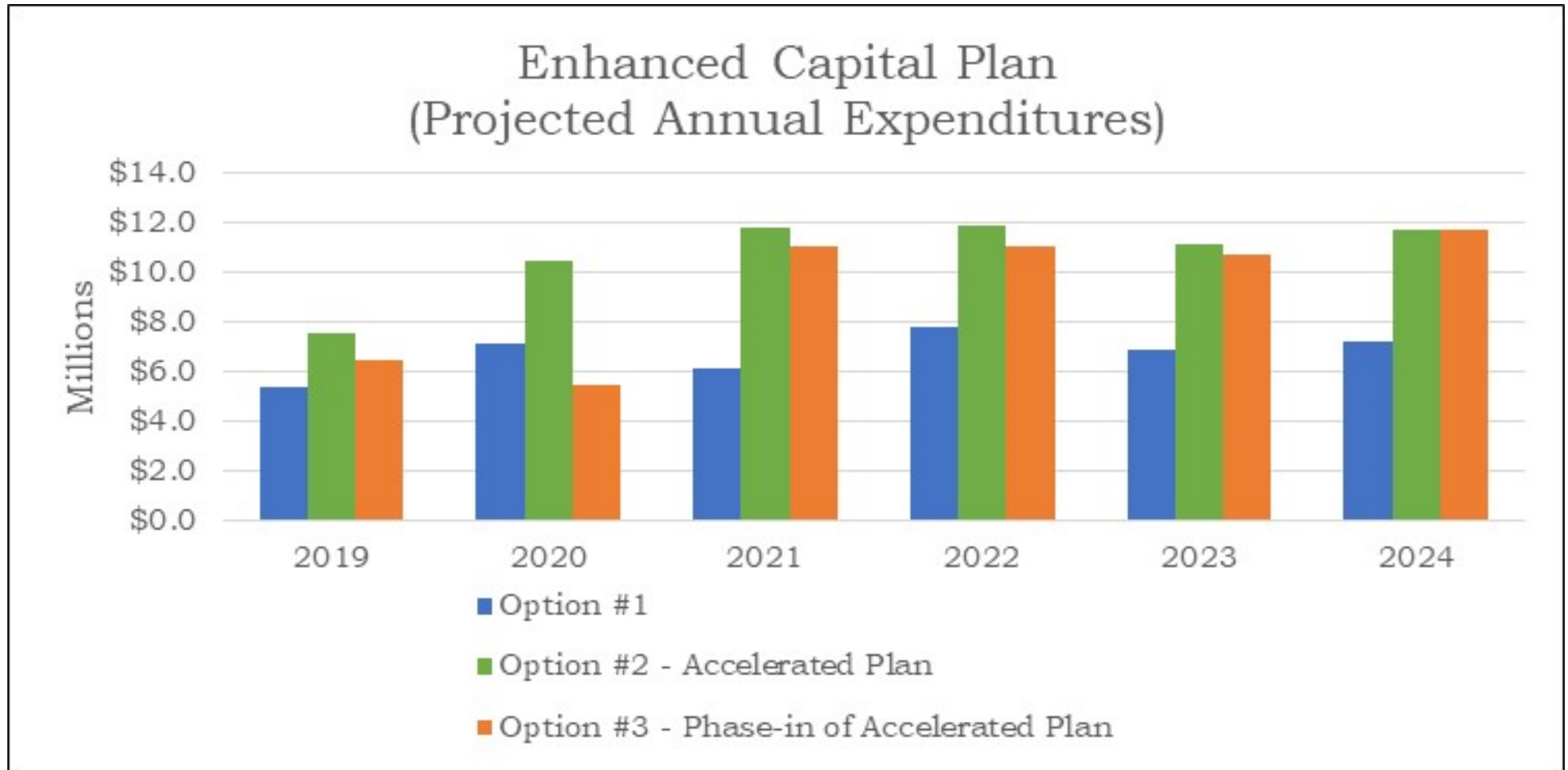
Study Goals & Objectives

- ▶ Develop a funding strategy to pay for Stormwater System Operations, R&R and Major Capital Improvements
- ▶ Estimate revenue requirements to be recovered from stormwater rates
- ▶ Identify the projected rate adjustments necessary to:
 - ▶ Maintain adequate cash reserve balances
 - ▶ Achieve a positive cash flow over time
 - ▶ Meet or exceed the minimum debt service coverage requirements established for existing and future loans
- ▶ City staff presented preliminary options on August 14, 2018
- ▶ City staff developed a third option to phase-in the enhanced capital projects over time to address system deficiencies

