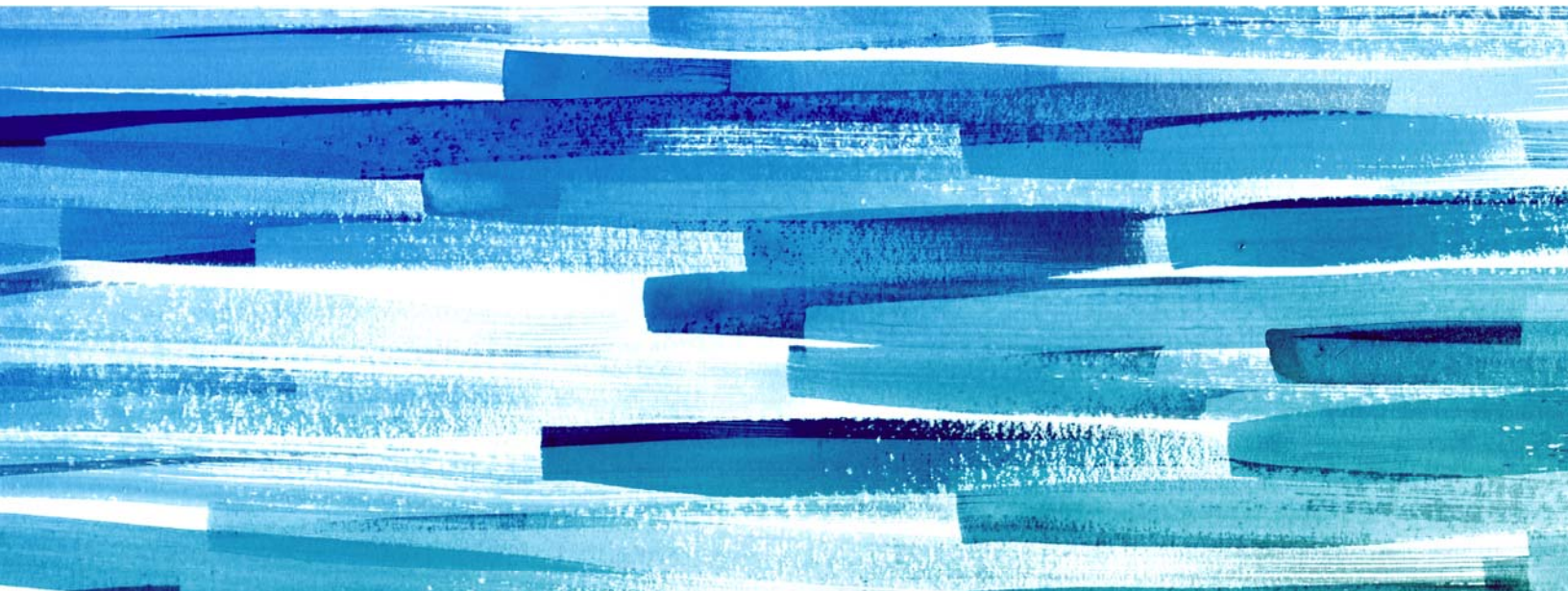


CITY OF MARGATE, FLORIDA

September 12, 2019

# STORMWATER RATE STUDY



**GovRates, Inc.**  
Utility, Financial, Rate, and Management  
Consultants for Governments  
[www.govrates.com](http://www.govrates.com)



**PUBLIC WORKS**



September 12, 2019

Honorable Mayor and  
Members of the City Commission  
City of Margate  
5790 Margate Boulevard  
Margate, Florida 33063

**Subject: Stormwater Rate Study**

GovRates, Inc. ("GovRates") has completed our review of the stormwater utility rates for the City of Margate (the "City") and has prepared this report which summarizes our analyses, findings, and recommendations. This utility rate study involved preparing a financial forecast through the Fiscal Year 2024.

Developing a financial and rate plan for the City's stormwater system (the "System") involved multiple considerations:

- The financial and rate plan should consider utility best management practices and should promote financial sustainability and creditworthiness.
- The proposed monthly stormwater rates should be considered equitable, affordable, and competitive.
- The proposed rate plan should not cause "rate shock" to customers. From a best financial management practices standpoint, smaller incremental increases over time can help avoid future rate shock and large "catch up" rate increases.
- The proposed rates should enable the utility to perform the necessary capital improvements and operational changes to remain compliant with the regulatory requirements of the Environmental Protection Agency, the Florida Department of Environment Protection, and the Florida Department of Health.

GovRates believes that the financial and rate plan presented in this report reflects a reasonable balance of the aforementioned considerations. Following this letter is an executive summary that provides an overview of our analyses, conclusions, and recommendations. The other sections of the report provide additional details regarding the financial forecast and rate development.

**GovRates, Inc.**

1988 Varick Way  
Casselberry, FL 32707-2409  
Telephone and Fax: (833) GOV-PLAN

We greatly appreciate the opportunity to be of service to the City and would like to thank the City management and staff for their tremendous assistance and cooperation during the course of the stormwater rate study.

Yours in government service,  
**GovRates, Inc.**



Bryan A. Mantz, CMC, CGFM  
President



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## **EXECUTIVE SUMMARY AND RECOMMENDATIONS**



# EXECUTIVE SUMMARY AND RECOMMENDATIONS

## ES-1: General

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The City of Margate (the "City") owns a stormwater system (the "System") that was established to: i) reduce undesirable stormwater impacts through stormwater runoff reduction and pollution prevention strategies; ii) maintain the integrity of the City's stormwater infrastructure; iii) plan for and implement future stormwater system improvements; and iv) ensure compliance with Federal, State, and local stormwater rules and regulations. These regulatory requirements include Federally-mandated National Pollution Discharge Elimination System ("NPDES") permit requirements.

The City's stormwater division has several areas of responsibility:

- Stormwater infrastructure maintenance / repair.
- Preventative maintenance including:
  - Street sweeping.
  - Right-of-way spraying.
  - Catch basin cleaning.
  - Storm top cleaning.
  - Pipe jetting / clearing.
  - Litter control.
  - Mosquito spraying.
- Shoreline maintenance.
- Canal debris removal and dredging.
- Aquatic weed removal / eradication.

The division staff services 110 miles of streets; 45 miles of stormwater pipes; 2,117 catch basins; 27 miles of canals; 55 linear miles of canal banks; 3 lakes; and 7 aerators.

Services are provided throughout the City, but the City provides a reduced level of service for properties in the Cocomar Water Control District ("Cocomar" or the "District") that is located within the City. For the

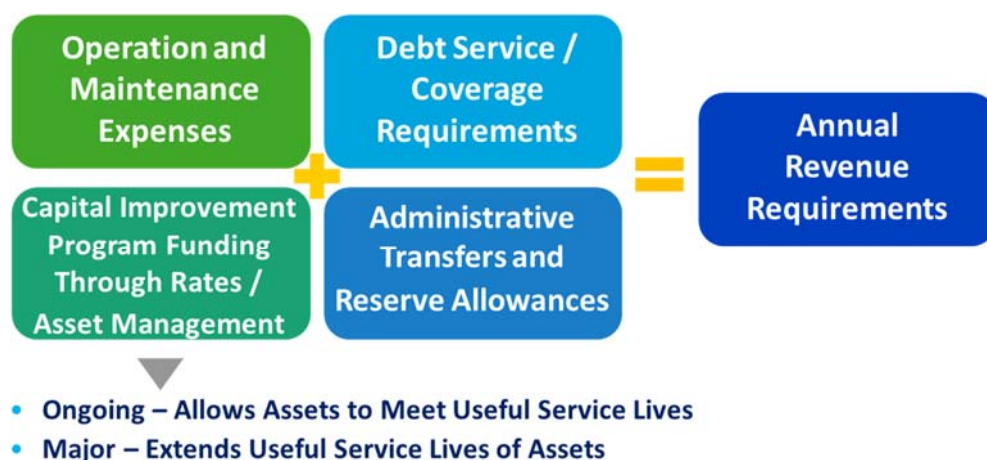
Cocomar properties, the City does not provide shoreline maintenance; canal debris removal and dredging; and aquatic weed removal / eradication. The District provides these water-related services for properties within the District. The Cocomar properties are not currently being billed for City services provided to these properties, and the proposed stormwater rates reflect a fundamental assumption that the City will start to bill the Cocomar properties a rate that reflects the lower level of service provided. Since the Cocomar properties benefit from the City stormwater services, it is fair for these properties to pay their proportionate share of the costs for such services. Cocomar properties are currently billed for City water and sewer service.

The System is established as an enterprise fund. 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 should be financed or recovered primarily through user charges." The System should have revenues equal to the costs of the services provided, and the City should establish rates sufficient to cover the cost of operating, maintaining, repairing and financing the System. To assist the City in reviewing the sufficiency of its rates, GovRates, Inc. ("GovRates") was retained to perform a stormwater rate study.

## ES-2: Financial Targets

The 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 to be the revenue requirements of public utilities such as the City's stormwater system. With respect to identifying revenue requirements for the forecast period of Fiscal Year 2019 through the Fiscal Year 2024 (the "Forecast Period"), the following Exhibit ES-1 indicates the elements considered:

**Exhibit ES-1: Components of Revenue Requirements**



The financial and rate plan should recognize the need to maintain appropriate debt service coverage ratios and adequate operating margins and reserves to fund ongoing capital needs and maintain the financial



condition of each system. **It is proposed that each utility target an unrestricted cash balance equal to at least 120 days of rate revenue plus one year of annual depreciation.** Over the long-term, GovRates recommends that each utility target one year days cash on hand (essentially one year of operating expenses excluding depreciation and amortization expenses) for unrestricted cash balances, as this metric is used by rating agencies to determine whether a utility is a strong credit. A stronger credit rating can position the utility to secure lower interest rates when debt financing high-priority capital improvements for the betterment of the system. The financial forecast discussed in this report does not recognize debt financing of the System's capital needs. **If the City utilizes debt financing in the future, a target all-in net revenues debt service coverage ratio of 200% is recommended.**

The City may want to consider adopting a formal financial policy document for its enterprise funds that could help guide rate and financial decisions. Such a policy document is looked upon favorably by credit rating agencies and could address financial targets (e.g., cash and coverage), capital reinvestment, and debt management.

## ES-2: Summary of Recommendations

---

Although the City annually reviews the financial position of the System, the last formal rate analysis was performed in 2015. The City's current stormwater rates have been in effect since October 1, 2018. As part of the current utility rate analysis, financial projections were prepared for the System for the Fiscal Year 2019 through the Fiscal Year 2024 (the "Forecast Period").

Based on the assumptions relied upon in the development of the System revenue requirements, GovRates has identified the need for stormwater rate adjustments. The primary reasons for the identified rate adjustments are to:

- 1. Fund the costs of future operations.** Similar to the experience of other Florida stormwater utilities, operating expenses for the System have been increasing at a significantly higher rate than general inflation, and this trend is expected to continue. System repair and maintenance expenses have been increasing substantially as the City must address its aging stormwater infrastructure. The repair and maintenance expenses include stormwater pipe lining and canal bank restoration. The financial forecast recognizes two (2) additional personnel in Fiscal Year 2021 to help address the System operating and capital needs.
- 2. Fund the System's capital needs, including vehicle replacements.** The Utility must replace a vacuum truck, street sweepers, a harvester, and pickup trucks. Street sweepers are the first line of defense for good drainage and prevent materials from entering the stormwater system. The vacuum truck keeps the infrastructure clean so that runoff water can flow through the pipes and culverts.
- 3. The need to provide annual funding for ongoing or routine renewal, replacement, and improvement needs.**

A financial risk of not adjusting the stormwater rates is that rate adjustments may be higher in the future. The repair, maintenance, and capital needs for the stormwater system are not anticipated to go away, but may be more expensive to address in the future. Inflation and the costs of construction continue to affect stormwater system costs.

Based on the financial forecast, the funding plan for the System, and discussions with City staff, the following Exhibit ES-2 shows the proposed stormwater rates:

**Exhibit ES-2: Summary of Existing and Proposed Monthly Stormwater Rates**

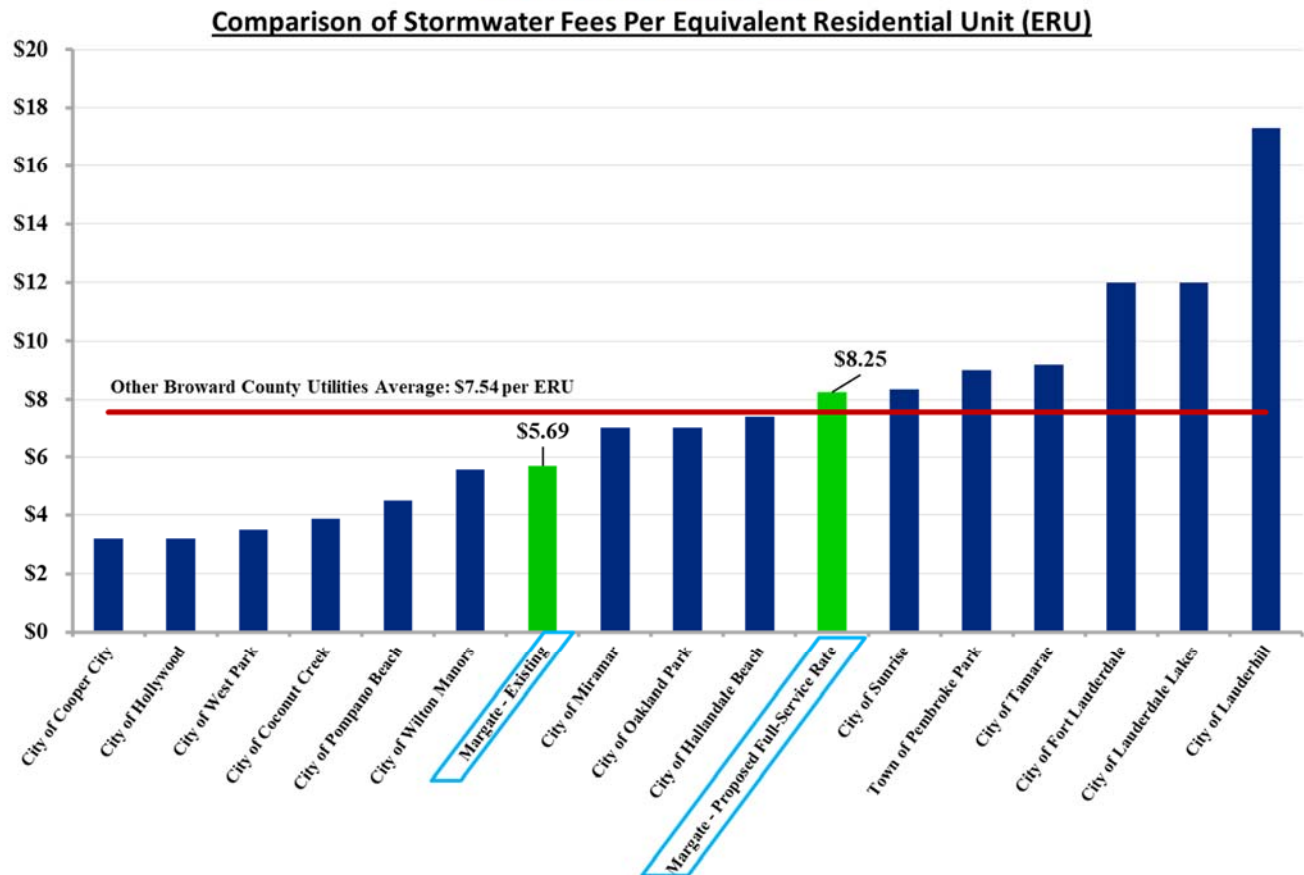
Fiscal Year	Effective Date	Full-Service Rate Per ERU		Cocomar Rate Per ERU	
		Monthly Rate	Difference	Monthly Rate	Difference
Existing		\$5.69		N/A	
2020	January 1, 2020	\$8.25	\$2.56	\$4.60	N/A
2021	October 1, 2020	8.67	0.42	4.83	\$0.23
2022	October 1, 2021	9.11	0.44	5.08	0.25
2023	October 1, 2022	9.57	0.46	5.34	0.26
2024	October 1, 2023	10.05	0.48	5.61	0.27

