

White Paper on The Benefits of Implementing a Stormwater Utility District on Marco Island

Securing a Sustainable Future through Dedicated Funding and Management

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Introduction

As environmental concerns grow and the impact of climate change becomes more apparent, managing stormwater has never been more critical. Implementing a Stormwater Utility District on Marco Island offers a strategic approach to address these challenges effectively. A Stormwater Utility District provides a dedicated funding source for water quality improvements, ensures efficient stormwater management, and supports the establishment of a dedicated Department of the Environment and Stormwater Management.

The Need for a Stormwater Utility District

Marco Island, like many coastal communities, faces unique challenges related to stormwater management. Rising sea levels, changes in precipitation, and urban development contribute to the growing complexity of maintaining water quality and preventing flooding. A Stormwater Utility District offers a structured solution to these challenges, drawing on the successful implementation in more than 165 other Florida cities.

Dedicated Funding Source for Water Quality Improvements

A primary benefit of establishing a Stormwater Utility District is the creation of a dedicated funding source. This financial mechanism ensures a reliable and consistent stream of revenue specifically allocated for stormwater management and water quality improvement projects. By directly linking funding to stormwater services, Marco Island can undertake necessary projects without competing for general municipal funds.

Benefits of Dedicated Funding

- **Resource Allocation:** Guaranteed funds allow for the prioritization of essential projects, from infrastructure upgrades to pollution control initiatives.
- **Long-term Planning:** Stable funding enables the development of comprehensive, long-term plans for stormwater management, ensuring sustainability and resilience.
- **Community Benefits:** Improved water quality leads to healthier ecosystems, recreational opportunities, and enhanced property values.

Establishing a Department of the Environment and Stormwater Management

To maximize the effectiveness of a Stormwater Utility District, it is beneficial to create a dedicated Department of the Environment and Stormwater Management. This department would oversee all stormwater-related activities, ensuring that projects are executed efficiently and in alignment with environmental goals.

Advantages of a Dedicated Department

The establishment of a dedicated department brings several advantages:

- **Specialized Expertise:** A focused department would employ experts in environmental science, engineering and stormwater management, bringing specialized knowledge to the forefront.
- **Integrated Management:** Coordinating all stormwater activities under one department ensures a holistic approach, integrating water quality improvements, flood prevention, and environmental protection.
- **Accountability:** A single department provides clear accountability, making it easier to track progress, address issues, and communicate with stakeholders.

Case Studies from Other Florida Cities

Examining the experiences of other Florida cities, including Naples, Cape Coral, Ft. Meyers, Key West, St. Petersburg and Tampa and others that have implemented Stormwater Utility Districts can provide valuable insights for Marco Island. Attached to this White Paper as **Exhibit 1** are excerpts from the Florida Stormwater Association 2024 Stormwater Utility Report listing participating municipalities and counties and their range in utility charges. **Exhibit 2** is the Estimated Cost to Fund AWT or Better from \$5,000,000 to \$15,000,000 and **Exhibit 3** is a Stormwater Utility Rate Analysis from monthly rates of \$.60 to \$60.00

City of Orlando

Orlando's Stormwater Utility District has been instrumental in funding various projects aimed at improving water quality and reducing flooding. The dedicated revenue stream has enabled the city to implement green infrastructure initiatives, such as rain gardens and permeable pavements, significantly enhancing urban resilience.

City of Fort Lauderdale

In Fort Lauderdale, the Stormwater Utility District has supported extensive infrastructure upgrades, including the installation of advanced stormwater treatment systems. These improvements have led to a notable reduction in pollutants entering waterways, benefiting both the environment and public health.

Conclusion

Implementing Stormwater Utility District on Marco Island offers a strategic path to enhanced environmental stewardship and community resilience. With a dedicated funding source for water quality improvements and a specialized Department of the Environment and Stormwater Management, Marco Island can address current and future stormwater challenges effectively. Learning from the successes of other Florida cities, Marco Island is poised to secure a sustainable future for its residents and the natural environment.

References

- Florida Stormwater Association (FSA) 2024 Report
- City of Orlando Stormwater Utility District Case Study
- City of Fort Lauderdale Stormwater Utility District Case Study
- Florida Department of Environmental Protection
- American Society of Civil Engineers

Exhibit 1






Florida Stormwater Association

| 2024 STORMWATER UTILITY REPORT



FSA 2024 Stormwater Utility Report

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1-6 How many accounts does your SWU serve?

Residential Average is 32,995 accounts: 27,733 are single family and 5,431 are multi-family.

Non-Residential Average is 3,050 accounts: 1,338 business, 159 institutional, 1,272 commercial and 173 industrial.

