

MIAMI BEACH City of Miami Beach, Florida

WATER, SEWER, AND STORMWATER RATE STUDY

January 27, 2025

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Honorable Mayor and
Members of the City Commission
City of Miami Beach
1700 Convention Center Drive
Miami Beach, FL 33139

Subject: Water, Sewer, and Stormwater Rate Study

GovRates, Inc. ("GovRates") has completed our review of the water, sewer, and stormwater utility rates for the City of Miami Beach (the "City") and has prepared this report which summarizes our analyses, findings, and recommendations. This utility rate study involved preparing financial forecasts through the Fiscal Year 2034.

Developing financial and rate plans for the City's utility systems involved multiple considerations:

- The financial and rate plan for each system should consider utility best management practices and should promote financial sustainability and creditworthiness. Conforming with utility best management practices enables a utility to accomplish its mission while charging lower user rates over the long term. The two most important financial metrics for determining financial sustainability and creditworthiness are cash reserves and debt service coverage.
- The proposed monthly user 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 large "catch-up" rate increases.
- The proposed rates should enable the utilities to perform the necessary capital improvements and operational enhancements to remain compliant with the regulatory requirements of the Florida Department of Environmental Protection, the Florida Department of Health, and the Environmental Protection Agency. The rates should also provide sufficient margins for capital reinvestment in the aging utility systems.
- The proposed user rates should provide the water and sewer system with an adequate level of revenue stability given the seasonality and cyclical nature of water sales and corresponding billable wastewater flow.

- The water user rate structure should encourage the conservation of water.
- The water and sewer impact fees, which are a funding source for utility capital needs, should be calculated based on industry standards and the requirements of statutory and case law.

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

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 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

The City of Miami Beach (the "City") owns and operates water, sewer, and stormwater utilities (the "Systems" or the "Utilities") that provide an essential service on a continual basis and operate in a highly regulated environment. Regulatory agencies for the Utilities include the Florida Department of Environmental Protection (the "FDEP"), the Florida Department of Health, and the Environmental Protection Agency. Permits issued by regulatory agencies require full compliance operating performance. The City could possibly face fines and consent orders if the City does not meet regulatory requirements or violates permit conditions.

The Systems are accounted for in utility enterprise funds and are essentially "businesses" of the City. 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 installed cost of depreciable water and sewer utility assets under City management was about \$354 million as of September 30, 2023, while the installed cost of depreciable stormwater utility assets was about \$316 million. The replacement cost of these assets is much higher. Based on the age of the assets and historical changes in the *Engineering News-Record* Construction Cost Index, a high-level replacement cost of the City's water and sewer depreciable assets is estimated at \$936 million. Meanwhile, the high-level replacement cost for the depreciable stormwater assets is estimated at \$361 million. These high-level replacement cost estimates do not consider newer technology, changes in regulatory requirements, and cost factors specific to Miami Beach.

The Systems should have revenues equal to the costs of the services provided by the Utilities, and the City should establish rates sufficient to cover the cost of operating, maintaining, repairing, and financing the Systems. There are also rate covenants associated with outstanding utility debt that require the City to establish the rates at certain levels to meet the debt obligations.

The City's last formal water and sewer rate study was completed in the middle of the COVID-19 pandemic, and there was no way of knowing future inflation or deflation trends at the time. The focus of the 2020 rate study was to fund approximately \$122.2 million in critical capital needs through the Fiscal Year 2024. The 56 Neighborhood Improvement Projects were not included in the financial plan of the 2020 rate study.

With respect to the stormwater rates, the last formal review was conducted in 2017. To assist the City in reviewing the sufficiency of its rates, GovRates, Inc. ("GovRates") was retained to perform a water, sewer, and stormwater rate study.

ES-2: Utility System Overview

As indicated in the previous section, there is a tremendous amount of utility infrastructure under City management. The City's water supply is provided on a wholesale basis by Miami-Dade County. For the water system, the City maintains:

- 184 miles of water mains.
- 86 water crossings.
- 1,400 fire hydrants.
- 6 water pump stations.
- 4 water storage tanks.

The City's sewer treatment is provided on a wholesale basis by Miami-Dade County. For the sewer system, the City maintains:

- 143 miles of force mains and gravity mains.
- 3,160 sanitary sewer manholes.
- 23 sewer pump stations.

For the stormwater system, the City maintains:

- 110 miles of stormwater lines.
- More than 7,800 stormwater structures (stormwater manholes, storm drains, and catch basins).
- 367 outfalls.
- 48 pump stations.

ES-3: Summary of Recommendations

Financial projections were prepared for the Systems through the Fiscal Year 2034 (the "Forecast Period"). 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. With respect to identifying revenue requirements for the Utilities, the following Exhibit ES-1 shows the elements considered:

Exhibit ES-1: Revenue Requirement Components



The financial and rate plan should recognize the need to maintain appropriate debt service coverage ratios and adequate operating margins and cash reserves to fund ongoing capital needs and optimize the financial condition of the Systems. **A target all-in net revenues debt service coverage ratio of 200% is recommended, and it is proposed that the Utilities target an unrestricted cash reserves balance equal to at least 365 days cash on hand (essentially one year of operating expenses excluding depreciation and amortization expenses).** These debt service coverage and cash targets are consistent with those of strong financial credits. Higher credit ratings can translate to lower interest rates and issuance costs when debt financing and lower user rates over the long term for the benefit of utility customers.

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

- 1. Public Health and Safety Issue: The need to fund the multi-year capital improvement programs and reinvest in the Utilities.** Utility infrastructure is often "out of sight, out of mind." Major capital needs are prioritized projects based on adopted master plans and are primarily renewals or rehabilitations of utility assets that have reached or exceeded useful service lives. Some of the City's utility infrastructure dates back to the 1930's – over 90 years old. There could be possible regulatory issues if the City is not proactive in addressing the capital needs. The renewal / replacement needs will not go away, but will be more expensive

to address in the future. The regulatory agencies could impose fines or consent orders if infrastructure failures cause environmental harm or jeopardize public health and safety, or if the City does not meet regulatory requirements.

SAMPLE MIAMI BEACH WATER AND SEWER UTILITY RENEWAL AND REPLACEMENT NEEDS



Old mains break frequently, causing service interruptions. Utility workers often have to rip up roads to address the breaks. As shown in the following Exhibit ES-2, water main failures, sewer main breaks, and sewer lateral breaks and blockages are trending upward. Sewage spills / pollution can lead to future fines and consent orders from regulatory agencies.

Exhibit ES-2: Water and Sewer System Statistics

Description	Fiscal Year 2023	Fiscal Year 2024
<u>Water System</u>		
Water Main Failures and Repairs	27	39
Water Service Line Emergency Response Failures	82	75
Water Service Line Replaced	44	66
Leak in Meter Box Repaired	280	250
Water Main Valve Replacements	2	2
Fire Hydrants Replaced	4	9
<u>Sewer System</u>		
Force Main Breaks	7	4
Gravity Main Breaks and/or Blockages	212	229
Lateral Breaks and/or Blockages	113	165

About \$643.4 million in water and sewer capital needs – net of grant-funded project costs – are recommended to be completed through the Fiscal Year 2034, as summarized in the following Exhibit ES-3.