The proposed rates for Fiscal Year 2020 are based on an allocation to determine the costs of services provided to full-service ERUs vs. Cocomar ERUs. For Fiscal Year 2021 and beyond, GovRates recommends that the City continue its current practice of annual automatic rate increases in the absence of a rate study recommendation – 5% annual adjustments are proposed. The adjustments shown in the preceding table are considered by the City staff to be representative of the increases in costs to effectively operate and maintain the System given the specific requirements of the System service area. As shown in the preceding table, the Fiscal Year 2020 adjustments are recommended to become effective on January 1, 2020.

As shown in the following Figure ES-1, the proposed Fiscal Year 2020 stormwater rates are competitive with those of other Broward County utilities. The City of Sunrise, the Town of Pembroke Park, the City of Tamarac, the City of Fort Lauderdale, the City of Lauderdale Lakes, and the City of Lauderdale Hill currently charge higher stormwater fees than what is being proposed for the City of Margate for the Fiscal Year 2020.

Fees Effective July 2019

**Figure ES-1**  
**City of Margate, Florida**



A rate or fee comparison is not a "report card" on how well a utility is performing. It should be noted when making a comparison of the rates charged by other utilities for stormwater service that several factors have an effect on the level of rates charged. These factors may include, but are not limited to, the following:

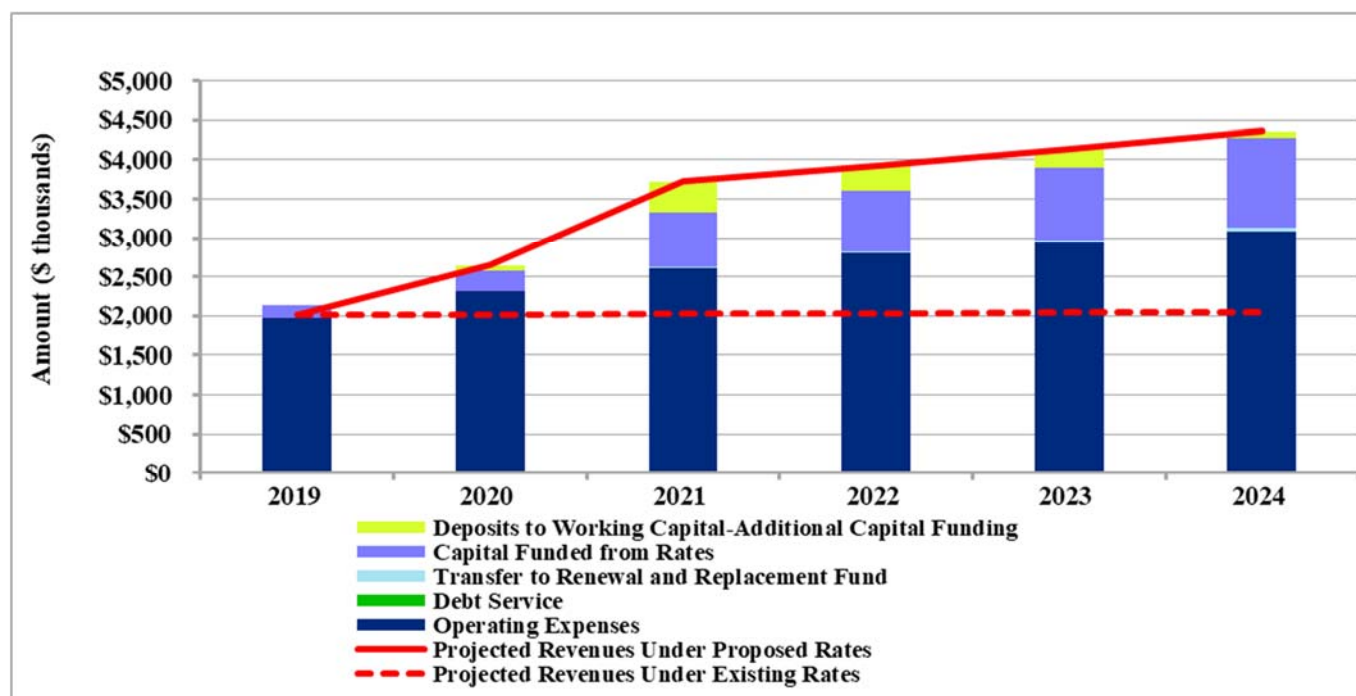
- Services provided through the stormwater fees differ by utility system.
- Amount of lake area to be maintained.
- Size and demographics of the existing customer base and available system growth.
- Level of capital improvement need to meet service area growth.
- Amount of renewals and replacements of assets and the remaining service life of assets.
- Differences in rate covenants associated with debt.

- External assistance in funding infrastructure (e.g., grants).
- Amount of subsidization from other funds (e.g., General Fund).
- Amount of General Fund and administrative fee transfers.
- Time of last rate review.

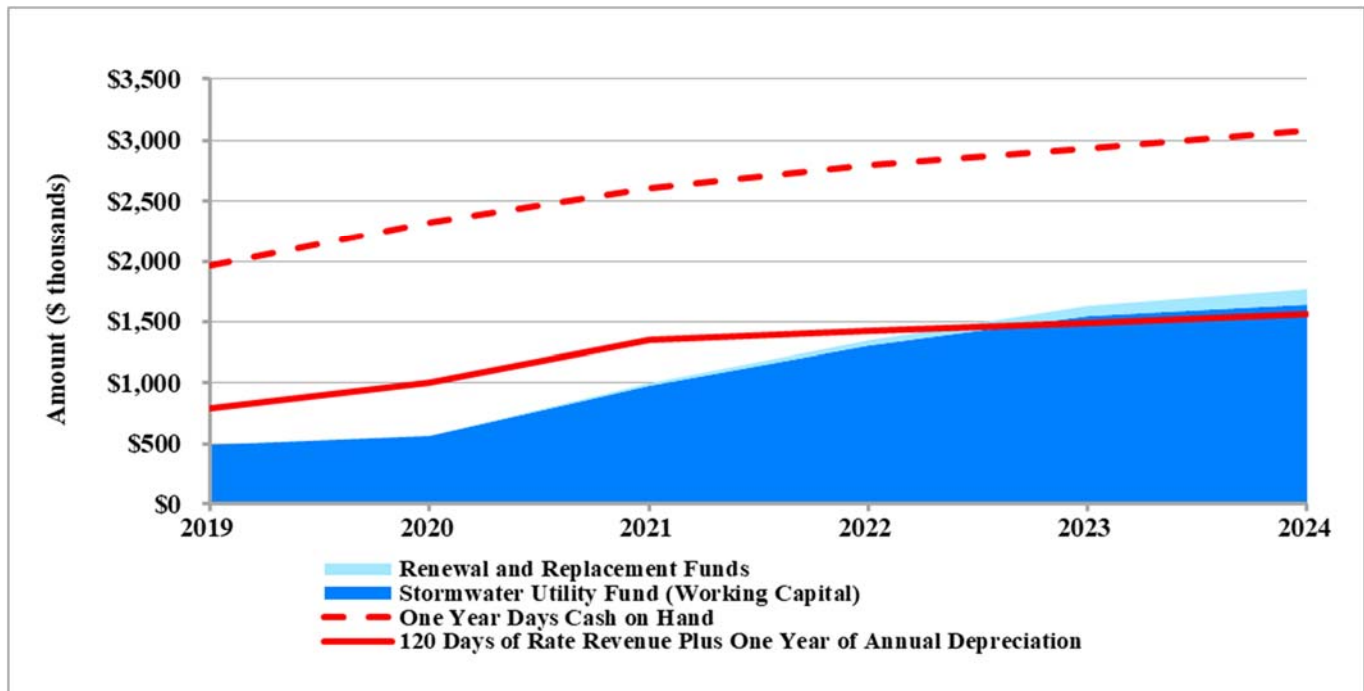
For the stormwater utilities included in the stormwater fee comparison on Table 2-3 and in the preceding Figure ES-1, no analysis has been made of the above-mentioned factors as they relate to the reported stormwater rates currently being charged by the other utilities surveyed for the purposes of this study.

The following Exhibit ES-3 shows how the revenue requirements for the stormwater system (the bars) compare against projected revenues (the red lines). The solid red line represents projected revenues under the proposed rates while the dotted red line represents projected revenues under existing rates. In the years in which the total revenue requirements exceed the revenues, available cash reserves must be utilized to make up the difference.

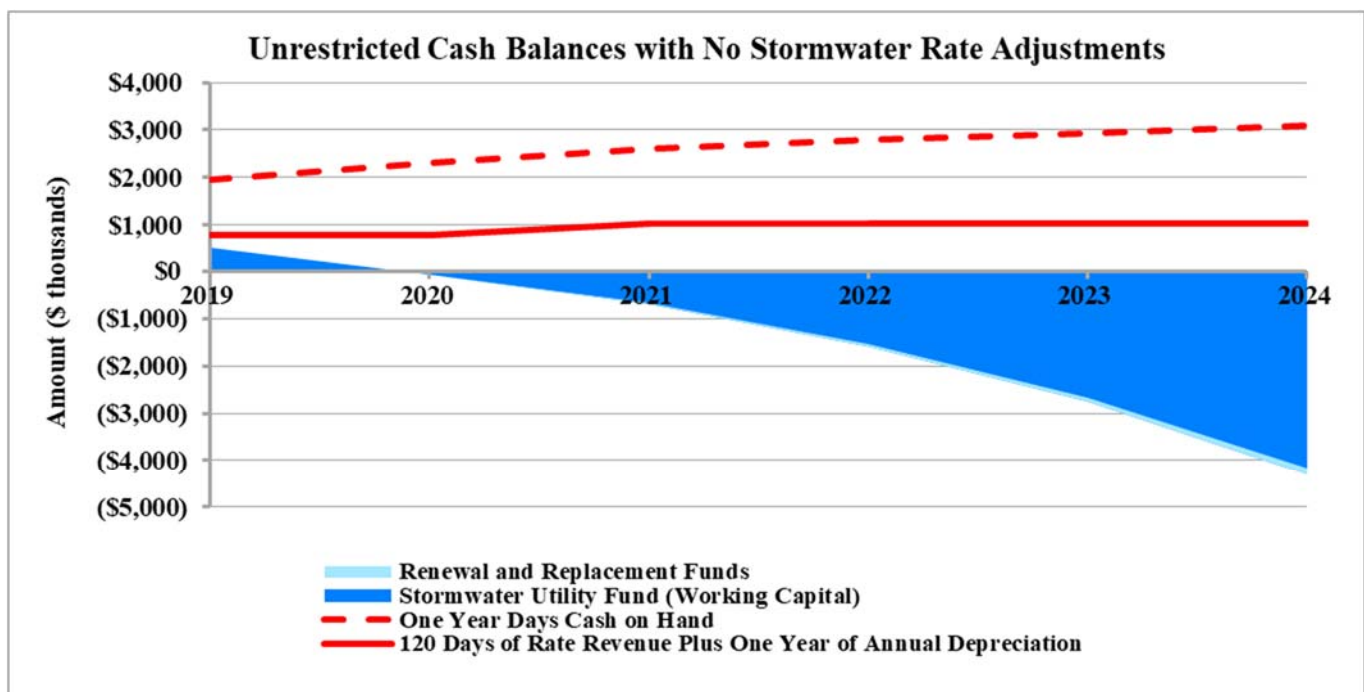
**Exhibit ES-3: Summarized Revenue Requirements Analysis for Stormwater System**



The following Exhibit ES-4 indicates the projected unrestricted cash balances for the stormwater system assuming implementation of the proposed rate adjustments.

**Exhibit ES-4: Projected Unrestricted Cash Balances**

The following Exhibit ES-5 indicates the projected unrestricted cash balances if the proposed rate adjustments were not implemented.

**Exhibit ES-5: Financial Risks of Not Implementing Proposed Stormwater Rate Adjustments**

As shown in the preceding Exhibit ES-5, the City would be unable to fund all of the identified stormwater revenue requirements without rate adjustments.