Jurisdiction	Residential	Non-Residential	Jurisdiction	Residential	Non-Residential
Alachua County	33,894	4,582	City of Lake Worth Beach	21,022	3,096
Bay County	39,369	1,501	City of Lakeland	48,403	2,923
Brevard County	120,500	9,618	City of Largo	15,502	2,372
City of Altamonte Springs	11,154	2,100	City of Longwood	6,040	605
City of Auburndale	6,796	2,491	City of Madeira Beach	1,655	131
City of Aventura	12,000	275	City of Maitland	4,622	432
City of Boynton Beach	32,494	1,923	City of Margate	12,828	1,074
City of Bradenton Beach	1,521	65	City of Mascotte	2,839	61
City of Callaway	6,837	248	City of Melbourne	32,741	3,865
City of Cape Canaveral	2,642	238	City of Miami	75,452	7,112
City of Cape Coral	91,099	2,952	City of Miami Gardens	23,404	6,933
City of Casselberry	8,810	417	City of Miami Springs	3,705	602
City of Clearwater	28,209	3,042	City of Minneola	5,670	2,268
City of Clermont	32,875	2,412	City of Mulberry	1,859	284
City of Cocoa	6,825	1,609	City of Naples	15,630	2,607
City of Cocoa Beach	3,071	247	City of New Port Richey	6,539	802
City of Coconut Creek	11,280	845	City of New Smyrna Beach	18,025	1,523
City of Cooper City	11,862	1,335	City of Niceville	8,771	1,122
City of Coral Gables	13,110	1,175	City of North Lauderdale	10,468	209
City of Daytona Beach	27,874	4,435	City of North Miami	10,141	1,502
City of DeBary	9,100	NR	City of North Miami Beach	7,908	486
City of Deerfield Beach	31,509	1,666	City of Oakland Park	6,984	4,670
City of Delray Beach	29,376	2,967	City of Ocala	26,615	4,685
City of Dunedin	10,959	745	City of Ocoee	16,272	704
City of Edgewater	10,020	494	City of Oldsmar	4,686	417
City of Eustis	10,537	864	City of Orange City	3,138	569
City of Fernandina Beach	7,057	594	City of Orlando	82,259	8,120
City of Fort Lauderdale	45,533	6,392	City of Ormond Beach	16,893	909
City of Fort Meade	1,596	259	City of Palm Bay	79,546	1,259
City of Fort Myers	25,151	2,401	City of Palm Coast	42,000	433
City of Fort Pierce	14,364	2,259	City of Pensacola	20,660	3,512
City of Fort Walton Beach	10,027	1,159	City of Pinellas Park	13,237	6,647
City of Fruitland Park	2,145	184	City of Pompano Beach	20,727	2,547
City of Gainesville	61,947	2,615	City of Port Richey	1,286	236
City of Green Cove Springs	3,200	250	City of Port St. Lucie	105,294	2,283
City of Gulf Breeze	2,332	261	City of Riviera Beach	10,693	1,085
City of Gulfport	5,041	129	City of Safety Harbor	7,559	300
City of Hialeah	48,831	10,454	City of Satellite Beach	5,002	442
City of Holmes Beach	4,329	NR	City of South Pasadena	602	NR
City of Homestead	27,995	1,380	City of St. Augustine	14,690	2,209
City of Jacksonville	294,984	17,698	City of St. Cloud	19,425	1,137
City of Key Colony Beach	1,439	127	City of St. Pete Beach	3,993	3,915
City of Key West	9,181	1,093	City of St. Petersburg	74,483	6,164
City of Kissimmee	27,882	3,190	City of Stuart	3,019	NR
City of Lake Alfred	2,800	NR	City of Sunny Isles Beach	14,069	1,908
City of Lake Mary	5,262	471	City of Sunrise	42,539	38,709

1-6 How many accounts does your SWU serve? (continued)

Residential Average is 32,995 accounts: 27,733 are single family and 5,431 are multi-family.

Non-Residential Average is 3,050 accounts: 1,338 business, 159 institutional, 1,272 commercial and 173 industrial.

Jurisdiction	Residential	Non-Residential	Jurisdiction	Residential	Non-Residential
City of Sweetwater	2,753	274	Pasco County	212,216	10,363
City of Tallahassee	88,102	7,916	Pinellas County	118,440	4,283
City of Tamarac	33,780	331	Polk County	274,646	18,822
City of Tampa	101,747	11,643	Sarasota County	183,611	7,258
City of Tarpon Springs	8,139	835	Town of Belleair	1,413	22
City of Tavares	7,183	846	Town of Cutler Bay	14,207	534
City of Titusville	18,981	1,165	Town of Jupiter	22,399	1,034
City of Umatilla	1,277	190	Town of Lake Park	3,428	1,461
City of Vero Beach	8,710	1,201	Town of Lantana	3,053	596
City of West Melbourne	10,868	905	Town of Malabar	2,451	218
City of West Miami	1,850	200	Town of Pembroke Park	766	174
City of West Palm Beach	24,892	2,886	Town of Redington Shores	1,055	33
City of Wilton Manors	3,692	387	Town of Surfside	4,200	1,200
City of Winter Garden	16,017	844	Village of Indian Creek	36	1
City of Winter Haven	20,271	2,376	Village of Key Biscayne	1,528	NR
City of Winter Park	11,962	1,513	Village of Palm Springs	12,376	837
Hillsborough County	312,061	10,397	Village of Royal Palm Beach	11,243	375
Leon County	38,691	1,092	Village of Wellington	14,874	474
Marion County	234,665	38,379	Volusia County	49,343	4,788
Miami-Dade County	288,045	15,120			