**Exhibit ES-3: Water and Sewer
Capital Needs Through the Fiscal Year 2034 in Order of Priority**

Description	Project Type	Amount (\$ 000's)
		Recommended Master Plan
WATER & WASTEWATER MAINS AND REHAB [*]	Critical Needs	\$ 273,971
WASTEWATER STATIONS REHABILITATION [*]	Critical Needs	48,068
WATER PUMP STATIONS IMPROVEMENTS [*]	Critical Needs	24,334
NORTH BAY RD AND LAKEVIEW SEWER COLLECTION UPGRADES [*]	Critical Needs	16,105
WASTEWATER MANHOLE REHABILITATION [*]	Critical Needs	5,925
DERM & EPA CONSENT DECREE [*]	Other	6,734
STORMWATER CRITICAL NEEDS - ANCILLARY WATER AND SEWER LINE ADJUSTMENTS	Critical Needs	16,130
WEST AVENUE PH III	Neighborhoods	15,908
1ST STREET-ALTON RD TO WASHINGTON PH 1+2	Neighborhoods	12,989
1ST STREET-ALTON RD TO WASHINGTON PH 3+4	Neighborhoods	29,030
FDOT ALTON ROAD UTILITIES RELOCATION	Other	43,010
17TH STREET IMPROVEMENTS PHASE I - DESIGN ONLY WITH OPTION 3	Other	19,200
NORTH SHORE D - TOWN CENTER PHASE 1	Neighborhoods	11,543
NORTH SHORE D - TOWN CENTER PHASE 2	Neighborhoods	20,000
NORMANDY ISLES A PHASE 1	Neighborhoods	56,466
NORMANDY ISLES A PHASE 2 - DESIGN ONLY	Neighborhoods	5,647
FLAMINGO-LUMMUS C PHASE 1 - DESIGN ONLY	Neighborhoods	4,843
CONVENTION CNTR LINCEN RD CONNECTOR	Other	5,423
DEPARTMENTAL CAPITAL AND MINOR CAPITAL OUTLAY	Minor Capital Outlay	21,925
OTHER	Various	6,173
TOTAL WATER AND SEWER CAPITAL NEEDS		\$ 643,426

[*] These projects are crucial for ensuring compliance with the consent decree and preventing future consent orders related to sewer system overflows (SSOs).

Approximately 55% (\$354 million) of these capital needs are projected to be funded with bond proceeds, with the remainder funded through internal funding sources. As noted in the preceding table, the first six projects are crucial for ensuring compliance with the current consent decree and preventing future consent orders related to sewer system overflows (SSOs).

About \$457.5 million in stormwater capital needs – net of grant-funded project costs – are recommended to be completed through the Fiscal Year 2034, as summarized in the following Exhibit ES-4.

Exhibit ES-4:**Stormwater Capital Needs Through the Fiscal Year 2034 in Order of Priority**

Description	Project Type	Amount (\$ 000's)	
		Recommended Master Plan	
STORMWATER CRITICAL NEEDS	Critical Needs	\$	65,650
WEST AVENUE PH III	Neighborhoods		19,885
1ST STREET-ALTON RD TO WASHINGTON PHASES 3 and 4	Neighborhoods		34,670
FDOT ALTON ROAD UTILITIES RELOCATION	Other		25,500
CITYWIDE SEAWALL REHAB	Other		85,603
17TH STREET IMPROVEMENTS PHASE I - DESIGN ONLY WITH OPTION 3	Other		24,000
NORTH SHORE D - TOWN CENTER - PHASE 1	Neighborhoods		92,345
NORTH SHORE D - TOWN CENTER - PHASE 2	Neighborhoods		2,500
NORMANDY ISLES A - PHASE 1	Neighborhoods		70,583
NORMANDY ISLES A - PHASE 2 - DESIGN ONLY	Neighborhoods		7,058
FLAMINGO / LUMMUS C PHASE 1 - DESIGN ONLY	Neighborhoods		6,054
DEPARTMENTAL CAPITAL AND MINOR CAPITAL OUTLAY	Minor Capital Outlay		13,727
OTHER	Various		9,948
TOTAL STORMWATER CAPITAL NEEDS		\$	457,523

Approximately 36.5% (\$167 million) of these capital needs are projected to be funded with bond proceeds, with the remainder funded through internal funding sources.

- The need to fund the costs of future operations.** Florida's inflation is currently outpacing national trends. The City's water and sewer rates have not kept up with actual inflation – the Miami-Fort Lauderdale-West Palm Beach Consumer Price Index has increased 10.1% more than the water and sewer user rates since 2020. There are many factors that affect the costs of operations over which the Utilities have limited or no control. Nearly 60% of the Utility's operating expenses are uncontrollable wholesale charges from Miami-Dade County. The City remits 6% of retail revenues to the Miami-Dade Department of Environmental Resources Management (DERM) to help pay for the costs of regulation of the City's Utility by Miami-Dade County. Factors such as cost increases from electric power providers, changes in fuel and oil prices resulting from global market changes, competition for scarce resources such as concrete and building materials, and union labor contracts often result in cost increases that are greater than the change in the consumer price index (general inflation). Volatile market conditions have caused the supply costs of steel, PVC pipes, and other materials to increase substantially. Utility costs also typically increase at a higher rate than general inflation due to regulatory requirements.

Labor costs are assumed to increase by 5% per year, while health insurance costs are assumed to increase by 10% per year. These assumptions are consistent with those used by other local governments. There are nationwide issues with filling positions and keeping employees. A well-trained, experienced, and sufficient utility staff is critical for effectively running the utility 24 hours per day and 365 days per year, for maintaining the level of service, and for emergency preparedness (e.g., hurricanes).

It is important to recognize that these increased costs are usually permanent increases in the costs of operations and, as such, must ultimately be passed through to customers through rates.

- 3. Maintain appropriate debt service coverage ratios and adequate operating margins and reserves to fund ongoing capital needs, maintain the financial condition of the Systems, and preserve the ability to access capital markets.** Utilities with a healthy financial position can navigate volatile market conditions and new regulatory requirements. As previously discussed in this report and for the Utilities to maintain their "AA" bond ratings, it is recommended that the Systems target a minimum all-in (senior and subordinate lien combined) net revenues debt service coverage ratio of 200%, and it is further recommended that the Systems target an unrestricted cash balance equal to 365 days cash on hand. The debt service coverage ratio is derived as follows:

$$\text{Debt Service Coverage} = \frac{\text{Gross Revenues} - \text{Operating Expenses Less Non-Cash Items Such as Depreciation}}{\text{Annual Debt Service}}$$

Days cash on hand is calculated by first dividing the annual operating expenses – excluding non-cash items such as depreciation – by 365 days. This calculation provides one day of operating expenses. The unrestricted cash balance is then divided by the one day of operating expenses to arrive at the days cash on hand.