### Automatic Rate Adjustments

GovRates recommends that, in the absence of a formal rate analysis recommendation, the City should continue its current practice of automatically increasing monthly rates for stormwater service on an annual basis – without a formal rate hearing or analysis – for inflationary effects on the costs of operations. Automatic rate increases are very common among utilities in the State of Florida and are looked upon favorably by credit rating agencies and lenders when debt financing.

Historically, the Miami-Fort Lauderdale Consumer Price Index ("CPI") has been used to index the Utility's rates. In 2018, this index was discontinued by the United States Department of Labor's Bureau of Labor Statistics and replaced with a Miami-Fort Lauderdale-West Palm Beach CPI. Based on discussions with City staff, rate indexing based on the local CPI index (about 2.0% per year over the past 10 years) is not enabling the City's stormwater system to keep up with System costs. As previously mentioned, GovRates recommends automatic 5% annual increases to provide a better match with the increases in System costs, especially considering the System's repair and maintenance costs.

The following Exhibit ES-6 shows selected Florida local governments with rate adjustment provisions based on an index, formula, or established percentage:

#### Exhibit ES-6: Selected Florida Local Governments with Automatic Rate Adjustment Provisions

City of Apopka	City of Boca Raton	Charlotte County
City of Chipley	Citrus County	City of Clearwater
City of Coconut Creek	City of Cooper City	Town of Davie
City of Daytona Beach	City of DeLand	City of Dunedin
City of Eustis	City of Fellsmere	Florida Governmental Utility Authority
Florida Keys Aqueduct Authority	City of Fort Lauderdale	City of Fort Myers
Hillsborough County	City of Homestead	City of Jacksonville Beach
Town of Jupiter	Town of Jupiter Island	City of Lake City
Town of Lantana	Town of Mangonia Park	City of Marco Island
City of Margate	City of Miami	City of Miami Beach
City of Mount Dora	City of Naples	City of New Port Richey
City of North Port	City of Oakland	City of Oakland Park
City of Ocoee	City of Oldsmar	City of Orange City
City of Palatka	City of Palm Bay	City of Palmetto
City of Pembroke Pines	City of Plant City	City of Plantation
City of Port St. Lucie	City of St. Augustine	Seminole County
City of South Daytona	City of Stuart	City of Tallahassee
City of Tamarac	City of Tarpon Springs	Village of Tequesta
Volusia County	City of West Palm Beach	City of Winter Garden
City of Winter Haven	City of Winter Park	



## ES-3: Financial Overview

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Tables ES-1 and ES-2 following this executive summary provides a financial overview of forecasted System operations. These tables indicate the following for all projected fiscal years, assuming that the projected user rate adjustments for all fiscal years are implemented:

1. Maintenance of adequate operating reserves.
2. Maintenance of affordable rates. Monthly stormwater bills for residential customers are projected to remain well below 1% of the City's median household income, the affordability metric used by credit rating agencies for stormwater rates.

Based on the financial forecast and assuming the implementation of the proposed rate adjustments, the Utility is projected to be in decent financial position through the Fiscal Year 2024.

The remainder of this report provides additional details regarding the stormwater financial and rate analysis conducted on behalf of the City, including how the recommended rate adjustments were derived.



Table ES-1

City of Margate, Florida  
Stormwater Rate Study

Stormwater System Financial Overview

Fiscal Year Ending September 30,							Fiscal Year Ending September 30,						
High-Level Summary	2019	2020	2021	2022	2023	2024	High-Level Summary	2019	2020	2021	2022	2023	2024
<b>Identified Revenue Adjustments</b>							<b>Assumed Monthly ERU's</b>						
Stormwater Revenue Adjustment	0.0%	41.8%	5.0%	5.0%	5.0%	5.0%	Full-Service ERU's	29,606	29,731	29,857	29,982	30,107	30,233
Effective Months	12	12	12	12	12	12	Difference - Amount		125	125	125	125	125
							Difference - Percent		0.4%	0.4%	0.4%	0.4%	0.4%
<b>Unrestricted Cash Balances (\$ 000's)</b>							Cocomar Water Control District ERU's	11,150	11,150	11,150	11,150	11,150	11,150
Ending Unrestricted Cash Balance	\$ 490	\$ 564	\$ 1,001	\$ 1,351	\$ 1,626	\$ 1,771	Difference - Amount		0	0	0	0	0
One Year Days Cash on Hand (Target)	1,966	2,319	2,604	2,799	2,937	3,083	Difference - Percent		0.0%	0.0%	0.0%	0.0%	0.0%
<b>Revenue Surplus / (Deficiency) (\$ 000's)</b>	\$ (126)	\$ 74	\$ 411	\$ 324	\$ 249	\$ 92	<b>Cocomar Rate Per ERU</b>						
<b>Residential Bill</b>							Rate Design - Cocomar Per ERU	\$ 4.60	\$ 4.83	\$ 5.08	\$ 5.34	\$ 5.61	
Stormwater Fee Per ERU	\$ 5.69	\$ 8.25	\$ 8.66	\$ 9.09	\$ 9.54	\$ 10.02	Cocomar Rate as % of Full-Service	55.8%	55.8%	55.9%	56.0%	56.0%	
Monthly Increase - Amount		2.56	0.41	0.43	0.45	0.48							
Fee Per 1,000 Square Feet	\$ 2.39	\$ 3.46	\$ 3.64	\$ 3.82	\$ 4.01	\$ 4.21							
Affordability - % of MHI (<=1%)	0.16%	0.22%	0.23%	0.24%	0.25%	0.26%							

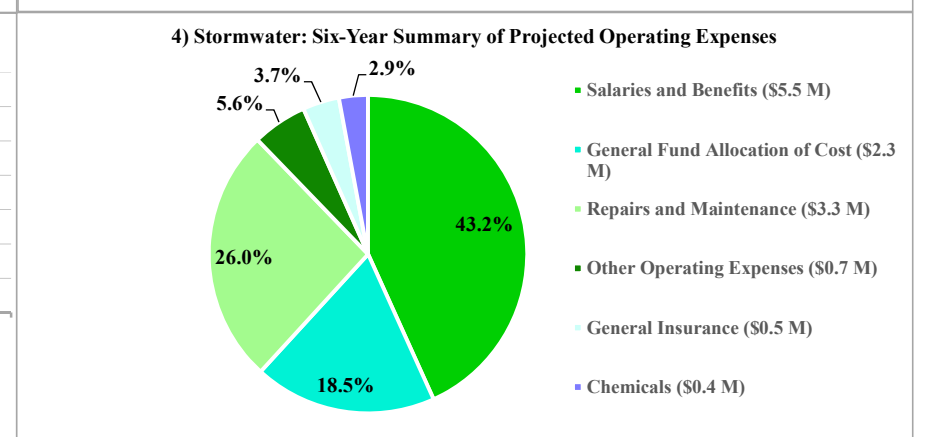
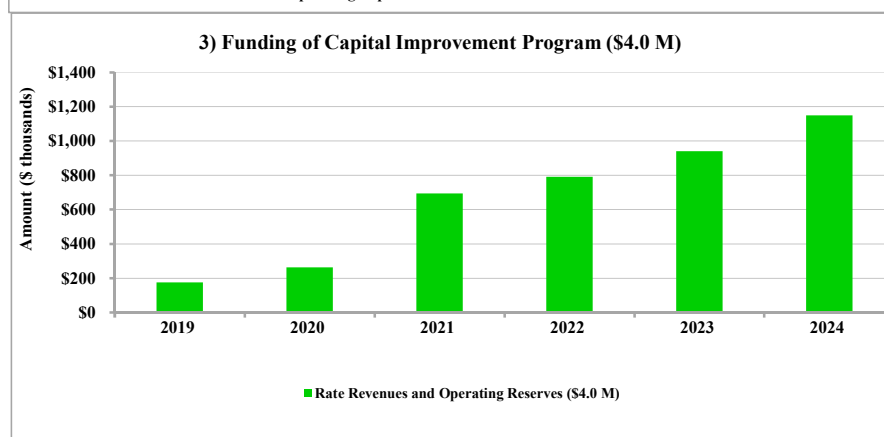
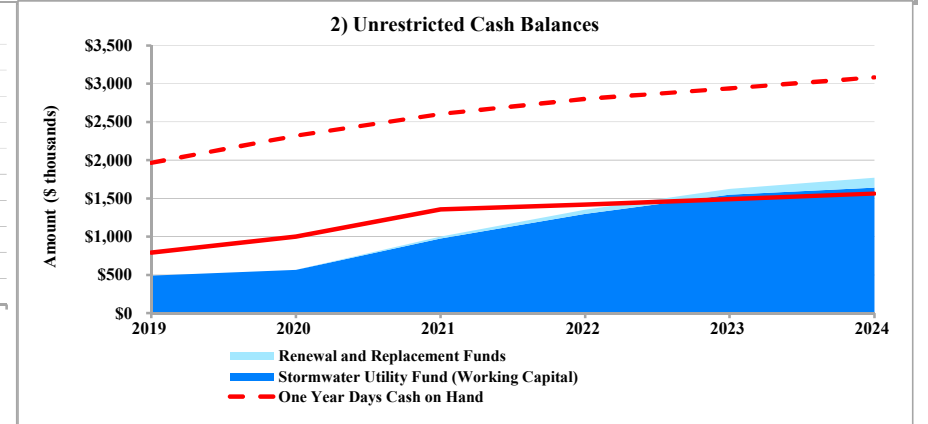
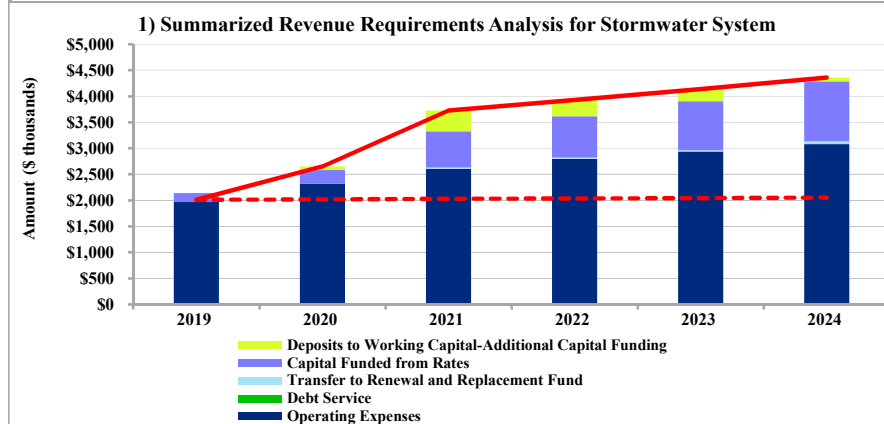
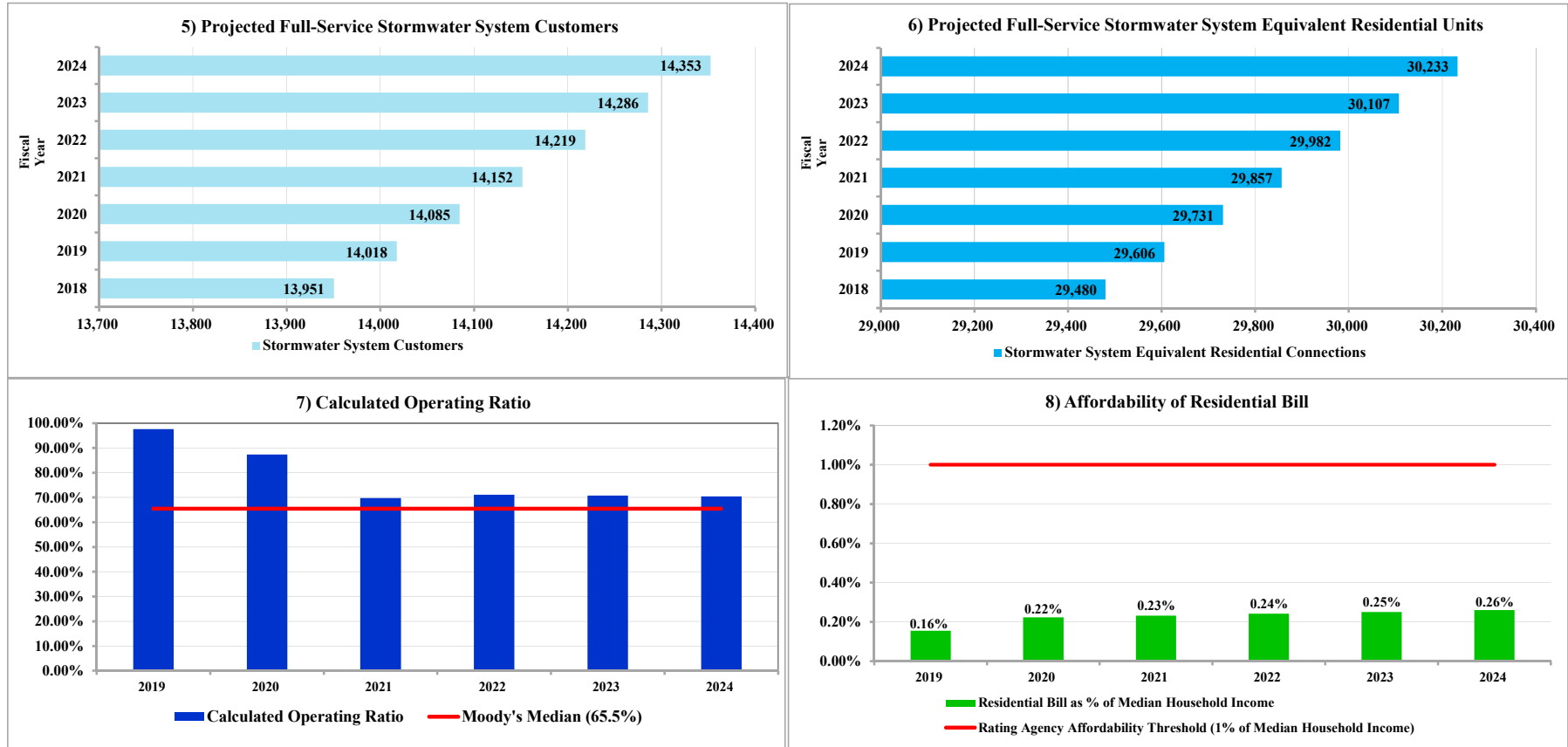