2-6a What is your current SWU rate per month? *(continued)*

Average rate is \$8.86 (2022 was \$8.05)

Utility Rate Range: \$0.58 (Low) \$60.00 (High)

NR = No Response NA = Not Applicable

Jurisdiction	Rate	Unit Size
City of St. Petersburg	\$9.93	2,406
City of Stuart	\$7.00	3,707
City of Sunny Isles Beach	\$4.33	1,548
City of Sunrise	\$10.01	1,884
City of Sweetwater	\$6.00	1,458
City of Tallahassee	\$10.06	1,990
City of Tamarac	\$12.21	1,830
City of Tampa	\$6.83	3,310
City of Tarpon Springs	\$10.15	1,945
City of Tavares	\$10.00	3,500
City of Titusville	\$9.60	NA
City of Umatilla	\$4.00	3,000
City of Vero Beach	\$0.58	3,972
City of West Melbourne	\$4.33	2,500
City of West Miami	\$2.50	1,400
City of West Palm Beach	\$15.73	2,171
City of Wilton Manors	\$6.46	3,460
City of Winter Garden	\$8.25	4,077
City of Winter Haven	\$7.83	NA
City of Winter Park	\$23.50	2,324
Hillsborough County	\$7.21	4,267

Jurisdiction	Rate	Unit Size
Leon County	\$7.08	3,272
Marion County	\$1.25	2,275
Miami-Dade County	\$5.00	1,548
Pasco County	\$7.92	2,890
Pinellas County	\$10.11	2,339
Sarasota County	\$7.55	3,153
Town of Belleair	\$11.92	5,459
Town of Cutler Bay	\$7.50	1,548
Town of Jupiter	\$7.06	2,651
Town of Lake Park	\$25.52	5,202
Town of Malabar	\$5.33	6,500
Town of Melbourne Beach	\$3.00	2,500
Town of Pembroke Park	\$10.12	1,548
Town of Redington Shores	\$1.50	1,312
Town of Surfside	\$5.35	1,300
Village of Indian Creek	\$4.39	4,385
Village of Key Biscayne	\$16.90	1,083
Village of Palm Springs	\$4.00	NA
Village of Royal Palm Beach	\$5.50	2,723
Village of Wellington	\$21.25	NA
Volusia County	\$6.50	2,775

2-6b What is your current SWU rate per month? *[see below monthly rates with a standardized billing area]***Comparative Monthly Stormwater Rates Based on Standardized Billing Area**

Standardizing the billing area to 1,000 square feet gives the average for 2024 of \$3.69 (2022 was \$3.30).

Range of rate per 1,000 square feet: \$0.15(Low) \$15.60(High)

Jurisdiction	Rate/1000 Sq. Ft.
Alachua County	\$1.04
Brevard County	\$2.13
City of Altamonte Springs	\$2.71
City of Aventura	\$2.26
City of Boynton Beach	\$4.26
City of Cape Canaveral	\$4.82
City of Cape Coral	\$3.59
City of Casselberry	\$4.23
City of Clearwater	\$7.58
City of Clermont	\$3.93
City of Cocoa	\$3.54
City of Cocoa Beach	\$3.09
City of Coconut Creek	\$2.22
City of Cooper City	\$3.19
City of Coral Gables	\$8.13
City of Daytona Beach	\$7.20

Jurisdiction	Rate/1000 Sq. Ft.
City of DeBary	\$5.47
City of Deerfield Beach	\$1.71
City of DeLand	\$1.97
City of Delray Beach	\$2.24
City of Doral	\$2.58
City of Dunedin	\$7.17
City of Edgewater	\$6.66
City of Fort Meade	\$2.71
City of Fort Myers	\$3.92
City of Fort Pierce	\$2.63
City of Fort Walton Beach	\$1.56
City of Gainesville	\$4.78
City of Green Cove Springs	\$8.33
City of Gulf Breeze	\$2.53
City of Gulfport	\$4.98
City of Hialeah	\$1.50

Exhibit 2

Estimated Cost to Fund Advanced Wastewater Treatment(or better) Improvement on Marco Island