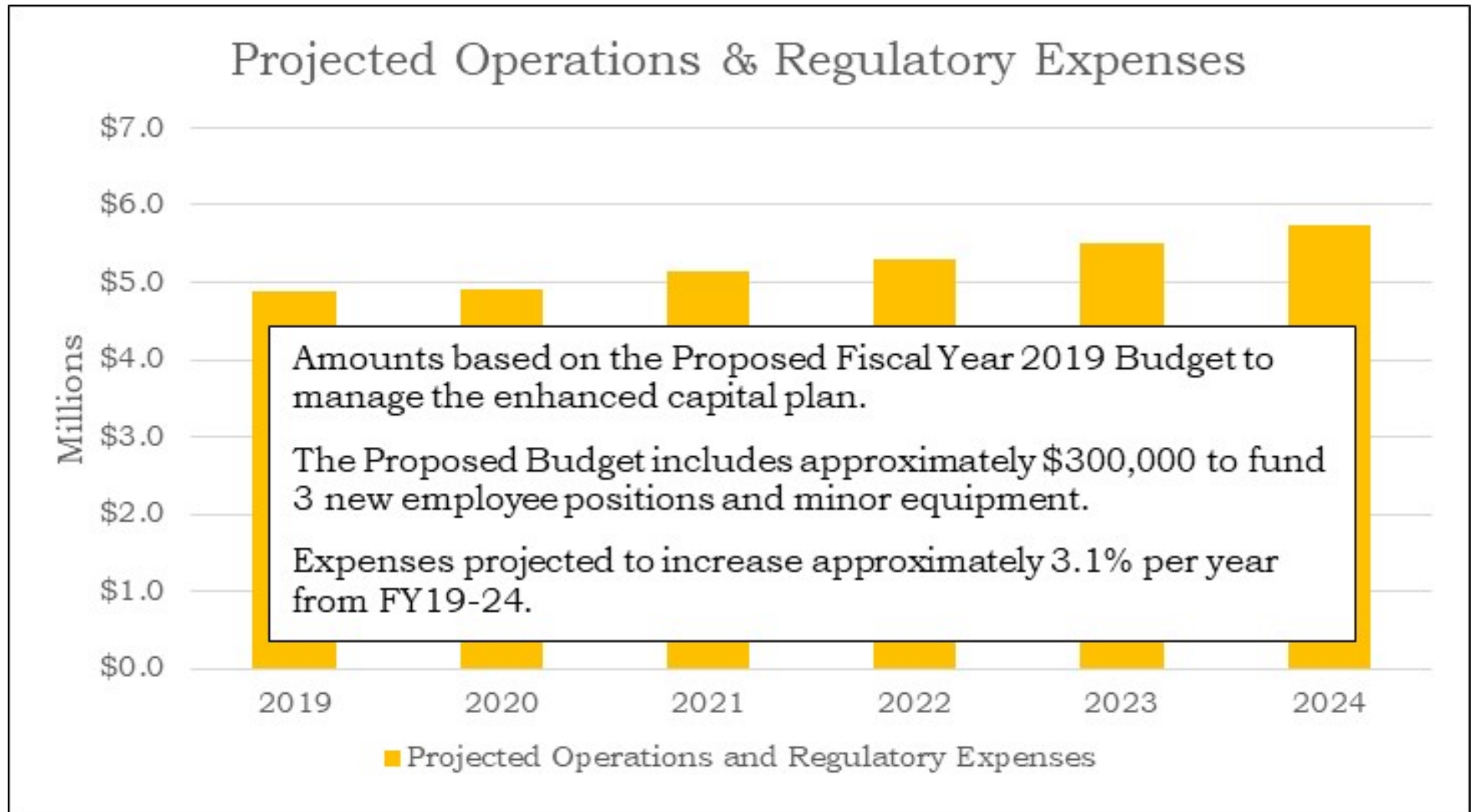
Enhanced Capital Plan Options FY19-24

- ▶ City staff developed enhanced capital plan options:
 - ▶ Option #1 - \$40.9 million
 - ▶ Option #2 (Accelerated Plan) - \$64.8 million
 - ▶ Option #2 includes \$23.9 million of additional project costs when compared to Option #1 (58% more)
 - The average increase is approximately \$4.0 million more per year
 - ▶ Option #3 (Phase-in of Accelerated Plan) - \$56.6 million
 - ▶ Option #3 includes \$15.7 million of additional project costs when compared to Option #1 (38% more)
 - The average increase is approximately \$2.6 million more per year