Debt service coverage and cash position are the two most important financial metrics for determining a utility's creditworthiness. The 2020 Fitch median (half of rated utilities were above and half were below) for all-in debt service coverage for "AA"-rated utilities was 250%, while the median unrestricted cash was 555 days cash on hand.

If the user rates are not adjusted, possible financial risks to the Systems include:

- Inability to secure debt financing for major / critical capital needs. When evaluating a utility's ability to repay debt, lenders such as the SRF loan program and bond rating agencies will only consider rate adjustments that have already been adopted.
- Debt service coverage requirements may not be met.
- Inability to fund all revenue requirements and meet financial targets.

- User rates will be even higher in the future. The capital needs for the Utilities will not go away but will be more expensive to address in the future. As previously mentioned, there is a risk of future fines and consent orders if the Systems do not comply with regulatory requirements or cause pollution due to infrastructure failures.

ES-3.1: Proposed Monthly Water and Sewer User Rates

Based on the financial forecast, the funding plan for the water and sewer system, and discussions with City staff, the following Exhibit ES-5 shows the proposed revenue adjustments for the water and sewer system:

Exhibit ES-5:

Summary of Proposed Water and Sewer User Rate Revenue Adjustments

Fiscal Year	Effective Date	Total Adjustment Not Including Pass-Through Adjustments [1]	Monthly Bill for SFR Customer Using 5,000 Gallons [2]	Increase in SFR Customer Monthly Bill [3]	Total Cost Per Gallon of Water and Sewer Service [3]	% of Median Household Income (< 4.5% Considered Affordable By EPA) [4]
	Existing		\$97.73			1.8%
ASAP	ASAP	9.0%	106.44	\$8.71	2.1¢	1.9%
2027	10/1/2026	9.0%	115.15	8.71	2.3¢	2.0%
2028	10/1/2027	9.0%	124.63	9.48	2.5¢	2.1%
2029	10/1/2028	4.5%	129.85	5.22	2.6¢	2.1%
2030	10/1/2029	4.5%	135.34	5.49	2.7¢	2.2%
2031	10/1/2030	4.5%	140.96	5.62	2.8¢	2.2%
CPI and Pass-Through Adjustments After Fiscal Year 2031						

[1] The water and sewer adjustments shown are to fund i) the City's operating expenses other than wholesale water and sewer charges from Miami-Dade County; and ii) the multi-year capital program that addresses the City's infrastructure needs. Additional pass-through adjustments are based on increases or decreases in the County's wholesale rates charged to the City. Adjustments include allowance for annual inflation.

[2] Based on proposed rate design without future pass-through adjustments.

[3] Based on proposed rates applied to single family residential ("SFR") customer with 5,000 gallons of monthly usage.

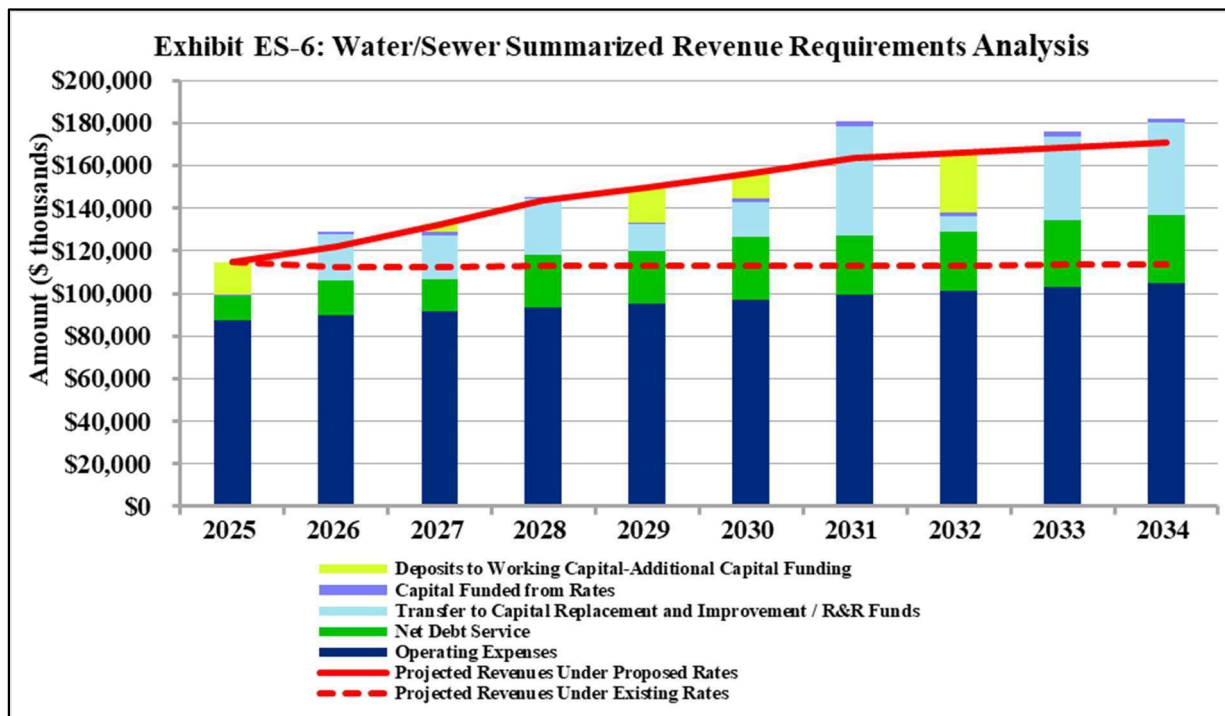
[4] EPA = United States Environmental Protection Agency. Assumes annual 3% cost of living salary increases throughout Forecast Period.

A typical single-family residential customer in the State of Florida uses 5,000 gallons per month. Under the initial proposed rates, this customer would pay \$106.44, or 2.1¢ per gallon, for both water and sewer service. Compare 2.1¢ per gallon to the cost per gallon of bottled water or something else commonly bought. Water and sewer service is a bargain.