1/27/2025

		Low	Mid	Mid	High
Cost of Plant Improvements		\$ 5,000,000	\$ 10,000,000	\$ 12,000,000	\$ 15,000,000
Engineering Costs	3%	\$ 150,000	\$ 300,000	\$ 360,000	\$ 450,000
	Subtotal	\$ 5,150,000	\$ 10,300,000	\$ 12,360,000	\$ 15,450,000
Bond Cost of Issuance	2%	\$ 103,000	\$ 206,000	\$ 247,200	\$ 309,000
Total Bonds		\$ 5,253,000	\$ 10,506,000	\$ 12,607,200	\$ 15,759,000
20 year interest rate AAA rated bonds		3.4%	3.4%	3.4%	3.4%
		\$ 178,602	\$ 357,204	\$ 428,645	\$ 535,806
Principal-Fully Amortizing	3.498%	\$ 183,750	\$ 367,500	\$ 441,000	\$ 551,250
Total Debt Service	6.898%	\$ 362,352	\$ 724,704	\$ 869,645	\$ 1,087,056
Estimated Marco Island Taxpayers		17,000	17,000	17,000	17,000
Estimated Annual Cost Per Taxpayer		\$ 21.31	\$ 42.63	\$ 51.16	\$ 63.94
Plant Only Cost Per Taxpayer		\$ 303	\$ 606	\$ 727	\$ 909

* Not including any additional operating costs or savings

Exhibit 3

Stormwater Utility Rate Analysis

2/28/2025

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						Annual Debt	
						Service on \$15	
Monthly						million AWT	Surplus
Stormwater						Sewer Plant	(Deficit)for
Utility Rate	Annual Rate	Users	Monthly Revenue	Annual Revenue	Upgrade	Other Uses	
\$ 0.60	\$ 7.20	17,000	\$ 10,200.00	\$ 122,400	\$ 1,087,056	\$ (964,656)	
\$ 1.00	\$ 12.00	17,000	\$ 17,000.00	\$ 204,000	\$ 1,087,056	\$ (883,056)	
\$ 2.00	\$ 24.00	17,000	\$ 34,000.00	\$ 408,000	\$ 1,087,056	\$ (679,056)	
\$ 3.00	\$ 36.00	17,000	\$ 51,000.00	\$ 612,000	\$ 1,087,056	\$ (475,056)	
\$ 4.00	\$ 48.00	17,000	\$ 68,000.00	\$ 816,000	\$ 1,087,056	\$ (271,056)	
\$ 5.00	\$ 60.00	17,000	\$ 85,000.00	\$ 1,020,000	\$ 1,087,056	\$ (67,056)	
\$ 6.00	\$ 72.00	17,000	\$ 102,000.00	\$ 1,224,000	\$ 1,087,056	\$ 136,944	
\$ 7.00	\$ 84.00	17,000	\$ 119,000.00	\$ 1,428,000	\$ 1,087,056	\$ 340,944	
\$ 8.00	\$ 96.00	17,000	\$ 136,000.00	\$ 1,632,000	\$ 1,087,056	\$ 544,944	
\$ 8.86	\$ 106.32	17,000	\$ 150,620.00	\$ 1,807,440	\$ 1,087,056	\$ 720,384	
\$ 9.00	\$ 108.00	17,000	\$ 153,000.00	\$ 1,836,000	\$ 1,087,056	\$ 748,944	
\$ 10.00	\$ 120.00	17,000	\$ 170,000.00	\$ 2,040,000	\$ 1,087,056	\$ 952,944	
\$ 11.00	\$ 132.00	17,000	\$ 187,000.00	\$ 2,244,000	\$ 1,087,056	\$ 1,156,944	
\$ 12.00	\$ 144.00	17,000	\$ 204,000.00	\$ 2,448,000	\$ 1,087,056	\$ 1,360,944	
\$ 15.00	\$ 180.00	17,000	\$ 255,000.00	\$ 3,060,000	\$ 1,087,056	\$ 1,972,944	
\$ 20.00	\$ 240.00	17,000	\$ 340,000.00	\$ 4,080,000	\$ 1,087,056	\$ 2,992,944	
\$ 25.00	\$ 300.00	17,000	\$ 425,000.00	\$ 5,100,000	\$ 1,087,056	\$ 4,012,944	
\$ 30.00	\$ 360.00	17,000	\$ 510,000.00	\$ 6,120,000	\$ 1,087,056	\$ 5,032,944	
\$ 40.00	\$ 480.00	17,000	\$ 680,000.00	\$ 8,160,000	\$ 1,087,056	\$ 7,072,944	
\$ 50.00	\$ 600.00	17,000	\$ 850,000.00	\$ 10,200,000	\$ 1,087,056	\$ 9,112,944	
\$ 60.00	\$ 720.00	17,000	\$ 1,020,000.00	\$ 12,240,000	\$ 1,087,056	\$ 11,152,944	