Table ES-1

City of Margate, Florida  
Stormwater Rate Study

Stormwater System Financial Overview





**Table ES-2**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Multi-Year Financial Projections**

High-Level Summary	Actual FY 2018	Estimated FY 2019	Projected FY 2020	Projected FY 2021	Projected FY 2022	Projected FY 2023	Projected FY 2024
<b>Operating Revenue</b>							
<b>User Rate Revenue - Retail</b>							
Stormwater User Rate Revenue Before Current Year Adjustment		\$ 2,009,605	\$ 2,018,116	\$ 3,550,297	\$ 3,740,770	\$ 3,941,415	\$ 4,152,773
<b>Additional User Rate Increase - Stormwater</b>		<b>0.0%</b>	<b>41.8%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>
Total Stormwater User Rate Revenue	\$ 1,920,205	\$ 2,009,605	\$ 2,650,493	\$ 3,727,812	\$ 3,927,809	\$ 4,138,486	\$ 4,360,412
<b>Other Operating Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL OPERATING REVENUE</b>	<b>\$ 1,920,205</b>	<b>\$ 2,009,605</b>	<b>\$ 2,650,493</b>	<b>\$ 3,727,812</b>	<b>\$ 3,927,809</b>	<b>\$ 4,138,486</b>	<b>\$ 4,360,412</b>
<b>Operating Expenses</b>							
TOTAL OPERATING EXPENSES [1]	\$ 1,452,174	\$ 1,965,722	\$ 2,319,425	\$ 2,604,436	\$ 2,799,098	\$ 2,937,369	\$ 3,083,109
Percent Change		35.4%	18.0%	12.3%	7.5%	4.9%	5.0%
<b>Operating Revenues Less Operating Expenses</b>	<b>\$ 468,031</b>	<b>\$ 43,883</b>	<b>\$ 331,068</b>	<b>\$ 1,123,376</b>	<b>\$ 1,128,711</b>	<b>\$ 1,201,117</b>	<b>\$ 1,277,302</b>
<b>Non-Operating Revenue</b>							
Unrestricted Interest Income	\$ 20,412	\$ 5,533	\$ 5,273	\$ 7,826	\$ 11,762	\$ 14,889	\$ 16,986
<b>Net Revenue Available for Debt Service</b>	<b>\$ 488,444</b>	<b>\$ 49,415</b>	<b>\$ 336,342</b>	<b>\$ 1,131,202</b>	<b>\$ 1,140,473</b>	<b>\$ 1,216,006</b>	<b>\$ 1,294,289</b>
<b>Debt Service</b>							
TOTAL DEBT SERVICE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Revenue Available for Capital Rehabilitations / Improvements</b>	<b>\$ 488,444</b>	<b>\$ 49,415</b>	<b>\$ 336,342</b>	<b>\$ 1,131,202</b>	<b>\$ 1,140,473</b>	<b>\$ 1,216,006</b>	<b>\$ 1,294,289</b>
<b>Capital Expenditures</b>							
<b>Capital Program as Scheduled</b>							
Capital Projects		\$ -	\$ 262,650	\$ 694,300	\$ 790,250	\$ 940,800	\$ 1,150,000
Departmental Capital		175,000	-	-	-	-	-
Total Capital Program as Scheduled		\$ 175,000	\$ 262,650	\$ 694,300	\$ 790,250	\$ 940,800	\$ 1,150,000



**Table ES-2**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Multi-Year Financial Projections**

<b>High-Level Summary</b>	<b>Actual FY 2018</b>	<b>Estimated FY 2019</b>	<b>Projected FY 2020</b>	<b>Projected FY 2021</b>	<b>Projected FY 2022</b>	<b>Projected FY 2023</b>	<b>Projected FY 2024</b>
<b>Adjustments</b>							
Capital Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Departmental Capital	-	-	-	-	-	-	-
Total Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Capital Projects as Adjusted</b>							
Capital Projects	\$ -	\$ 262,650	\$ 694,300	\$ 790,250	\$ 940,800	\$ 1,150,000	
Departmental Capital	175,000	-	-	-	-	-	-
<b>ADJUSTED CAPITAL EXPENDITURES</b>	<b>\$ 175,000</b>	<b>\$ 262,650</b>	<b>\$ 694,300</b>	<b>\$ 790,250</b>	<b>\$ 940,800</b>	<b>\$ 1,150,000</b>	
<b>Cash Surplus / (Deficiency)</b>							
Base Surplus / (Deficiency)	\$ (125,585)	\$ 73,692	\$ 436,902	\$ 350,223	\$ 275,206	\$ 144,289	
Less Projects to Be Funded Through Grants and Contributions	-	-	-	-	-	-	-
Less Projects to Be Funded Through Proceeds from Existing and Proposed Debt	-	-	-	-	-	-	-
<b>INCREASE / DECREASE IN UNRESTRICTED FUND BALANCES</b>	<b>\$ (125,585)</b>	<b>\$ 73,692</b>	<b>\$ 436,902</b>	<b>\$ 350,223</b>	<b>\$ 275,206</b>	<b>\$ 144,289</b>	
<b>Debt Service Coverage</b>							
Net Revenue Available for Debt Service	\$ 488,444	\$ 49,415	\$ 336,342	\$ 1,131,202	\$ 1,140,473	\$ 1,216,006	\$ 1,294,289
Total Debt Service	-	-	-	-	-	-	-
<b>ALL-IN DEBT SERVICE COVERAGE - 2.00x MIN TARGET</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>



**Table ES-2**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Multi-Year Financial Projections**

High-Level Summary	Actual FY 2018	Estimated FY 2019	Projected FY 2020	Projected FY 2021	Projected FY 2022	Projected FY 2023	Projected FY 2024
<b>Cash Balances</b>							
Beginning of Year Cash Balances		\$ 616,051					
Adjustments		0					
Beginning of Year Fund Balance - Net Cash		\$ 616,051	\$ 490,466	\$ 564,158	\$ 1,001,059	\$ 1,351,282	\$ 1,626,488
Operating/Capital Reserve (Increase/Decrease)		(125,585)	73,692	436,902	350,223	275,206	144,289
ENDING CASH RESERVES - \$		\$ 490,466	\$ 564,158	\$ 1,001,059	\$ 1,351,282	\$ 1,626,488	\$ 1,770,777
Target Minimum Cash Reserves - One Year of Operating Expenses - \$ [4]		\$ 1,965,722	\$ 2,319,425	\$ 2,604,436	\$ 2,799,098	\$ 2,937,369	\$ 3,083,109
Cash Reserves Balance - % of Annual Operating Expenses [4]		25%	24%	38%	48%	55%	57%
Cash Reserves Balance - Days Cash on Hand [4]		91	89	140	176	202	210
<b>Monthly Bill and Rate Affordability</b>							
Average Monthly Residential Bill		\$ 5.69	\$ 8.25	\$ 8.66	\$ 9.09	\$ 9.54	\$ 10.02
Amount Increase			\$ 2.56	\$ 0.41	\$ 0.43	\$ 0.45	\$ 0.48
Percent Increase			45.0%	5.0%	5.0%	5.0%	5.0%
Cumulative Increase - %			45.0%	52.2%	59.8%	67.7%	76.1%
Median Household Income in City of Margate (Monthly) [4]		\$ 3,648.50	\$ 3,684.99	\$ 3,721.83	\$ 3,759.05	\$ 3,796.64	\$ 3,834.61
Percent of Median Household Income (Target < 2.0%)		0.16%	0.22%	0.23%	0.24%	0.25%	0.26%





**Table ES-2**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Multi-Year Financial Projections**

High-Level Summary	Actual FY 2018	Estimated FY 2019	Projected FY 2020	Projected FY 2021	Projected FY 2022	Projected FY 2023	Projected FY 2024
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**Footnotes:**

[1] Historical Operating Expenses excluding depreciation are shown as follows:

	Fiscal Year Ended September 30,					Compound
	2014	2015	2016	2017	2018	Annual
<b>Total Operating Expenses</b>	<b>\$ 833,481</b>	<b>\$ 1,032,017</b>	<b>\$ 1,122,182</b>	<b>\$ 1,724,103</b>	<b>\$ 1,452,174</b>	<b>Growth Rate</b>
Percent Change		23.8%	8.7%	53.6%	-15.8%	14.9%

[2] Fitch Ratings considers that utilities with the strongest financial profiles would have cash reserve balances equal to at least 100% of annual Operating Expenses.

[3] \$43,782 median household income per United States Census Bureau ([www.census.gov](http://www.census.gov)) divided by 12 months. Assumed to increase by 1.0% per year after Fiscal Year 2019.

ADDITIONAL PERSONNEL ASSUMED	Fiscal Year Ending September 30,					
	2019	2020	2021	2022	2023	2024
Additional Full Time Employees (FTE) per Year	0.00	0.00	2.00	0.00	0.00	0.00
Cumulative Additional FTE	0.00	0.00	2.00	2.00	2.00	2.00



## **SECTION 1**

### **Financial Forecast**

## SECTION 1:

# FINANCIAL FORECAST

### 1-1: Existing Stormwater Rates

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The City charges for stormwater service on an equivalent residential unit ("ERU") basis. Section 34-2 of the City's Code of Ordinances establishes one stormwater ERU as 2,382 of impervious surface area for nonresidential properties and one ERU per residential dwelling unit for residential unit. Section 34-4 of the Code of Ordinances establishes a minimum ERU value of 1.0 for a developed property, whether residential or nonresidential. The ERU standard was established in 1993, or about 26 years ago, and was based on the statistical average impervious area of residential developed property per dwelling unit within the City. Ordinance 2015-1500.617 (the "Rate Ordinance"), which was adopted by the City Commission (the "Commission") on October 28, 2015, established a rate per ERU to become effective on January 1, 2016 and provided for automatic annual rate adjustments in future fiscal years based on changes in the Miami-Fort Lauderdale Consumer Price Index, with a minimum adjustment of \$0.20. The current rate of \$5.69 per ERU has been in effect since October 1, 2018. A copy of the Rate Ordinance is in the Appendix of this report.

A GIS evaluation performed in 2019 by Hazen and Sawyer, the City's consulting engineers, determined based on a statistically significant sample size that a residential stormwater ERU within the Cocomar Water Control District (previously defined as "Cocomar" or the "District") should be 2,078 square feet of impervious area. Based on discussions with City staff, the Cocomar stormwater rate was calculated based on the 2,078 square feet per ERU since this standard was calculated based on up-to-date property information within the District.

### 1-2: Stormwater System Customer Statistics

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During the Fiscal Year 2018, it is estimated that the City provided stormwater service to 13,951 full-service accounts and 29,480 full-service ERUs. Based on discussions with the City staff, the following Exhibit 1-1 indicates the assumed ERU growth for the stormwater system during the forecast period that is further detailed in Table 1-1 at the end of this section:

**Exhibit 1-1: Projected Stormwater System  
Customer Statistics - Full-Service Accounts [1]**

Fiscal Year Ending September 30, (Projected)	Full- Service Accounts	Change in Full- Service Accounts	Full-Service Equivalent Residential Units (ERUs)	Change in Full- Service ERUs
2018 (historical)	13,951		29,480	
2019	14,018	67	29,606	125
2020	14,085	67	29,731	125
2021	14,152	67	29,857	125
2022	14,219	67	29,982	125
2023	14,286	67	30,107	125
2024	14,353	67	30,233	125
Compound Annual Growth Rate:				
2018 - 2024	0.47%		0.42%	
2019 - 2024	0.47%		0.42%	

[1] Amounts shown derived from Table 1-1.

As can be seen in the preceding exhibit, it has been assumed for the purposes of developing the financial projections that the City's stormwater system full-service customer base would increase by less than 0.5% annually during the forecast period from the Fiscal Year 2019 to the end of Fiscal Year 2024.

According to the GIS evaluation performed by Hazen and Sawyer, the Cocomar customer base consists of about 11,150 ERUs based on the 2,078 square feet of impervious area ERU standard calculated for the District. These 11,150 Cocomar ERUs consist of 1,391 single family residential ERUs, 2,710 multifamily residential ERUs, and 7,049 nonresidential ERUs.

### 1-3: Revenues Under Existing Monthly Rates

The forecast of revenues from existing stormwater rates was based on: i) the projection of System ERUs as shown in Table 1-1; and ii) the existing monthly rates for stormwater service as currently adopted by the City. A summary of the estimated stormwater rate revenues derived under existing rates is included in Table 1-2 at the end of this section. The projected stormwater rate revenues by fiscal year based on the previously discussed forecast are summarized in the following Exhibit 1-2:

**Exhibit 1-2: Projected Rate Revenues Under  
Existing Monthly Stormwater Rates [1]**

Fiscal Year Ending September 30, (Projected)		Stormwater System Rate Revenues
2018 (actual)		\$1,920,205
2019	[2]	2,009,605
2020		2,018,116
2021		2,026,628
2022		2,035,140
2023		2,043,652
2024		2,052,164
Compound Annual Growth Rate:		
2018 - 2024	[2]	1.11%
2019 - 2024		0.42%

[1] Amounts shown derived from Table 1-2.

[2] Amounts reflect rate adjustment that became effective on October 1, 2019.

As shown in the preceding table, revenues under existing stormwater rates are projected to increase by less than 0.5% per year.

## 1-4: Revenue Requirements – Principal Assumptions and Considerations

The 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 operating and non-operating (e.g., interest income, capacity fees available to pay expansion-related debt service) revenues available to the utility, represents the net revenue requirements of a utility system that must be funded from the monthly user charges or rates. The following is a summary of the net revenue requirement derivation:

- + Cost of Operation and Maintenance
- + Debt Service Payments (Senior and Subordinate)
- + Transfers and Administration Payments
- + Capital Project Financing
- + Working Capital Reserves / Financial Compliance
- Other Operating Revenue and Other Funding Sources
- Interest Income
- = Net Revenue Requirements (Funded from User Rates)

Net revenue requirements signify the expenditure levels 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 analysis since utility rates should be designed to fully recover the cost of providing service.

The financial evaluation contained in this utility rate analysis covered projections for the 6 fiscal year period of October 1, 2018 through September 30, 2024 (previously defined as the "Forecast Period"). A forecast of System operations was prepared in order 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 adjustments to meet the projected revenue requirements and finance identified capital expenditure requirements; and iii) examine the financial implications of alternatives to funding the System's multi-year capital improvement program.