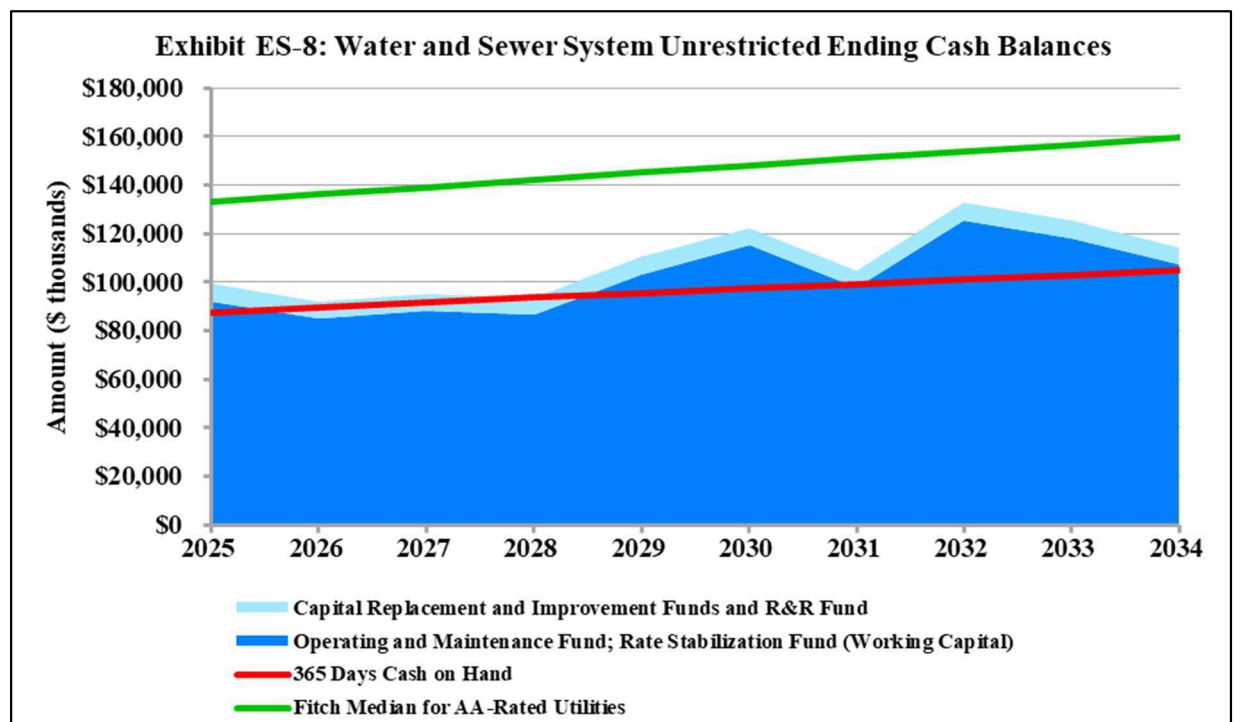
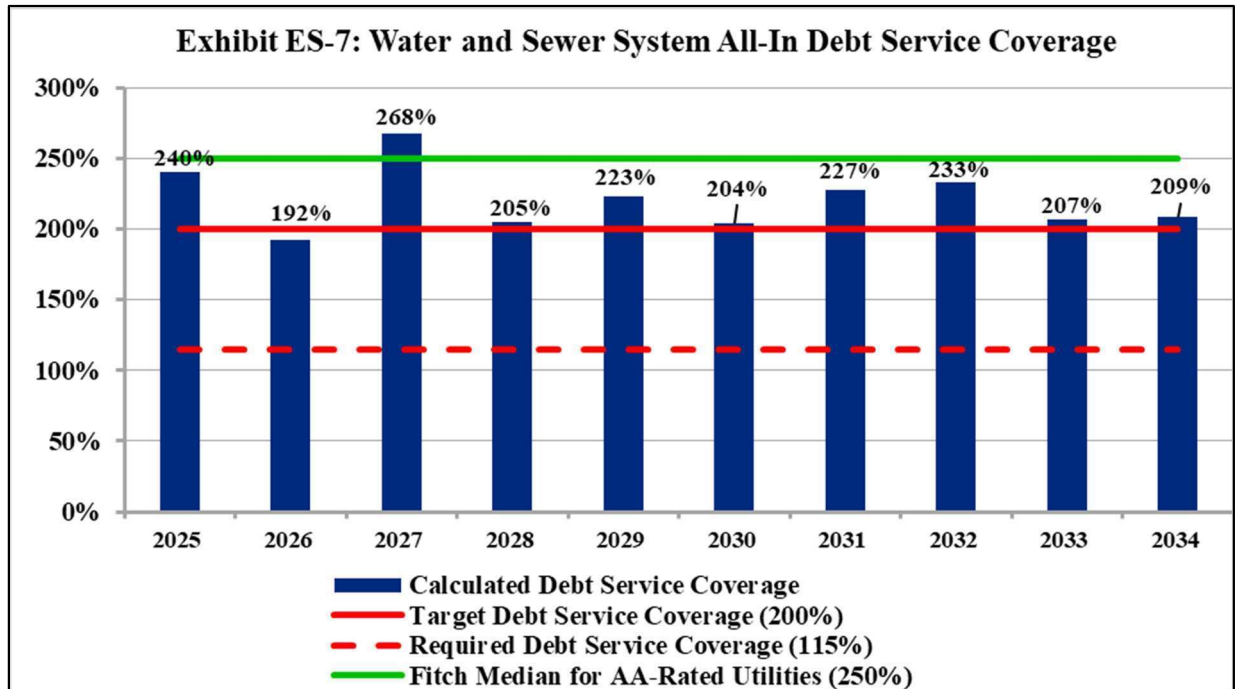
To provide some additional perspective, many people are familiar with the infamous water crisis in Flint, Michigan. Prior to this crisis, residents in Flint paid \$144.87 for 5,000 gallons of water and sewer service. These rates for Flint were effective in 2015 (ten years ago). Compare Flint's \$144.87 to the \$106.44 for the safe and reliable utility service that the City provides.

Miami Beach is often compared to the City of Fort Lauderdale. Fort Lauderdale currently charges \$107.13 for 5,000 gallons of water and sewer service – higher than the \$106.44 under the initial proposed water and sewer rates for Miami Beach. Fort Lauderdale increased its water and sewer rates by 14% in Fiscal Year 2024 and by 14.4% in Fiscal Year 2025. For Fiscal Years 2026 and 2027, Fort Lauderdale has adopted a 9% increase and a 6.7% increase, respectively.

The proposed rate adjustments are projected to enable the water and sewer system to fund its annual revenue requirements as shown in the following Exhibit ES-6:



The following Exhibits ES-7 and ES-8 show the projected water and sewer system debt service coverage and unrestricted cash position under the proposed rate plan.



The proposed rate adjustments are considered by the City staff to be representative of the increases in costs to effectively operate and maintain the water and sewer system given the specific requirements of this system's service area. A summary of the existing and proposed monthly water and sewer user rates is shown in Table ES-1 at the end of this executive summary.

The proposed water and sewer rates produce bills that are competitive with those of other "neighboring" utilities. Comparison information is in Section 1 of this report. As further discussed in Section 1, a bill comparison should not be considered a "report card" on how well a utility is performing because there are many reasons why rates differ among utilities. Each utility has unique circumstances.