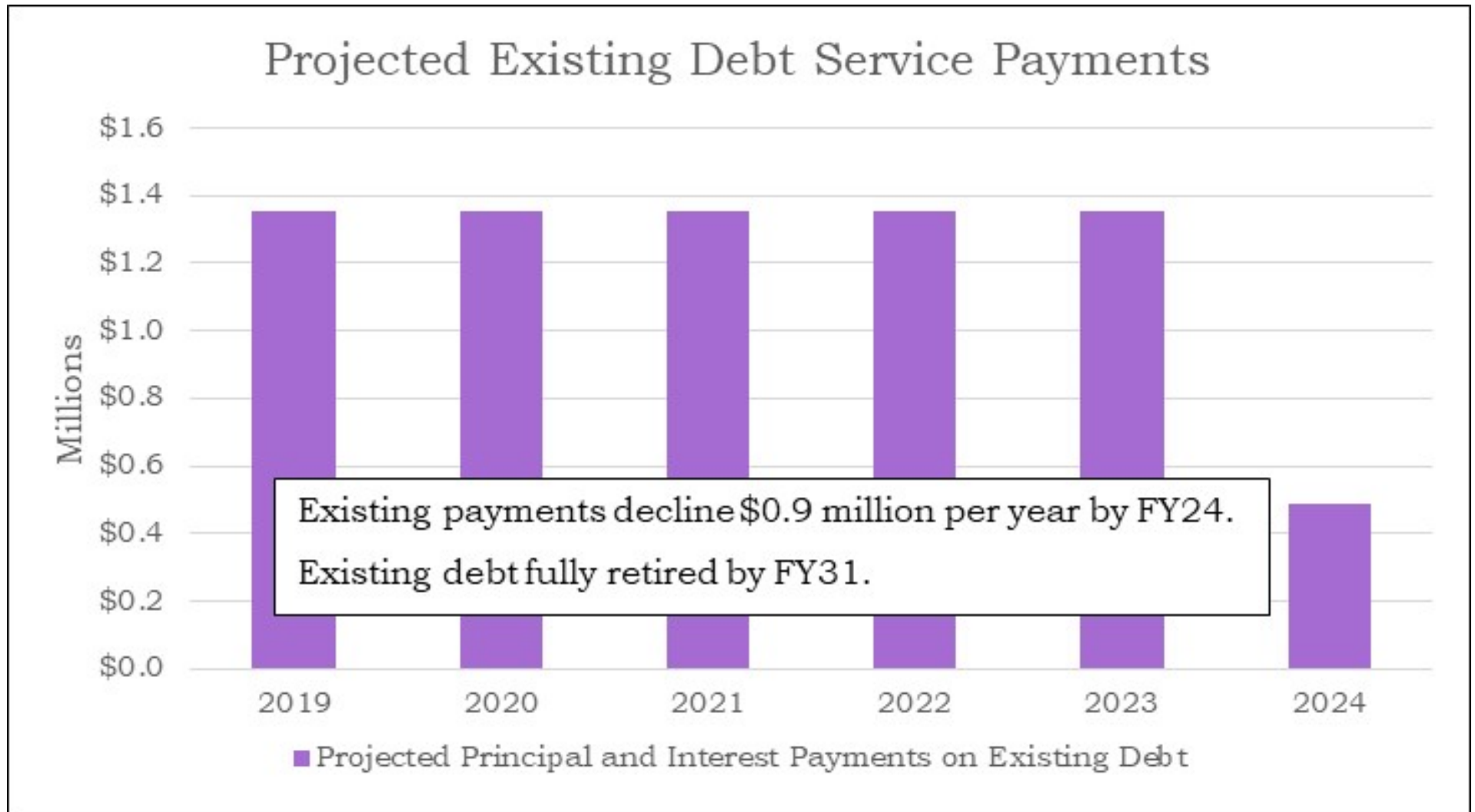
Projected Capital Expenditures



Projected Operations & Regulatory Expenses



Existing Debt Service Payments



Projects Identified for Debt Financing

- ▶ Considered one-time Major Capital Improvements:
 - ▶ Water Control Structures: L-4 / K-6 / P-1
 - ▶ Freshwater Canal Pipe Lining & Replacement: M-2 / I-2 / PA-1 / Sesame Blvd @ Seminole Waterway
 - ▶ Concrete Lined Ditch: Section F
- ▶ Considered accelerated improvements to normalize pay-go funding for R&R Improvements:
 - ▶ Freshwater Canal Dredging - 75% of project costs
 - ▶ North Side London Waterway / Storage & Detention - 80% of project costs
 - ▶ Future Storage and Detention Projects - 80% of project costs
 - ▶ Ditches Maintenance, Rehab and Equipment - 30% of project costs
- ▶ Total projects and amounts vary when considering Options #1, #2 and #3