The projected revenue requirements are shown in Table 1-3. In the preparation of the financial projections contained in this report and the conclusions that follow, GovRates has made certain assumptions with respect to conditions that may occur in the future. While we believe the assumptions are reasonable and based on the best available information for the purpose of this report, they are dependent upon future events, and actual conditions may differ from those assumed. We recommend that the City continue to compare actual results with the projections contained in this report to ensure that the utility's rates continue to be sufficient.

For the purposes of the financial projections, the principal considerations and assumptions were either made by us or provided to us by others. These primary considerations and assumptions include the following:

1. Projected revenues from current rates and charges for the City's stormwater system have been based on the schedule of rates and charges currently in effect and as set forth in the Rate Ordinance. Such rates were applied to the customer forecast discussed previously.
2. The adopted Fiscal Year 2019 Operating and Capital Budget as provided by the City served as the baseline for the expenditure projections for the remainder of the Forecast Period, and the underlying assumptions contained in these budgets were considered reasonable and to reflect anticipated operations. The budgeted operating expenses were compared with actual historical results and trends in operating expenses.
3. Table 1-4 at the end of this section summarizes: i) the budgeted Fiscal Year 2019 operations and maintenance expenses for the System; and ii) the adjustments made to the forecast for known operational and ratemaking considerations. The operation and maintenance expenses for the stormwater system identified for the Fiscal Year 2019 were projected for the remaining five (5) years of the Forecast Period (through Fiscal Year 2024). These projections are displayed on Table 1-5. The forecast of inflation was based upon the consumer price index (CPI) forecast prepared by the Congressional Budget Office as contained in "The Budget and Economic Outlook: 2019 to 2029" published in January 2019. This inflation forecast was compared to other pricing indices used by many



utilities for financial forecasting and rate review purposes. Major cost escalation factors assumed were based on discussions with City staff and include:

- Salaries and Wages: 4.0% per year
  - Health Insurance: 10.0% per year
  - Repair: 4.0% per year
  - Repair and Maintenance Services: 71.4% increase in Fiscal Year 2020, and then 5.0% per year after Fiscal Year 2020
  - Property / General Insurance: 5.0% per year
  - Chemicals Commodity Cost: 5.0% per year
  - Fuel Commodity Cost: 5.0% per year
  - General Fund Cost Allocation: 5.0% per year in Fiscal Years 2020 and 2021; 20% in Fiscal Year 2022; 5% per year in Fiscal Years 2023 and 2024
4. Based on discussions with City staff, two (2) additional personnel above Fiscal Year 2019 budgeted levels were assumed during the Forecast Period. These Service Worker II positions were assumed to be hired in Fiscal Year 2021, and the salaries and benefits of the new hires was assumed to total approximately \$166,000.
  5. In the projection of the estimated expenditure requirements, a contingency allowance has been included for Fiscal Years 2020 through 2024. The contingency allowance assumed for the development of the projected revenue requirements represents approximately 1.0% of the total stormwater operating expenses and for the Fiscal Year 2020 was estimated to be approximately \$23,000. This annual allowance has been included as an operating expense in order to have additional funds to meet unknown or unplanned expenses throughout the fiscal year. To the extent the contingency allowance is not required to meet annual operating expenses or provide funds for ongoing System operations, such monies would accrue to the benefit of the System and could be used for other purposes such as funding renewals, replacements, and upgrades to the System over time.
  6. An allowance for bad debt expenses has been made to recognize that a certain amount of revenues will be considered as uncollectible and written off throughout the year. This expenditure item reflects an incremental adjustment to each year's operating expenses and was estimated at 0.25% of rate revenue.
  7. Amounts associated with depreciation and amortization expenses have not been recognized in this analysis. These expenditures are non-cash in nature and are also not considered as operating expenses for ratemaking purposes. Therefore, such amounts have not been recognized as a revenue requirement to be recovered from rates for the Forecast Period. It should be noted that an allowance for the funding of capital projects, renewals and replacements, and/or reserves has been recognized which essentially provides for the cash funding of these expenses.

8. The System current has no outstanding debt, and no additional debt has been recognized during the Forecast Period.
9. The projected 6-year capital expenditures (i.e., through the Fiscal Year ending September 30, 2024) for the stormwater system were based on discussions with the City staff. Table 1-6 at the end of this section provides a detailed listing of the capital projects for the System as well as projected funding sources for such projects within the analysis period. The entire capital improvement program (the "CIP") is projected to be funded on a pay-as-you-go basis from available revenues reserves.
10. Interest income has been recognized as an available revenue source to fund the expenditure needs of the System. For the Forecast Period, interest income was based on estimated balances in unrestricted funds. In the development of the estimated interest earnings, an average interest rate of 1.00% was assumed to be earned on the estimated average fund balances during the Forecast Period. This interest rate is based on recent earning performance results of the utility, discussions with the City, and a review of earnings performance of available investment vehicles to the City (e.g., State Board of Administration).

Table 1-7 at the end of this section contains the projection of fund balances and interest income.

## 1-5: Summary of Stormwater Revenue Requirements

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Table 1-3 at the end of this section, as well as the financial overview and graphical presentation in the executive summary of this report, presents the need for increases in stormwater revenues through the Fiscal Year 2024. The proposed monthly stormwater rates to recover the necessary revenue recognize the commencement of billing the Cocomar properties for the stormwater services provided by the City.

**Table 1-1**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Summary of Historical and Projected Full-Service Stormwater Accounts**

Line		Historical [1]	Fiscal Year Ending September 30					
No	Description	2018	2019	2020	2021	2022	2023	2024
<b><u>Full-Service Accounts</u></b>								
<b>Single-Family Residential</b>								
1	Account Growth	N/A	60	60	60	60	60	60
2	Incremental Growth	N/A	0	0	0	0	0	0
3	Average Monthly Accounts	12,245	12,305	12,365	12,425	12,485	12,545	12,605
4	Average Equivalent Residential Units	12,245	12,305	12,365	12,425	12,485	12,545	12,605
5	Equivalent Residential Units Per Account	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Multifamily Residential</b>								
6	Account Growth	N/A	2	2	2	2	2	2
7	Incremental Growth	N/A	0	0	0	0	0	0
8	Average Monthly Accounts	576	578	580	582	584	586	588
9	Average Equivalent Residential Units	11,426	11,466	11,506	11,545	11,585	11,625	11,664
10	Equivalent Residential Units Per Account	19.85	19.85	19.85	19.85	19.85	19.85	19.85
<b>Nonresidential</b>								
11	Account Growth	N/A	5	5	5	5	5	5
12	Incremental Growth	N/A	0	0	0	0	0	0
13	Average Monthly Accounts	1,130	1,135	1,140	1,145	1,150	1,155	1,160
14	Average Equivalent Residential Units	5,810	5,835	5,861	5,887	5,912	5,938	5,964
15	Equivalent Residential Units Per Account	5.14	5.14	5.14	5.14	5.14	5.14	5.14
<b><u>Summary:</u></b>								
16	Total Full-Service Accounts	13,951	14,018	14,085	14,152	14,219	14,286	14,353
17	Total Full-Service Equivalent Residential Units	29,480	29,606	29,731	29,857	29,982	30,107	30,233

**Table 1-2**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Projected Stormwater Rate Revenue Under Existing Rates - Full-Service Accounts**

Line No.	Description	Historical 2018	Fiscal Year Ending September 30,					
			2019	2020	2021	2022	2023	2024
<b><u>Full-Service ERU's</u></b>								
<b>Single-Family Residential</b>								
1	Monthly Fee	\$ 5.46	\$ 5.69	\$ 5.69	\$ 5.69	\$ 5.69	\$ 5.69	\$ 5.69
2	Average Monthly ERU's	12,245	12,305	12,365	12,425	12,485	12,545	12,605
3	Calculated Revenue	\$ 802,265	\$ 840,157	\$ 844,254	\$ 848,351	\$ 852,447	\$ 856,544	\$ 860,641
<b>Multifamily Residential</b>								
4	Monthly Fee per ERU	\$ 5.46	\$ 5.69	\$ 5.69	\$ 5.69	\$ 5.69	\$ 5.69	\$ 5.69
5	Average Monthly ERU's	11,426	11,466	11,506	11,545	11,585	11,625	11,664
6	Calculated Revenue	\$ 748,642	\$ 782,889	\$ 785,600	\$ 788,310	\$ 791,021	\$ 793,731	\$ 796,442
<b>Nonresidential</b>								
7	Monthly Fee per ERU	\$ 5.46	\$ 5.69	\$ 5.69	\$ 5.69	\$ 5.69	\$ 5.69	\$ 5.69
8	Average Monthly ERU's	5,810	5,835	5,861	5,887	5,912	5,938	5,964
9	Calculated Revenue	\$ 380,645	\$ 398,435	\$ 400,189	\$ 401,944	\$ 403,699	\$ 405,454	\$ 407,209
10	<b>Subtotal - Full-Service ERU's</b>	\$ 1,931,553	\$ 2,021,481	\$ 2,030,043	\$ 2,038,605	\$ 2,047,167	\$ 2,055,729	\$ 2,064,291
11	Revenue Adjustments	-0.59%	-0.59%	-0.59%	-0.59%	-0.59%	-0.59%	-0.59%
Total Stormwater Rate Revenue - Exisitng Customer Base Under								
12	Fiscal Year 2019 Rates	\$ 1,920,205	\$ 2,009,605	\$ 2,018,116	\$ 2,026,628	\$ 2,035,140	\$ 2,043,652	\$ 2,052,164

**Table 1-3**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Projected Stormwater System Revenue Requirements**

Line No.	Description	Fiscal Year Ending September 30,					
		2019	2020	2021	2022	2023	2024
1	Operating Expenses [1]	\$ 1,965,722	\$ 2,319,425	\$ 2,604,436	\$ 2,799,098	\$ 2,937,369	\$ 3,083,109
2	Total Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Other Recognized Revenue Requirements						
3	Transfer to Renewal and Replacement Fund	\$ -	\$ -	\$ 25,964	\$ 25,964	\$ 25,964	\$ 51,928
4	Capital Funded from Rates [2]	175,000	262,650	694,300	790,250	940,800	1,150,000
5	Total Other Revenue Requirements	\$ 175,000	\$ 262,650	\$ 720,264	\$ 816,214	\$ 966,764	\$ 1,201,928
6	Gross Revenue Requirements	\$ 2,140,722	\$ 2,582,075	\$ 3,324,700	\$ 3,615,312	\$ 3,904,133	\$ 4,285,037
	<u>Less Income and Funds from Other Sources</u>						
7	Unrestricted Interest Income [3]	\$ 5,533	\$ 5,273	\$ 7,826	\$ 11,762	\$ 14,889	\$ 16,986
8	<b>Net Revenue Requirements</b>	<b>\$ 2,135,189</b>	<b>\$ 2,576,802</b>	<b>\$ 3,316,874</b>	<b>\$ 3,603,550</b>	<b>\$ 3,889,244</b>	<b>\$ 4,268,051</b>
	<b>Revenue from Rates</b>						
	<u>Stormwater Rate Revenue</u>						
9	Stormwater Rate Revenue - Existing Rates	\$ 2,009,605	\$ 2,018,116	\$ 3,550,297	\$ 3,562,638	\$ 3,574,980	\$ 3,587,321
10	Prior Year Rate Adjustments	-	-	-	178,132	366,435	565,452
11	Total Rate Revenue Before Current Year Adjustment	\$ 2,009,605	\$ 2,018,116	\$ 3,550,297	\$ 3,740,770	\$ 3,941,415	\$ 4,152,773
	<u>Current Year Rate Adjustments</u>						
12	Current Year Rate Adjustments	0.0%	41.8%	5.0%	5.0%	5.0%	5.0%
13	Effective Month	12	9	12	12	12	12
14	% of Current Year Effective	100.0%	75.0%	100.0%	100.0%	100.0%	100.0%
15	Revenue From Current Year Rate Adjustments	\$ -	\$ 632,377	\$ 177,515	\$ 187,039	\$ 197,071	\$ 207,639
16	<b>Total Revenue from Rates</b>	<b>\$ 2,009,605</b>	<b>\$ 2,650,493</b>	<b>\$ 3,727,812</b>	<b>\$ 3,927,809</b>	<b>\$ 4,138,486</b>	<b>\$ 4,360,412</b>
17	<b>Revenue Surplus/(Deficiency) [4]</b>	<b>\$ (125,585)</b>	<b>\$ 73,692</b>	<b>\$ 410,938</b>	<b>\$ 324,259</b>	<b>\$ 249,242</b>	<b>\$ 92,361</b>
18	<b>As a Percent of Total Rates</b>	<b>-6%</b>	<b>3%</b>	<b>11%</b>	<b>8%</b>	<b>6%</b>	<b>2%</b>

Footnotes:

- [1] Amounts shown based on Table 1-5.  
[2] Amounts based on the proposed capital funding plan.  
[3] Interest income reflects estimated earnings on unrestricted fund balances.  
[4] The forecast assumes that any deficiencies will be funded from available operating reserves.