ES-3.2: Proposed Water and Sewer Impact Fees

Water and sewer impact fees are charged to development to "buy-in" to a proportionate share of system capacity and support a policy of "growth paying for growth." Such fees reduce cost burdens on monthly user rates (help to reduce the need for user rate increases). The City's water and sewer impact fees recover the cost of transmission capacity. Separate impact fees are paid to Miami-Dade County for water and sewer treatment capacity. The City's water and sewer impact fees were last adjusted in 1995, or 30 years ago.

Based on our analysis, GovRates recommends that the impact fees be increased to the amounts shown in the following Exhibit ES-9.

**Exhibit ES-9: Existing and Proposed
Water and Sewer Impact Fees Per ERC**

System	Existing Fee	Calculated / Proposed Fee	Difference
Water	\$155	\$1,630	\$1,475
Wastewater	235	2,030	1,795
Total	\$390	\$3,660	\$3,270

ERC = Equivalent Residential Connection

The full schedule of water and sewer impact fees by meter size is shown in Table ES-2 at the end of this executive summary. The City now has a higher cost per unit of capacity than what was calculated 30 years ago due to inflation, new treatment technology, increased government regulations, and changing capital needs. As discussed in Section 2 of this report, the proposed impact fees are competitive with those of other utilities. Similar to user rates, the calculated impact fees should not be considered a "report card" on how well a utility is performing, as there are many reasons why impact fees differ among utilities.

ES-3.3: Proposed Monthly Stormwater Rates

Based on the financial forecast, the funding plan for the stormwater system, and discussions with City staff, the following Exhibit ES-10 shows the proposed revenue adjustments for the stormwater system.

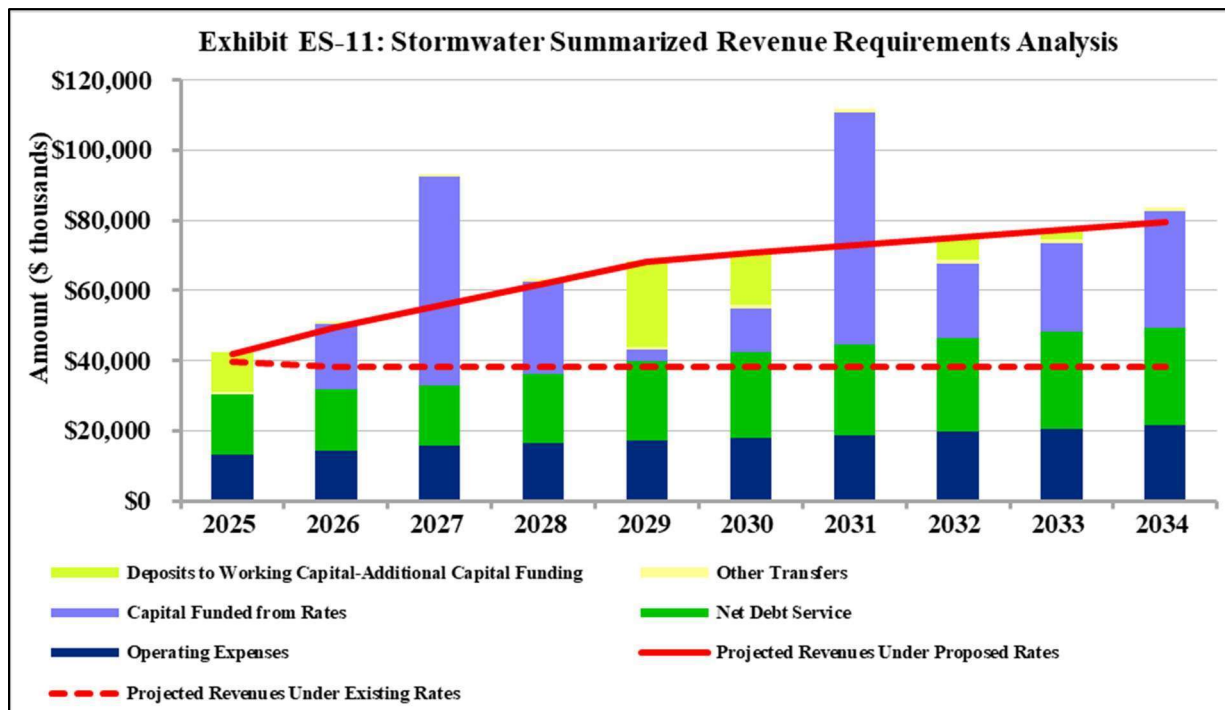
**Exhibit ES-10:
Summary of Proposed Stormwater
Rates Per Equivalent Residential Unit**

Fiscal Year	Effective Date	Total Bill for SFR Customer	Increase in SFR Customer Monthly Bill	% of Median Household Income [*]
	Existing	\$31.86		0.6%
ASAP	ASAP	39.00	\$7.14	0.7%
2027	10/1/2026	44.00	5.00	0.8%
2028	10/1/2027	49.00	5.00	0.8%
2029	10/1/2028	54.00	5.00	0.9%
2030	10/1/2029	56.00	2.00	0.9%
2031	10/1/2030	57.68	1.68	0.9%