Summary of Capital Plan Options

- ▶ Evaluated stormwater rates under a total of six (6) capital plan options as follows:
 - ▶ Option #1 - \$40.9 million Capital Plan
 - ▶ Option #1A (Pay-go)
 - ▶ Option #1B (12% Debt Funded or \$4.9 million)
 - ▶ Option #2 (Accelerated Plan) - \$64.8 million Capital Plan
 - ▶ Option #2A (Accelerated, but Pay-go)
 - ▶ Option #2B (Accelerated with 46% Debt Funded or \$29.7 million)
 - ▶ Option #3 (Phase-in of Accelerated Plan) - \$56.6 million Capital Plan
 - ▶ Option #3A (Accelerated, but Pay-go)
 - ▶ Option #3B (Accelerated with 46% Debt Funded or \$26.1 million)
 - ▶ Financing assumptions for Options #1B, #2B & #3B include the following:
 - ▶ Senior Lien / Qualified Bank Loans
 - ▶ 20-year term with interest rates ranging from 4-5%
 - ▶ Capitalized interest assumed for the first 12-months

Other Study Considerations

- ▶ Target a minimum cash reserve balance of at least 60 days of annual expenses by FY24 or approximately \$900,000
 - ▶ The beginning balance for Fiscal Year 2019 is estimated at approximately \$300,000
 - ▶ No reserves are available to help phase-in required rate adjustments early in the study period
- ▶ Meet or exceed the minimum senior and junior lien debt service coverage requirements
- ▶ Study considers implementing an annual index adjustment similar to the water and wastewater rate index beginning on and after October 1, 2024 (FY25)

Summary of Projected Increases per Month / ERU^[*]

Description	FY19	FY20	FY21	FY22	FY23	FY24
Option #1A - \$40.9 million (Pay-go)	\$17.82	\$20.50	\$20.99	\$21.49	\$22.01	\$22.54
Increase per Monthly ERU	\$6.17	\$2.68	\$0.49	\$0.50	\$0.52	\$0.53
Option #2A - \$64.8 million (Accelerated, but Pay-go)	\$21.20	\$25.87	\$28.20	\$28.87	\$29.57	\$30.27
Increase per Monthly ERU	\$9.55	\$4.67	\$2.33	\$0.67	\$0.70	\$0.70
Option #3A - \$56.6 million (Phase-in, but Pay-go)	\$19.46	\$21.69	\$24.19	\$26.97	\$27.62	\$28.28
Increase per Monthly ERU	\$7.81	\$2.23	\$2.50	\$2.78	\$0.65	\$0.66
Option #1B - \$40.9 million (12% Debt Funded)	\$16.19	\$18.62	\$19.46	\$20.34	\$20.95	\$21.45
Increase per Monthly ERU	\$4.54	\$2.43	\$0.84	\$0.88	\$0.61	\$0.50
Option #2B - \$64.8 million (Accelerated with 46% Debt Funded)	\$17.24	\$19.14	\$20.48	\$21.91	\$23.01	\$23.93
Increase per Monthly ERU	\$5.59	\$1.90	\$1.34	\$1.43	\$1.10	\$0.92
Proposed Option #3B - \$56.6 million (Phase-in with 46% Debt Funded)	\$15.55	\$17.23	\$18.91	\$20.59	\$22.27	\$23.95
Increase per Monthly ERU	\$3.90	\$1.68	\$1.68	\$1.68	\$1.68	\$1.68

[*] The Existing Rate is \$11.65 per Monthly ERU. The City should consider implementing an annual index adjustment beginning on and after October 1, 2024 (FY25).

Conclusions and Recommendations

- ▶ City staff have developed several capital plan options to address system deficiencies including an Accelerated Plan
- ▶ The City Council should first consider the options that provide a balanced approach to capital funding using both debt and pay-go funding for the Major Capital and R&R Improvements which will provide benefits over the useful life of the assets
- ▶ Options #2B and #3B provide a balanced capital funding plan based on financing approximately 46% of the planned improvements to better match the costs over the benefit period

Conclusions and Recommendations

- ▶ City staff developed Option #3B to phase-in the Accelerated Capital Plan that results in the lowest stormwater rate when compared to any other option for the next three (3) Fiscal Years
- ▶ Option #3B provides approximately \$74.7 million in total revenues from FY19-24 to fund the projected operating, debt service and Major Capital & R&R Improvement funding identified for the accelerated capital plan
- ▶ The City Council should consider adopting the proposed stormwater rates for Option #3B from FY19-24 and implement an annual index beginning on and after October 1, 2024 (FY25)
- ▶ This study should be updated within the next three to five years

Discussion & Questions