**Table 1-4**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Historical and Budgeted Stormwater Operating Expenses**

		Actual					Budget			Average Annual Rates of Change				
Line		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Adj. Budget		5-Year Actual	3-Year Actual	1-Year Actual	Adjusted	
No.	Cost ID Code	2014	2015	2016	2017	2018	2019	Adjustments	Fiscal Year 2019	2014 to 2018	2016 to 2018	2017 to 2018	1-Year Projected 2018 to 2019	
STORMWATER OPERATIONS [1]														
Personal Services														
1	445-4575-538.12-01	Salaries and Wages-Regular	\$ 344,216	\$ 393,911	\$ 387,645	\$ 398,988	\$ 509,416	\$ 537,180	\$ -	\$ 537,180	10.3%	14.6%	27.7%	5.5%
2	445-4575-538.12-15	Added Responds Increment	3,926	2,775	-	-	-	-	-	-	-100.0%	N/A	N/A	N/A
3	445-4575-538.12-18	Accrued Leave Payouts	-	-	-	60,471	-	-	-	-	N/A	N/A	-100.0%	N/A
4	445-4575-538.13-05	Salaries and Wages-Longevity	7,000	7,000	10,000	9,000	8,000	9,000	-	9,000	3.4%	-10.6%	-11.1%	12.5%
5	445-4575-538.14-01	Salaries and Wages-Overtime	3,997	7,473	5,841	22,932	41,993	6,000	-	6,000	80.0%	168.1%	83.1%	-85.7%
6	445-4575-538.21-01	Contributions to Social Security Tax (Employer)	27,398	24,621	22,022	28,327	32,450	34,235	-	34,235	4.3%	21.4%	14.6%	5.5%
7	445-4575-538.21-02	Contributions to Medicare Tax (Employer)	6,408	5,541	5,367	6,625	7,589	8,007	-	8,007	4.3%	18.9%	14.6%	5.5%
8	445-4575-538.22-01	Florida Retirement System Contribution-Employer	27,668	10,361	30,882	33,926	46,601	46,529	-	46,529	13.9%	22.8%	37.4%	-0.2%
9	445-4575-538.22-03	Contribution-Health Trust	-	-	4,498	1,447	1,447	1,447	-	1,447	N/A	-43.3%	0.0%	0.0%
10	445-4575-538.22-05	Pension Expenses-Florida Retirement System	-	-	16,428	26,587	-	-	-	-	N/A	-100.0%	-100.0%	N/A
11	445-4575-538.22-06	Pension Expenses-Change in PROP	-	-	(3,236)	-	-	-	-	-	N/A	-100.0%	N/A	N/A
12	445-4575-538.23-01	Health and Life Insurance	78,469	76,764	88,501	116,554	137,333	159,519	-	159,519	15.0%	24.6%	17.8%	16.2%
13	445-4575-538.26-10	Post Employment Benefit-OPEB	-	(87,060)	-	-	(440,272)	90,000	-	90,000	N/A	N/A	N/A	-120.4%
14	445-4575-538.91-19	To Employees Benefit Trust	3,489	3,907	-	-	-	-	-	-	-100.0%	N/A	N/A	N/A
15	AddPers	Additional Personnel	-	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A
16		Total Personal Services	\$ 502,570	\$ 445,293	\$ 567,948	\$ 704,857	\$ 344,558	\$ 891,917	\$ -	\$ 891,917	-9.0%	-22.1%	-51.1%	158.9%
Operating Expenses														
17	445-4575-538.29-01	Clothing and Wearing APP	\$ 3,250	\$ 3,441	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-100.0%	N/A	N/A	N/A
18	445-4575-538.30-31	Other Expense	-	-	4,102	3,989	5,333	4,500	-	4,500	N/A	14.0%	33.7%	-15.6%
19	445-4575-538.31-02	Professional Services-Medical	245	415	120	510	360	3,000	-	3,000	10.1%	73.2%	-29.4%	733.3%
20	445-4575-538.31-09	Professional Services-Other	-	16,224	-	-	-	-	-	-	N/A	N/A	N/A	N/A
21	445-4575-538.31-23	Professional Services-DEES-Allocation of Cost	20,000	20,000	20,000	20,000	20,000	20,000	-	20,000	0.0%	0.0%	0.0%	0.0%
22	445-4575-538.31-25	General Allocation of Cost	85,000	85,000	200,000	250,000	254,750	399,081	-	399,081	31.6%	12.9%	1.9%	56.7%
23	445-4575-538.34-16	Contract Services-Other	68,518	11,101	-	-	-	-	-	-	-100.0%	N/A	N/A	N/A
24	445-4575-538.39-03	Operating Expense-Bank Fees	-	-	700	2,157	955	1,000	-	1,000	N/A	16.8%	-55.7%	4.7%
25	445-4575-538.40-03	Travel and Per Diem	-	859	559	8	-	-	-	-	N/A	-100.0%	-100.0%	N/A
26	445-4575-538.44-01	Rentals and Leases	-	-	-	11,625	-	-	-	-	N/A	N/A	-100.0%	N/A
27	445-4575-538.45-27	Insurance Charges	-	-	60,000	60,000	85,000	85,000	-	85,000	N/A	19.0%	41.7%	0.0%
28	445-4575-538.46-01	Maintenance-Equipment	12,771	21,896	23,189	27,146	42,213	29,000	-	29,000	34.8%	34.9%	55.5%	-31.3%
29	445-4575-538.46-06	Repair and Maintenance Services	-	288,805	91,963	523,919	545,029	350,000	-	350,000	N/A	143.4%	4.0%	-35.8%
30	445-4575-538.46-08	Maintenance-Vehicles	22,985	19,238	35,785	30,125	40,212	35,000	-	35,000	15.0%	6.0%	33.5%	-13.0%
31	445-4575-538.46-31	Waterways (Grass Carp)	10,000	8,000	4,000	4,000	4,000	10,000	-	10,000	-20.5%	0.0%	0.0%	150.0%
32	445-4575-538.52-02	Gas, Oil and Coolant	20,283	19,853	16,160	16,976	30,737	26,000	-	26,000	11.0%	37.9%	81.1%	-15.4%
33	445-4575-538.52-14	Chemicals-Other	63,095	63,792	69,899	52,215	35,593	67,000	-	67,000	-13.3%	-28.6%	-31.8%	88.2%
34	445-4575-538.52-15	Operating Supplies-Other	2,970	4,611	6,490	2,985	7,133	13,000	-	13,000	24.5%	4.8%	139.0%	82.2%
35	445-4575-538.52-35	Licenses and Permits	16,082	15,593	18,195	11,822	32,054	21,000	-	21,000	18.8%	32.7%	171.1%	-34.5%
36	445-4575-538.54-01	Subscriptions and Memberships	5,714	6,626	1,320	270	1,325	1,400	-	1,400	-30.6%	0.2%	390.7%	5.7%
37	445-4575-538.54-05	Education and Training	-	1,270	1,752	1,499	2,921	3,800	-	3,800	N/A	29.1%	94.8%	30.1%
38	445-4575-538.59-01	Depreciation Expense	-	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A
39	AddPersOpEx	Additional Personnel Operating Expenses	-	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A
40	IncrOpEx	Incremental Operating Expenses	-	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A
41		Total Operating Expenses	\$ 330,911	\$ 586,724	\$ 554,234	\$ 1,019,246	\$ 1,107,616	\$ 1,068,781	\$ -	\$ 1,068,781	35.3%	41.4%	8.7%	-3.5%
Other Adjustments														
42	BadDebt	Bad Debt Expense = 0.25% of Rate Revs. [3]	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,024	\$ 5,024	N/A	N/A	N/A	N/A
43	Contingency	Operating Contingency = 1.00% of O&M [4]	-	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A
44		Total Other Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,024	\$ 5,024	N/A	N/A	N/A	N/A
45		TOTAL OPERATING EXPENSES	\$ 833,481	\$ 1,032,017	\$ 1,122,182	\$ 1,724,103	\$ 1,452,174	\$ 1,960,698	\$ 5,024	\$ 1,965,722	14.9%	13.8%	-15.8%	35.4%



**Table 1-4  
City of Margate, Florida  
Stormwater Rate Study**

**Historical and Budgeted Stormwater Operating Expenses**

								Average Annual Rates of Change						
Line No.	Cost ID Code	Description	Actual Fiscal Year 2014	Actual Fiscal Year 2015	Actual Fiscal Year 2016	Actual Fiscal Year 2017	Actual Fiscal Year 2018	Budget Fiscal Year 2019	Adj. Budget Fiscal Year 2019	5-Year Actual 2014 to 2018	3-Year Actual 2016 to 2018	1-Year Actual 2017 to 2018	Adjusted 1-Year Projected 2018 to 2019	
Capital Expenses														
46	445-4575-538.64-02	Acquisition of Vehicles	\$ -	\$ -	\$ -	\$ -	\$ 770	\$ 175,000	\$ (175,000)	\$ -	N/A	N/A	N/A	-100.0%
47	445-4575-538.64-12	Other Equipment	4,034	171	-	-	396	-	-	-	-44.0%	N/A	N/A	-100.0%
48	445-4575-538.68-85	Storm Pipe Refurbishment	42,901	-	-	-	-	-	-	-	-100.0%	N/A	N/A	N/A
49		Total Capital Expenses	\$ 46,935	\$ 171	\$ -	\$ -	\$ 1,166	\$ 175,000	\$ (175,000)	\$ -	-60.3%	N/A	N/A	-100.0%
Transfers and Contingency														
50	445-4575-581.91-01	Transfer to General Fund	\$ -	\$ -	\$ 992	\$ -	\$ -	\$ -	\$ -	\$ -	N/A	-100.0%	N/A	N/A
51	445-4575-589.91-03	Transfer to Fund Balance	-	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A
52		Total Transfers and Contingency	\$ -	\$ -	\$ 992	\$ -	\$ -	\$ -	\$ -	\$ -	N/A	-100.0%	N/A	N/A
53		Total Stormwater Expenses	\$ 880,415	\$ 1,032,188	\$ 1,123,174	\$ 1,724,103	\$ 1,453,340	\$2,135,698	(\$169,976)	\$1,965,722	13.3%	13.8%	-15.7%	35.3%
54		Total Stormwater Operating Expenses Only	\$ 833,481	\$ 1,032,017	\$ 1,122,182	\$ 1,724,103	\$ 1,452,174	\$1,960,698		\$1,965,722	14.9%	13.8%	-15.8%	35.4%

**Footnotes:**

- [1] Budgeted amounts are based on Fiscal Year 2019 Adopted Operating Budget as provided by the City.  
[2] Amounts are adjusted from budget as shown herein since such capital outlay expenses are reflected in the Capital Improvements Plan or the Revenue Requirements part of the rate model.  
[3] An allowance for bad debt expense of 0.25% of rate was recognized to account for uncollectible revenues.  
[4] A contingency of 1.00% of O&M was added to allow for unforeseen contingencies.

**Table 1-5**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Projected Stormwater System Operating Expenses**

Line No.	Cost ID Code	Description	Unaudited 2018	Adjusted 2019	Escalation	Fiscal Year Ending September 30,				
						2020	2021	2022	2023	2024
STORMWATER OPERATIONS [1]										
Personal Services										
1	445-4575-538.12-01	Salaries and Wages-Regular	\$ 509,416	\$ 537,180	Labor	\$ 558,667	\$ 581,014	\$ 604,254	\$ 628,425	\$ 653,562
2	445-4575-538.13-05	Salaries and Wages-Longevity	8,000	9,000	Labor	9,360	9,734	10,124	10,529	10,950
3	445-4575-538.14-01	Salaries and Wages-Overtime	41,993	6,000	Labor	6,240	6,490	6,749	7,019	7,300
4	445-4575-538.21-01	Contributions to Social Security Tax (Employer)	32,450	34,235	Labor	35,604	37,029	38,510	40,050	41,652
5	445-4575-538.21-02	Contributions to Medicare Tax (Employer)	7,589	8,007	Labor	8,327	8,660	9,007	9,367	9,742
6	445-4575-538.22-01	Florida Retirement System Contribution-Employer	46,601	46,529	Labor	48,390	50,326	52,339	54,432	56,610
7	445-4575-538.22-03	Contribution-Health Trust	1,447	1,447	Ins-Health	1,592	1,751	1,926	2,119	2,330
8	445-4575-538.23-01	Health and Life Insurance	137,333	159,519	Ins-Health	175,471	193,018	212,320	233,552	256,907
9	445-4575-538.26-10	Post Employment Benefit-OPEB	(440,272)	90,000	Labor	93,600	97,344	101,238	105,287	109,499
10	AddPers	Additional Personnel	-	-	Input	-	165,600	172,224	179,113	186,277
11		Total Personal Services	\$ 344,558	\$ 891,917		\$ 937,252	\$ 1,150,965	\$ 1,208,690	\$ 1,269,893	\$ 1,334,828
Operating Expenses										
12	445-4575-538.30-31	Other Expense	\$ 5,333	\$ 4,500	Inflation	\$ 4,608	\$ 4,728	\$ 4,846	\$ 4,967	\$ 5,086
13	445-4575-538.31-02	Professional Services-Medical	360	3,000	Ins-Health	3,300	3,630	3,993	4,392	4,832
14	445-4575-538.31-23	Professional Services-DEES-Allocation of Cost	20,000	20,000	Labor	20,800	21,632	22,497	23,397	24,333
15	445-4575-538.31-25	General Allocation of Cost	254,750	399,081	GeneralFund	419,035	439,987	527,984	554,383	582,103
16	445-4575-538.39-03	Operating Expense-Bank Fees	955	1,000	Revenue	1,319	1,855	1,955	2,059	2,170
17	445-4575-538.45-27	Insurance Charges	85,000	85,000	General-Ins	89,250	93,713	98,398	103,318	108,484
18	445-4575-538.46-01	Maintenance-Equipment	42,213	29,000	Repair	30,160	31,366	32,621	33,926	35,283
19	445-4575-538.46-06	Repair and Maintenance Services	545,029	350,000	RepairMaint	600,000	630,000	661,500	694,575	729,304
20	445-4575-538.46-08	Maintenance-Vehicles	40,212	35,000	Repair	36,400	37,856	39,370	40,945	42,583
21	445-4575-538.46-31	Waterways (Grass Carp)	4,000	10,000	Inflation	10,240	10,506	10,769	11,038	11,303
22	445-4575-538.52-02	Gas, Oil and Coolant	30,737	26,000	Fuel	27,045	28,132	29,263	30,440	31,663
23	445-4575-538.52-14	Chemicals-Other	35,593	67,000	Chemicals	70,350	73,868	77,561	81,439	85,511
24	445-4575-538.52-15	Operating Supplies-Other	7,133	13,000	Inflation	13,312	13,658	14,000	14,350	14,694
25	445-4575-538.52-35	Licenses and Permits	32,054	21,000	Inflation	21,504	22,063	22,615	23,180	23,736
26	445-4575-538.54-01	Subscriptions and Memberships	1,325	1,400	Inflation	1,434	1,471	1,508	1,545	1,582
27	445-4575-538.54-05	Education and Training	2,921	3,800	Inflation	3,891	3,992	4,092	4,194	4,295

**Table 1-5**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Projected Stormwater System Operating Expenses**

Line No.	Cost ID Code	Description	Unaudited 2018	Adjusted 2019	Escalation	Fiscal Year Ending September 30,				
						2020	2021	2022	2023	2024
28	IncrOpEx	Incremental Operating Expenses	-	-	Input	-	-	-	-	-
29		Total Operating Expenses	<u>\$ 1,107,616</u>	<u>\$ 1,068,781</u>		<u>\$ 1,352,648</u>	<u>\$ 1,418,457</u>	<u>\$ 1,552,972</u>	<u>\$ 1,628,150</u>	<u>\$ 1,706,962</u>
<b>Other Adjustments</b>										
30	BadDebt	Bad Debt Expense = 0.25% of Rate Revs. [1]	\$ -	\$ 5,024	Input	\$ 6,626	\$ 9,320	\$ 9,820	\$ 10,346	\$ 10,901
31	Contingency	Operating Contingency = 1.00% of O&M [2]	-	-	Input	22,899	25,694	27,617	28,980	30,418
32		Total Other Adjustments	<u>\$ -</u>	<u>\$ 5,024</u>		<u>\$ 29,525</u>	<u>\$ 35,014</u>	<u>\$ 37,436</u>	<u>\$ 39,327</u>	<u>\$ 41,319</u>
33		<b>TOTAL OPERATING EXPENSES</b>	<u><u>\$ 1,452,174</u></u>	<u><u>\$ 1,965,722</u></u>		<u><u>\$ 2,319,425</u></u>	<u><u>\$ 2,604,436</u></u>	<u><u>\$ 2,799,098</u></u>	<u><u>\$ 2,937,369</u></u>	<u><u>\$ 3,083,109</u></u>

Footnotes

[1] A allowance for bad debt expense of 0.25% of rate was recognized to account for uncollectible revenues.