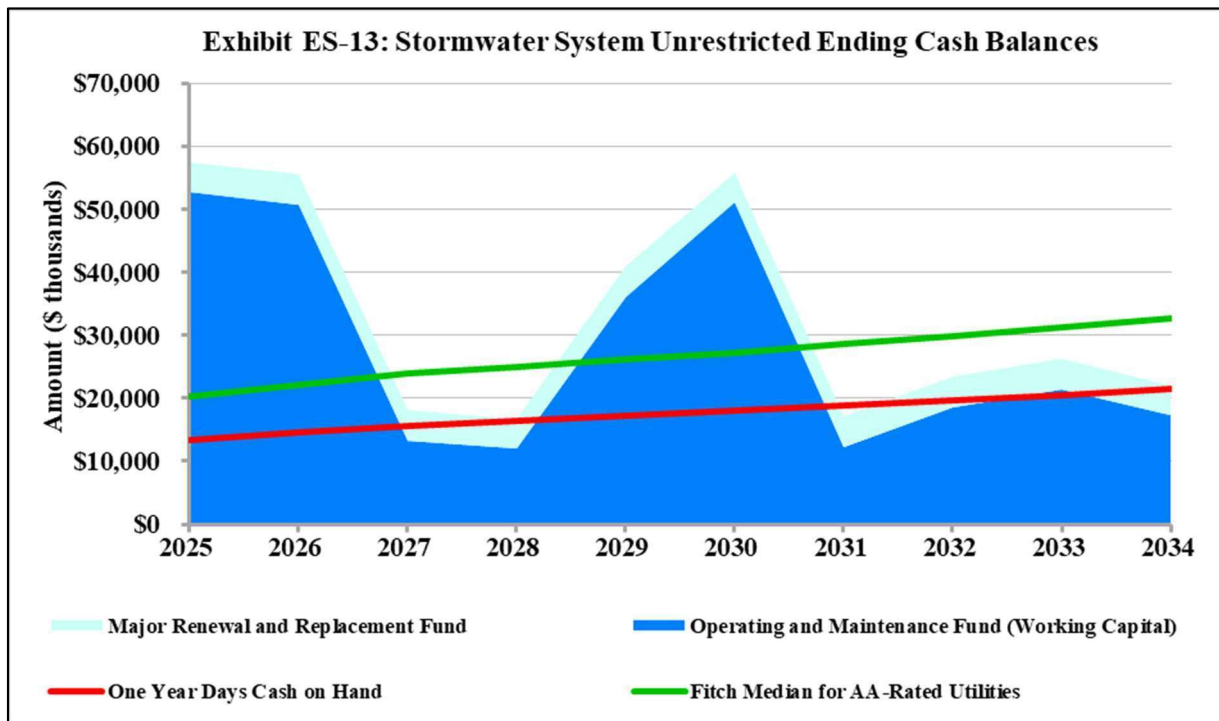
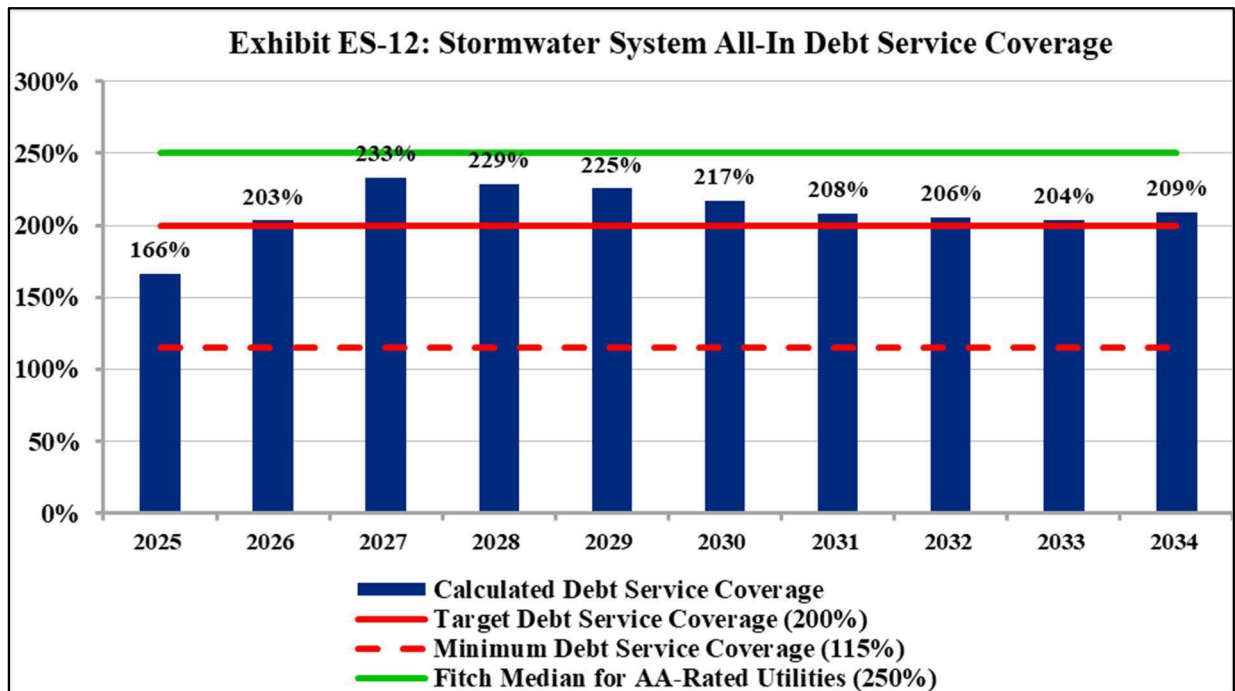
SFR = Single Family Residential

[*] Assumes annual 3% cost of living salary increases throughout Forecast Period.

The proposed rate adjustments are projected to enable the stormwater system to fund its annual revenue requirements as shown in the following Exhibit ES-11:



The following Exhibits ES-12 and ES-13 show the projected stormwater debt service coverage and unrestricted cash position under the proposed rate plan.



The proposed rate adjustments are considered by the City staff to be representative of the increases in costs to effectively operate and maintain the stormwater system given the specific requirements of this system's service area.

The proposed stormwater rates produce bills that are competitive with those of other "neighboring" utilities. Comparison information is in Section 3 of this report. As further discussed in Section 3, a bill comparison should not be considered a "report card" on how well a utility is performing because there are many reasons why rates differ among utilities. Each utility has unique circumstances.

ES-4: Combined Utility Bill

Single family residential customers comprise about 53% of the customer base. The combined water, sewer, and stormwater bill for a single family customer using 5,000 gallons of water per month is shown in the following Exhibit ES-14:

**Exhibit ES-14: Combined Utility Bill for
Single Family Residential Customer**

Fiscal Year	Effective Date	Combined Bill for SFR Customer	Increase in SFR Customer Monthly Bill	% of Median Household Income [*]
	Existing	\$129.59		2.4%
ASAP	ASAP	145.44	\$15.85	2.6%
2027	10/1/2026	159.15	13.71	2.8%
2028	10/1/2027	173.63	14.48	2.9%
2029	10/1/2028	183.85	10.22	3.0%
2030	10/1/2029	191.34	7.49	3.0%
2031	10/1/2030	198.64	7.30	3.1%

SFR = Single Family Residential

[*] Assumes annual 3% cost of living salary increases throughout the Forecast Period.

The combined bill for all utility services (water, sewer, solid waste/recycling, and stormwater) is well below the EPA's 4.5% of median household income affordability threshold for water and sewer service only. The financial and rate plan is considered affordable by utility industry standards.

ES-5: Financial Overview

Tables ES-3 through ES-8 of this executive summary provide a financial overview of forecasted operations of the Utilities. The proposed rate and financial plans generally place the Systems on a path for maintaining financial performance and creditworthiness over time.

ES-6: Benefits to Miami Beach Residents of Rate and Financial Plan

Benefits to Miami Beach residents of the rate and financial plan include:

- The City is proactively addressing public health and safety issues and is following the recommendations of the City's adopted master plans.
- Access to debt financing / capital markets – the ability to "get the work done" at today's prices. The Utilities cannot secure debt financing for critical capital needs without rate adjustments. When the Utilities issue bonds, rating agencies want to see a five-year projection of Utility operating and capital needs, and all of the needs should be fully funded with adopted increases. Funding of the capital program on a 100% pay-as-you-go basis would require much higher rate adjustments.
- Improved water pressure and fire protection as a result of line replacements.
- Improved flood protection as a result of stormwater improvements.
- There will be fewer water, sewer, and stormwater line breaks and less risk of fines / consent orders due to pollution or violation of system permits from regulatory agencies. Pipe failures can result in property damage and extensive roadway repairs.
- Maintenance of affordable and competitive rates.

ES-7: Requested City Commission Action

Based on our analyses and findings as summarized in this section of the report and as further detailed in Sections 1 through 3 of this report, GovRates recommends the following items for the City Commission's consideration:

- 1. Adopt the proposed monthly water, sewer, and stormwater rates.** Smaller, incremental rate increases over time help to avoid future "rate shock" and "catch up" increases. The proposed rates will produce bills considered competitive and affordable and are anticipated to favorably position the utility for the issuance of additional bonds to fund replacement / rehabilitation of utility assets. Third-party evaluators such as credit rating agencies want to see that all increases needed to support the debt have already been adopted.
- 2. Pass-through future wholesale rate increases or decreases from Miami-Dade County, starting with any adjustments for Fiscal Year 2026.**

3. **Adopt the proposed water and sewer impact fees.**
4. **Continue to monitor the financial position of the utility systems and adjust the financial and rate plans as needed.** Changes in economic conditions, customer usage trends, the regulatory environment, and capital needs could significantly affect the projections in this report.

The remainder of the report provides additional details regarding the utility financial and rate analyses conducted on behalf of the City, including how the proposed rate adjustments were derived.

Table ES-1

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Existing and Proposed Monthly Water and Sewer User Rates

Line No.	Fiscal Year Ending September 30,							
	Existing 2025	Proposed 2026	Proposed 2027	Proposed 2028	Proposed 2029	Proposed 2030	Proposed 2031	
WATER SERVICE - DOMESTIC								
Residential								
Base Facility Charge								
	Meter Size							
1	5/8"	\$ 10.08	\$ 10.99	\$ 11.98	\$ 13.05	\$ 13.64	\$ 14.26	\$ 14.90
2	1"	10.52	11.47	12.50	13.62	14.24	14.88	15.55
3	1.5"	11.55	12.59	13.73	14.95	15.63	16.34	17.07
4	2"	12.58	13.72	14.95	16.29	17.02	17.80	18.60
5	3"	13.21	14.40	15.70	17.10	17.88	18.69	19.53
6	4"	15.21	16.58	18.08	19.69	20.58	21.52	22.48
Consumption Charge Per 1,000 Gallons								
7	0 to 8,000 Gallons	\$ 1.16	\$ 1.28	\$ 1.49	\$ 1.71	\$ 1.84	\$ 1.97	\$ 2.10
8	8,001 to 16,000 Gallons	3.21	3.54	4.12	4.73	5.09	5.45	5.81
9	16,001 to 24,000 Gallons	4.75	5.24	6.10	7.00	7.53	8.07	8.60
10	Over 24,000 Gallons	6.49	7.16	8.34	9.57	10.29	11.02	11.75
11	Purchased Water Pass-Through Rate Per 1,000 Gallons [1]	\$ 2.72	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83

Table ES-1

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Existing and Proposed Monthly Water and Sewer User Rates

		Fiscal Year Ending September 30,						
Line No.		Existing 2025	Proposed 2026	Proposed 2027	Proposed 2028	Proposed 2029	Proposed 2030	Proposed 2031
<u>Master-Metered Multifamily Residential Service</u>								
(Includes Apartment, Condominium, and Duplex)								
Base Facility Charge								
	<u>Meter Size</u>							
12	5/8"	\$ 10.08	\$ 10.99	\$ 11.98	\$ 13.05	\$ 13.64	\$ 14.26	\$ 14.90
13	1"	21.76	23.72	25.86	28.17	29.45	30.78	32.17
14	1.5"	41.49	45.24	49.31	53.71	56.14	58.70	61.33
15	2"	65.00	70.87	77.25	84.15	87.96	91.95	96.08
16	3"	125.52	136.85	149.18	162.50	169.85	177.57	185.54
17	4"	194.92	212.52	231.66	252.35	263.76	275.75	288.13
18	6"	390.50	425.75	464.11	505.56	528.41	552.43	577.23
19	8"	616.66	672.33	732.90	798.35	834.45	872.38	911.53
20	10"	885.22	965.14	1,052.08	1,146.04	1,197.86	1,252.31	1,308.51
21	12"	1,636.41	1,784.14	1,944.86	2,118.57	2,214.35	2,315.00	2,418.90
Consumption Charge Per 1,000 Gallons								
22	Block 1	\$ 2.05	\$ 2.26	\$ 2.63	\$ 3.02	\$ 3.25	\$ 3.48	\$ 3.71
23	Block 2	3.48	3.84	4.47	5.13	5.52	5.91	6.30
24	Block 3	4.64	5.12	5.96	6.84	7.36	7.88	8.40
25	Purchased Water Pass-Through Rate Per 1,000 Gallons [1]	\$ 2.72	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83

Table ES-1

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Existing and Proposed Monthly Water and Sewer User Rates

		Fiscal Year Ending September 30,						
Line No.		Existing 2025	Proposed 2026	Proposed 2027	Proposed 2028	Proposed 2029	Proposed 2030	Proposed 2031
<u>Nonresidential Service</u>								
(Includes Commerical, Hotel, and City)								
Base Facility Charge								
	<u>Meter Size</u>							
26	5/8"	\$ 10.08	\$ 10.99	\$ 11.98	\$ 13.05	\$ 13.64	\$ 14.26	\$ 14.90
27	1"	21.76	23.72	25.86	28.17	29.45	30.78	32.17
28	1.5"	41.49	45.24	49.31	53.71	56.14	58.70	61.33
29	2"	65.00	70.87	77.25	84.15	87.96	91.95	96.08
30	3"	125.52	136.85	149.18	162.50	169.85	177.57	185.54
31	4"	194.92	212.52	231.66	252.35	263.76	275.75	288.13
32	6"	390.50	425.75	464.11	505.56	528.41	552.43	577.23
33	8"	616.66	672.33	732.90	798.35	834.45	872.38	911.53
34	10"	885.22	965.14	1,052.08	1,146.04	1,197.86	1,252.31	1,308.51
35	12"	1,636.41	1,784.14	1,944.86	2,118.57	2,214.35	2,315.00	2,418.90
Consumption Charge Per 1,000 Gallons								
36	Block 1	\$ 2.05	\$ 2.26	\$ 2.63	\$ 3.02	\$ 3.25	\$ 3.48	\$ 3.71
37	Block 2	3.48	3.84	4.47	5.13	5.52	5.91	6.30
38	Block 3	4.64	5.12	5.96	6.84	7.36	7.88	8.40
39	Purchased Water Pass-Through Rate Per 1,000 Gallons [1]	\$ 2.72	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83

Table ES-1

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Existing and Proposed Monthly Water and Sewer User Rates