[2] A contingency of 1.00% of O&M was added to allow for unforeseen contingencies.

**Table 1-6**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Estimated Stormwater Multi-Year Capital Needs and Funding Sources**

Line No.	Description	Funding	Fiscal Year Ending September 30,						6-Year Total
			2019	2020	2021	2022	2023	2024	
	Stormwater System Capital Expenditures: [1]								
1	Stormwater Master Plan	Rates	\$ -	\$ -	\$ -	\$ 136,250	\$ -	\$ -	\$ 136,250
2	Vacuum Truck Replacement	Rates	-	-	424,000	-	-	-	424,000
3	Harvester Replacement	Rates	-	-	-	327,000	-	-	327,000
4	Large Street Sweeper Replacement	Rates	-	-	-	-	-	316,250	316,250
5	Small Street Sweeper Replacement	Rates	-	-	-	-	196,000	-	196,000
6	Water Control Structure on C-14 Canal	Rates	-	206,000	212,000	218,000	-	-	636,000
7	Pickup Truck	Rates	-	56,650	58,300	-	33,600	-	148,550
8	Allowance for Additional Stormwater Capital Needs	Rates	-	-	-	109,000	711,200	833,750	1,653,950
	<u>Departmental Capital</u>								
9	Acquisition of Vehicles	Rates	175,000	-	-	-	-	-	175,000
10	Total Stormwater System Capital Expenditures		<u>\$ 175,000</u>	<u>\$ 262,650</u>	<u>\$ 694,300</u>	<u>\$ 790,250</u>	<u>\$ 940,800</u>	<u>\$ 1,150,000</u>	<u>\$ 4,013,000</u>
	<u>Funding Source Summary</u>								
11	Stormwater Rate Revenue	Rates	\$ 175,000	\$ 262,650	\$ 694,300	\$ 790,250	\$ 940,800	\$ 1,150,000	\$ 4,013,000
12	Total Funding Sources		<u>\$ 175,000</u>	<u>\$ 262,650</u>	<u>\$ 694,300</u>	<u>\$ 790,250</u>	<u>\$ 940,800</u>	<u>\$ 1,150,000</u>	<u>\$ 4,013,000</u>

Footnotes:

[1] Amounts as provided by City staff.

**Table 1-7**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Projection of Fund Cash Balances and Interest Income**

Line No.	Description	Fiscal Year Ending September 30,					
		2019	2020	2021	2022	2023	2024
	<b>ENDING CASH BALANCE:</b>						
1	Operating / Revenue Fund	\$ 490,466	\$ 564,158	\$ 975,096	\$1,299,354	\$1,548,597	\$1,640,958
2	Renewal, Replacement, and Improvement Fund	-	-	25,964	51,928	77,892	129,819
3	Total Ending Cash Balance	\$ 490,466	\$ 564,158	\$1,001,059	\$1,351,282	\$1,626,488	\$1,770,777
	<b>OPERATING / REVENUE FUND</b>						
4	Beginning Balance	\$ 616,051	\$ 490,466	\$ 564,158	\$ 975,096	\$1,299,354	\$1,548,597
5	Transfer In - Stormwater Revenue	2,009,605	2,650,493	3,727,812	3,927,809	4,138,486	4,360,412
6	Transfers Out - Revenue Requirements	2,135,189	2,576,802	3,316,874	3,603,550	3,889,244	4,268,051
7	Interest Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
8	Interest Income	5,533	5,273	7,696	11,372	14,240	15,948
	Recognition of Interest Earnings						
9	in Revenue Requirements	5,533	5,273	7,696	11,372	14,240	15,948
10	Ending Balance	490,466	564,158	975,096	1,299,354	1,548,597	1,640,958
11	Target Days of Available Cash: 120 Days of Revenue	660,692	871,395	1,225,582	1,291,334	1,360,598	1,433,560
12	Calculated Days of Available Cash (Revenue)	89	78	95	121	137	137
	<b>RENEWAL, REPLACEMENT, AND IMPROVEMENT FUND</b>						
13	Beginning Balance	\$ -	\$ -	\$ -	\$ 25,964	\$ 51,928	\$ 77,892
14	Transfers In - R&R Deposit	-	-	25,964	25,964	25,964	51,928
15	Interest Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
16	Interest Income	-	-	130	389	649	1,039
	Recognition of Interest Earnings						
17	in Revenue Requirements	-	-	130	389	649	1,039
18	Ending Balance	-	-	25,964	51,928	77,892	129,819
19	<b>Total Unrestricted Interest Income</b>	<u>\$ 5,533</u>	<u>\$ 5,273</u>	<u>\$ 7,826</u>	<u>\$ 11,762</u>	<u>\$ 14,889</u>	<u>\$ 16,986</u>



## **SECTION 2**

### **Rate Design**

## SECTION 2:

# RATE DESIGN

### 2-1: Rate Design - General

---

User rate design involves the calculation of monthly rates and charges for each customer classification (e.g., residential, commercial, etc.). As noted in the transmittal letter of this report, developing a financial and rate plan for the System involves multiple considerations:

- The financial and rate plan should consider utility best management practices and should promote financial sustainability and creditworthiness.
- The proposed monthly stormwater rates should be considered equitable, affordable, and competitive.
- The proposed rate plan should not cause "rate shock" to customers. From a best financial management practices standpoint, smaller incremental increases over time can help avoid future rate shock and large "catch up" rate increases.
- The proposed rates should enable the utility to perform the necessary capital improvements and operational changes to remain compliant with the regulatory requirements of the Environmental Protection Agency, the Florida Department of Environment Protection, and the Florida Department of Health.

### 2-2: Proposed Monthly Stormwater Rate Design

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To develop "full-service" stormwater rates as well as rates for properties within the Cocomar Water Control District, GovRates interviewed the City staff to determine the costs of services that benefit all customers vs. the costs that only benefit the full-service accounts. As previously mentioned in the executive summary section of this report, services are provided throughout the City, but the City provides a reduced level of service for properties in the Cocomar Water Control District that is located within the City. For the Cocomar properties, the City does not provide shoreline maintenance; canal debris removal and dredging; and aquatic weed removal / eradication. The allocation analysis is shown in Table 2-1 at the end of this section, and the allocation references are shown in Table 2-2. A summary of the allocation and calculated monthly rates for the Fiscal Year 2020 is shown in the following Exhibit 2-1.

**Exhibit 2-1: Derivation of Monthly Stormwater Rates [1]**

Description	Amount Allocable to All Accounts	Amount Not Allocable to Cocomar Accounts
Operating Expenses	\$1,611,855	\$707,570
Capital Funding	199,622	63,028
Gross Revenue Requirements	1,811,477	770,598
Less Unrestricted Interest Income	3,699	1,574
Net Revenue Requirements	1,807,778	769,024
Surplus / (Deficiency)	51,699	21,993
Total Revenue Required	\$1,859,476	\$791,017
Adjusted Revenue Per Revenue Reconciliation	1,870,465	795,691
Allocable Square Feet [2]	93,989,297	70,819,597
Cost Per Square Foot	\$0.01990083	\$0.01123547
Full-Service ERU Standard	2,382	2,382
Full-Service Rate Component - Over 9 Months	\$47.40	\$26.76
Full-Service Rate Component - Monthly	\$5.27	\$2.98
Cocomar ERU Standard	2,078	
Cocomar Rate Component - Over 9 Months	\$41.35	
Cocomar Rate Component - Monthly	\$4.60	
<b>Cocomar Water Control District Monthly Rate Per ERU</b>		<b>\$4.60</b>
<b>Full-Service Monthly Rate Per ERU [3]</b>		<b>\$8.25</b>

[1] Amounts shown derived from Table 2-1.

[2] Calculated based on 2,382 square feet per full-service ERU and 2,078 square feet per Cocomar ERU.

[3] Reflects sum of \$5.27 and \$2.98 components.

As shown in the preceding exhibit, the proposed monthly stormwater rate for full-service accounts for the Fiscal Year 2020 is \$8.25 per ERU, while the proposed Cocomar rate is \$4.60 per ERU. The Cocomar monthly rate per ERU reflecting the lower level of service is about 56% of the full-service rate. The full-service rate was calculated based on the adopted ERU standard of 2,382 feet of impervious surface area, while the Cocomar rate was calculated based on 2,078 feet of impervious surface area per the recent GIS evaluation of Cocomar properties performed by Hazen and Sawyer.

The proposed stormwater rates per ERU for Fiscal Years 2021 through 2024 represent across-the-board or uniform 5% rate adjustments.



## 2-3: Bill Comparisons – Neighboring Utilities

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In order to provide the City with additional information regarding the current rates charged for service, a comparison of the City's existing and proposed stormwater rates per ERU with charges for stormwater service by 15 Broward County utilities has been made. This bill comparison is shown in Table 2-3 at the end of this section. A graphical comparison is in Figure ES-1 within the executive summary of this report. As noted in the executive summary, a rate or fee comparison is not a "report card" on how well a utility is performing because several factors have an effect on the level of rates charged. The executive summary provides a list of many of these factors. The proposed stormwater rates produce bills that are comparable / competitive with those of other Broward County utilities.

**Table 2-1**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Development of Proposed Fiscal Year 2020 Stormwater Rates**

Line No.	Description	Rate Design Fiscal Year 2020	Reference	Percent Allocable to All Accounts [1]	Percent Not Allocable to Cocomar Accounts [2]	Amount Allocable to All Accounts [1]	Amount Not Allocable to Cocomar Accounts [2]
STORMWATER OPERATIONS [1]							
Personal Services							
1	Salaries and Wages-Regular	\$ 558,667	Personnel	64.00%	36.00%	\$ 357,535	\$ 201,133
2	Salaries and Wages-Longevity	9,360	Personnel	64.00%	36.00%	5,990	3,370
3	Salaries and Wages-Overtime	6,240	Personnel	64.00%	36.00%	3,993	2,247
4	Contributions to Social Security Tax (Employer)	35,604	Personnel	64.00%	36.00%	22,786	12,818
5	Contributions to Medicare Tax (Employer)	8,327	Personnel	64.00%	36.00%	5,329	2,998
6	Florida Retirement System Contribution-Employer	48,390	Personnel	64.00%	36.00%	30,969	17,422
7	Contribution-Health Trust	1,592	Personnel	64.00%	36.00%	1,019	573
8	Health and Life Insurance	175,471	Personnel	64.00%	36.00%	112,297	63,173
9	Post Employment Benefit-OPEB	93,600	Personnel	64.00%	36.00%	59,902	33,698
10	Additional Personnel	-	Personnel	64.00%	36.00%	-	-
11	Total Personal Services	\$ 937,252				\$ 599,820	\$ 337,431
Operating Expenses							
12	Other Expense	4,608	All-Accounts	100.00%	0.00%	\$ 4,608	\$ -
13	Professional Services-Medical	3,300	Personnel	64.00%	36.00%	2,112	1,188
14	Professional Services-DEES-Allocation of Cost	20,800	All-Accounts	100.00%	0.00%	20,800	-
15	General Allocation of Cost	419,035	OpEx	69.49%	30.51%	291,203	127,832
16	Operating Expense-Bank Fees	1,319	RevReq	70.16%	29.84%	925	394
17	Insurance Charges	89,250	All-Accounts	100.00%	0.00%	89,250	-
18	Maintenance-Equipment	30,160	Maint-Equip	85.00%	15.00%	25,636	4,524
19	Repair and Maintenance Services	600,000	Repair-Maint	80.00%	20.00%	480,000	120,000
20	Maintenance-Vehicles	36,400	Maint-Vehicles	80.00%	20.00%	29,120	7,280
21	Waterways (Grass Carp)	10,240	No-Cocomar	0.00%	100.00%	-	10,240
22	Gas, Oil and Coolant	27,045	Gas-Oil	85.00%	15.00%	22,988	4,057
23	Chemicals-Other	70,350	Chemicals	10.00%	90.00%	7,035	63,315
24	Operating Supplies-Other	13,312	All-Accounts	100.00%	0.00%	13,312	-
25	Licenses and Permits	21,504	Licenses-Permits	5.00%	95.00%	1,075	20,429
26	Subscriptions and Memberships	1,434	Personnel	64.00%	36.00%	917	516
27	Education and Training	3,891	Personnel	64.00%	36.00%	2,490	1,401
28	Total Operating Expenses	\$ 1,352,648				\$ 991,473	\$ 361,175
Other Adjustments							
29	Bad Debt Expense = 0.25% of Rate Revenues	\$ 6,626	RevReq	70.16%	29.84%	\$ 4,649	\$ 1,978
30	Operating Contingency = 1.00% of O&M	22,899	OpEx	69.49%	30.51%	15,913	6,986
31	Total Other Adjustments	\$ 29,525				\$ 20,562	\$ 8,963

**Table 2-1**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Development of Proposed Fiscal Year 2020 Stormwater Rates**

Line No.	Description	Rate Design Fiscal Year 2020	Reference	Percent Allocable to All Accounts [1]	Percent Not Allocable to Cocomar Accounts [2]	Amount Allocable to All Accounts [1]	Amount Not Allocable to Cocomar Accounts [2]
32	TOTAL OPERATING EXPENSES	\$ 2,319,425				\$ 1,611,855	\$ 707,570
33	Other Recognized Revenue Requirements						
33	Capital Funded from Rates	\$ 262,650	Capital-Program	76.00%	24.00%	\$ 199,622	\$ 63,028
34	Total Other Revenue Requirements	\$ 262,650				\$ 199,622	\$ 63,028
35	Gross Revenue Requirements	\$ 2,582,075				\$ 1,811,477	\$ 770,598
36	<u>Less Income and Funds from Other Sources</u>						
36	Unrestricted Interest Income	\$ 5,273	RevReq	70.16%	29.84%	\$ 3,699	\$ 1,574
37	Net Revenue Requirements	\$ 2,576,802				\$ 1,807,778	\$ 769,024
38	Surplus / (Deficiency)	73,692	RevReq	70.16%	29.84%	51,699	21,993
39	Total Revenue Required	\$ 2,650,493				\$ 1,859,476	\$ 791,017
40	Revenue Adjustment from Revenue Reconciliation	-0.59%				-0.59%	-0.59%
41	Adjusted Revenue	\$ 2,666,157				\$ 1,870,465	\$ 795,691
42	Equivalent Residential Units (ERU's) and Allocable Square Feet:						
42	Full-Service ERU's	29,731					
43	Full-Service ERU Standard	2,382					
44	Full-Service Square Feet	70,819,597					
45	Cocomar ERU's	11,150					
46	Cocomar ERU Standard	2,078					
47	Cocomar Square Feet	23,169,700					
48	Total Square Feet for Shared Services	93,989,297					
49	Allocable Square Feet					93,989,297	70,819,597
50	Cost Per Square Foot					\$0.01990083	\$0.01123547
51	Full-Service ERU Standard					2,382	2,382
52	Full-Service Rate Component - Over 9 Months					\$47.40	\$26.76
53	Full-Service Rate Component - Monthly					\$5.27	\$2.98
54	Cocomar ERU Standard					2,078	
55	Full-Service Rate Component - Over 9 Months					\$41.35	
56	Cocomar Rate Component - Monthly					\$4.60	

**Table 2-1**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Development of Proposed Fiscal Year 2020 Stormwater Rates**

Line No.	Description	Rate Design Fiscal Year 2020	Reference	Percent Allocable to All Accounts [1]	Percent Not Allocable to Cocomar Accounts [2]	Amount Allocable to All Accounts [1]	Amount Not Allocable to Cocomar Accounts [2]
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57	Cocomar Water Control District Monthly Rate Per ERU						<b>\$4.60</b>
58	Full-Service Monthly Rate Per ERU						<b>\$8.25</b>

REVENUE CHECK			
Description	ERU's	Monthly Rate Per ERU	Revenue Over 9 Months
59 Full-Service ERUs	29,731	\$ 8.25	\$ 2,194,569
60 Cocomar Water Control District ERUs	11,150	4.60	458,898
61 Total Revenue			\$ 2,653,467
62 Difference from Total Revenue to Be Recovered - Amount			\$ 2,973
63 Difference from Total Revenue to Be Recovered - Percent			0.1%

Footnotes:

- [1] Allocations references are based on discussions with City staff and are summarized in Table 2-2.
- [2] Allocations references are based on discussions with City staff and are summarized in Table 2-2. Activities that do not benefit the Cocomar Water Control District include costs of shoreline maintenance; canal debris removal and dredging; and aquatic weed removal / eradication.

**Table 2-2**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Allocation References for Fiscal Year 2020 Stormwater Rate Design**

Line No.	Description	Reference	Percent Allocable to All Accounts [1]	Percent Not Allocable to Cocomar Accounts [2]
1	Allocable to All Accounts	All-Accounts	100.00%	0.00%
2	Not Allocable to Cocomar Accounts	No-Cocomar	0.00%	100.00%
3	Operating Expenses	OpEx	69.49%	30.51%
4	Personnel Costs	Personnel	64.00%	36.00%
5	Service Workers Labor	Service-Workers	80.00%	20.00%
6	Stormwater Foreman Labor	Storm-Foreman	75.00%	25.00%
7	Office Specialist II Labor	Office-Specialist	95.00%	5.00%
8	Capital Program	Capital-Program	76.00%	24.00%
9	Revenue Requirements	RevReq	70.16%	29.84%
10	Licenses and Permits	Licenses-Permits	5.00%	95.00%
11	Chemicals	Chemicals	10.00%	90.00%
12	Maintenance-Equipment	Maint-Equip	85.00%	15.00%
13	Repair and Maintenance Services	Repair-Maint	80.00%	20.00%
14	Maintenance-Vehicles	Maint-Vehicles	80.00%	20.00%
15	Gas, Oil, and Coolant	Gas-Oil	85.00%	15.00%
16	Not Applicable	N/A	0.00%	0.00%
17	Additional 1	Add 1	100.00%	0.00%

**DERIVATION OF ALLOCATION REFERENCES:**

**Operating Expenses Allocation Reference**

	Total	All Accounts	Not Allocable to Cocomar Accounts
18 Total Operating Expenses	\$ 2,319,425	\$ 1,611,855	\$707,570
19 Allocation Percentage	100.00%	69.49%	30.51%

**Table 2-2**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Allocation References for Fiscal Year 2020 Stormwater Rate Design**

Line No.	Description	Reference	Percent Allocable to All Accounts [1]	Percent Not Allocable to Cocomar Accounts [2]
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**Personnel**

		Total Salaries and Benefits	Allocation References	Allocation Percentages		Allocation Amounts	
Position				All Accounts	Not Allocable to Cocomar Accounts	All Accounts	Not Allocable to Cocomar Accounts
20	Canal Maintenance Technician I	\$72,686	No-Cocomar	0.00%	100.00%	\$0	\$72,686
21	Canal Maintenance Technician II	83,943	No-Cocomar	0.00%	100.00%	0	83,943
22	Service Worker I	50,631	Service-Workers	80.00%	20.00%	40,505	10,126
23	Service Worker I	48,445	Service-Workers	80.00%	20.00%	38,756	9,689
24	Service Worker II	80,825	Service-Workers	80.00%	20.00%	64,660	16,165
25	Service Worker II	80,426	Service-Workers	80.00%	20.00%	64,341	16,085
26	Service Worker II	64,262	Service-Workers	80.00%	20.00%	51,410	12,852
27	Service Worker II	80,825	Service-Workers	80.00%	20.00%	64,660	16,165
28	Service Worker II	66,034	Service-Workers	80.00%	20.00%	52,827	13,207
29	Office Specialist II	55,685	Office-Specialist	95.00%	5.00%	52,901	2,784
30	Stormwater Foreman	68,472	Storm-Foreman	75.00%	25.00%	51,354	17,118
31	Total Capital Program in Rate Design Year	\$752,234				\$481,413	\$270,821
32	Allocation Percentages	100.00%				64.00%	36.00%

**Table 2-2  
City of Margate, Florida  
Stormwater Rate Study**

**Allocation References for Fiscal Year 2020 Stormwater Rate Design**

Line No.	Description	Reference	Percent Allocable to All Accounts [1]	Percent Not Allocable to Cocomar Accounts [2]
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**Multi-Year Capital Program Allocation Reference**

		Total Cost - FY 2019 to 2024	Allocation References	Allocation Percentages		Allocation Amounts			
				All Accounts	Not Allocable to Cocomar Accounts	All Accounts	Not Allocable to Cocomar Accounts		
<u>Stormwater System Capital Expenditures: [1]</u>									
33	Stormwater Master Plan	\$ 136,250	All-Accounts	100.00%	0.00%	\$136,250	\$0		
34	Vacuum Truck Replacement	424,000	All-Accounts	100.00%	0.00%	424,000	0		
35	Harvester Replacement	327,000	No-Cocomar	0.00%	100.00%	0	327,000		
36	Large Street Sweeper Replacement	316,250	All-Accounts	100.00%	0.00%	316,250	0		
37	Small Street Sweeper Replacement	196,000	All-Accounts	100.00%	0.00%	196,000	0		
38	Water Control Structure on C-14 Canal	636,000	No-Cocomar	0.00%	100.00%	0	636,000		
39	Pickup Truck	148,550	All-Accounts	100.00%	0.00%	148,550	0		
40	Allowance for Additional Stormwater Capital Needs	1,653,950	All-Accounts	100.00%	0.00%	1,653,950	0		
<u>Departmental Capital</u>									
41	Acquisition of Vehicles	175,000	All-Accounts	100.00%	0.00%	175,000	0		
42	Total Capital Program in Rate Design Year	\$4,013,000				\$3,050,000	\$963,000		
43	Allocation Percentages	100.00%				76.00%	24.00%		

**Revenue Requirements Allocation Reference**

		Total	All Accounts	Not Allocable to Cocomar Accounts
44	Total Revenue Requirements	\$2,576,802	\$1,807,778	\$769,024
45	Allocation Percentage	100.00%	70.16%	29.84%

**Table 2-3**  
**City of Margate, Florida**  
**Stormwater Rate Study**

**Comparison of Monthly Stormwater Fees  
Per Equivalent Residential Unit (ERU) [1]**

(Rates Effective in June 2019)

Line No.	Description	Rate	ERU Size Square Feet	Rate Per 1,000 Square Feet
<b>City of Margate, Florida</b>				
1	Current Rates - Fiscal Year 2019	\$ 5.69	2,382	\$ 2.39
2	Proposed Rates - Fiscal Year 2020	8.25	2,382	3.46
<b>Other Broward County Utilities:</b>				
3	City of Coconut Creek	\$ 3.87	2,070	\$ 1.87
4	City of Cooper City	3.22	1,750	1.84
5	City of Fort Lauderdale [2]	12.00	N/A	N/A
6	City of Hallandale Beach [3]	7.37	958	7.69
7	City of Hollywood	3.22	2,250	1.43
8	City of Lauderdale Lakes	12.00	2,133	5.63
9	City of Lauderhill	17.30	3,800	4.55
10	City of Miramar	7.00	3,619	1.93
11	City of Oakland Park	7.00	1,507	4.65
12	Town of Pembroke Park	9.00	1,548	5.81
13	City of Pompano Beach	4.50	2,880	1.56
14	City of Sunrise	8.36	1,884	4.44
15	City of Tamarac	9.19	1,830	5.02
16	City of West Park	3.50	1,351	2.59
17	City of Wilton Manors	5.58	3,460	1.61
18	Other Broward County Utilities' Average	\$ 7.54	2,217	\$ 3.62
19	Minimum	3.22	958	1.43
20	Maximum	17.30	3,800	7.69

Footnotes:

- [1] Unless otherwise noted, amounts shown reflect stormwater rates in effect March 2019.
- [2] Nonresidential lots / parcels are charged per acre.
- [3] Charged \$88.44 per ERU per year. An ERU is defined as 0.022 acres, which is 958.32 square feet.





## **APPENDIX**

### **Rate Ordinance**

CITY OF MARGATE, FLORIDA

ORDINANCE NO. 2015-1500.617

AN ORDINANCE OF THE CITY OF MARGATE, FLORIDA,  
ESTABLISHING THE MONTHLY FEE TO BE PAID FOR THE  
STORMWATER MANAGEMENT UTILITY FEE TO A MONTHLY  
FEE OF \$5.15 PER EQUIVALENT RESIDENTIAL UNIT  
(ERU) EFFECTIVE JANUARY 1, 2016; PROVIDING FOR  
CPI INCREASE BEGINNING OCTOBER 1, 2016 AND EACH  
OCTOBER 1 THEREAFTER THROUGH FISCAL YEAR 2020;  
PROVIDING FOR REPEAL; PROVIDING FOR  
SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

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BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF  
MARGATE, FLORIDA:

SECTION 1: The City Commission of the City of  
Margate, Florida, hereby establishes that the monthly fee  
to be paid for the Stormwater Management Utility Fee shall  
be \$5.15 per equivalent residential connection (ERU),  
effective January 1, 2016 with Consumer Price Index (CPI)  
adjustments beginning October 1, 2016 and each October 1  
thereafter through fiscal year 2020. Consumer Price Index  
(CPI) change shall be as published by the U.S. Department  
of Labor, Bureau of Labor Statistics, or its successor  
agency for all urban consumers in the Miami-Fort  
Lauderdale area, during the most recent consecutive twelve  
month period from June of the previous year. The  
adjustment to the fee shall not be less than \$0.20 per ERU  
in any year.

SECTION 2: All ordinances or parts of ordinances in  
conflict herewith be and the same are hereby repealed to  
the extent of such conflict.


SECTION 3: If any section, sentence, clause, or  
phrase of this ordinance is held to be invalid or  
unconstitutional by a court of competent jurisdiction,  
then said holding shall in no way affect the validity of  
the remaining portions of this ordinance.

SECTION 4: This ordinance shall become effective immediately upon adoption at its second reading.

PASSED ON FIRST READING THIS 7<sup>TH</sup> day of OCTOBER, 2015.

PASSED ON SECOND READING THIS 28<sup>TH</sup> day of OCTOBER, 2015.

ATTEST:

  
JOSEPH J. KAVANAGH  
CITY CLERK

  
MAYOR JOANNE SIMONE

RECORD OF VOTE - 1ST READING

RECORD OF VOTE - 2ND READING

Peerman Yes  
Talerico Yes  
Bryan Yes  
Ruzzano Yes  
Simone Yes

Peerman Yes  
Talerico Absent  
Bryan Yes  
Ruzzano Yes  
Simone Yes

**CITY OF MARGATE, FLORIDA  
STORMWATER RATE STUDY**

**2019**