Line No.		Fiscal Year Ending September 30,							
		Existing 2025	Proposed 2026	Proposed 2027	Proposed 2028	Proposed 2029	Proposed 2030	Proposed 2031	
WATER SERVICE - IRRIGATION									
Residential Water									
Base Facility Charge									
	Meter Size								
40	5/8"	\$ 10.08	\$ 10.99	\$ 11.98	\$ 13.05	\$ 13.64	\$ 14.26	\$ 14.90	
41	1"	10.52	11.47	12.50	13.62	14.24	14.88	15.55	
42	1.5"	11.55	12.59	13.73	14.95	15.63	16.34	17.07	
43	2"	12.58	13.72	14.95	16.29	17.02	17.80	18.60	
44	3"	13.21	14.40	15.70	17.10	17.88	18.69	19.53	
45	4"	15.21	16.58	18.08	19.69	20.58	21.52	22.48	
Consumption Charge Per 1,000 Gallons									
46	0 to 16,000 Gallons	\$ 3.20	\$ 3.54	\$ 4.12	\$ 4.73	\$ 5.09	\$ 5.45	\$ 5.81	
47	Over 16,000 Gallons	6.49	7.16	8.34	9.57	10.29	11.02	11.75	
48	Purchased Water Pass-Through Rate Per 1,000 Gallons [1]	\$ 2.72	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	

Table ES-1

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Existing and Proposed Monthly Water and Sewer User Rates

Line No.	Fiscal Year Ending September 30,						
	Existing 2025	Proposed 2026	Proposed 2027	Proposed 2028	Proposed 2029	Proposed 2030	Proposed 2031
<u>Master-Metered Multifamily Residential Service</u>							
(Includes Apartment, Condominium, and Duplex)							
Base Facility Charge							
	<u>Meter Size</u>						
49	5/8"	\$ 10.08	\$ 10.99	\$ 11.98	\$ 13.05	\$ 13.64	\$ 14.26
50	1"	21.76	23.72	25.86	28.17	29.45	30.78
51	1.5"	41.49	45.24	49.31	53.71	56.14	58.70
52	2"	65.00	70.87	77.25	84.15	87.96	91.95
53	3"	125.52	136.85	149.18	162.50	169.85	177.57
54	4"	194.92	212.52	231.66	252.35	263.76	275.75
55	6"	390.50	425.75	464.11	505.56	528.41	552.43
56	8"	616.66	672.33	732.90	798.35	834.45	872.38
57	10"	885.22	965.14	1,052.08	1,146.04	1,197.86	1,252.31
58	12"	1,636.41	1,784.14	1,944.86	2,118.57	2,214.35	2,315.00
Consumption Charge Per 1,000 Gallons							
59	Block 1	\$ 3.20	\$ 3.54	\$ 4.12	\$ 4.73	\$ 5.09	\$ 5.45
60	Block 2	6.49	7.16	8.34	9.57	10.29	11.02
61	Purchased Water Pass-Through Rate Per 1,000 Gallons [1]	\$ 2.72	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83

Table ES-1

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Existing and Proposed Monthly Water and Sewer User Rates

Line No.		Fiscal Year Ending September 30,							
		Existing 2025	Proposed 2026	Proposed 2027	Proposed 2028	Proposed 2029	Proposed 2030	Proposed 2031	
<u>Nonresidential Service</u>									
(Includes Commerical, Hotel, and City)									
Base Facility Charge									
	<u>Meter Size</u>								
62	5/8"	\$ 10.08	\$ 10.99	\$ 11.98	\$ 13.05	\$ 13.64	\$ 14.26	\$ 14.90	
63	1"	21.76	23.72	25.86	28.17	29.45	30.78	32.17	
64	1.5"	41.49	45.24	49.31	53.71	56.14	58.70	61.33	
65	2"	65.00	70.87	77.25	84.15	87.96	91.95	96.08	
66	3"	125.52	136.85	149.18	162.50	169.85	177.57	185.54	
67	4"	194.92	212.52	231.66	252.35	263.76	275.75	288.13	
68	6"	390.50	425.75	464.11	505.56	528.41	552.43	577.23	
69	8"	616.66	672.33	732.90	798.35	834.45	872.38	911.53	
70	10"	885.22	965.14	1,052.08	1,146.04	1,197.86	1,252.31	1,308.51	
71	12"	1,636.41	1,784.14	1,944.86	2,118.57	2,214.35	2,315.00	2,418.90	
Consumption Charge Per 1,000 Gallons									
72	Block 1	\$ 3.20	\$ 3.54	\$ 4.12	\$ 4.73	\$ 5.09	\$ 5.45	\$ 5.81	
73	Block 2	6.49	7.16	8.34	9.57	10.29	11.02	11.75	
74	Purchased Water Pass-Through Rate Per 1,000 Gallons [1]	\$ 2.72	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83	

Table ES-1

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Existing and Proposed Monthly Water and Sewer User Rates

Line No.	Fiscal Year Ending September 30,														
	Existing 2025		Proposed 2026		Proposed 2027		Proposed 2028		Proposed 2029		Proposed 2030		Proposed 2031		
SEWER SERVICE															
<u>Residential Sewer</u>															
Base Facility Charge															
	<u>Meter Size</u>														
75	5/8"	\$	9.95	\$	10.85	\$	11.82	\$	12.88	\$	13.46	\$	14.08	\$	14.71
76	1"		9.95		10.85		11.82		12.88		13.46		14.08		14.71
77	1.5"		9.95		10.85		11.82		12.88		13.46		14.08		14.71
78	2"		9.95		10.85		11.82		12.88		13.46		14.08		14.71
79	3"		9.95		10.85		11.82		12.88		13.46		14.08		14.71
80	4"		9.95		10.85		11.82		12.88		13.46		14.08		14.71
Consumption Charge Per 1,000 Gallons															
81	All Flow	\$	5.02	\$	6.28	\$	7.42	\$	8.67	\$	9.35	\$	10.07	\$	10.81
82	Purchased Sewer Pass-Through Rate Per 1,000 Gallons [2]	\$	6.64	\$	6.53	\$	6.53	\$	6.53	\$	6.53	\$	6.53	\$	6.53

Table ES-1

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Existing and Proposed Monthly Water and Sewer User Rates

Line No.	Fiscal Year Ending September 30,						
	Existing 2025	Proposed 2026	Proposed 2027	Proposed 2028	Proposed 2029	Proposed 2030	Proposed 2031
<u>Master-Metered Multifamily Residential Service</u>							
(Includes Apartment, Condominium, and Duplex)							
Base Facility Charge							
	<u>Meter Size</u>						
83	5/8"	\$ 9.95	\$ 10.85	\$ 11.82	\$ 12.88	\$ 13.46	\$ 14.71
84	1"	22.23	24.24	26.41	28.78	30.07	32.86
85	1.5"	42.68	46.54	50.70	55.25	57.74	63.10
86	2"	67.23	73.31	79.87	87.03	90.95	99.39
87	3"	132.70	144.70	157.64	171.78	179.51	196.18
88	4"	206.35	225.01	245.13	267.11	279.14	305.07
89	6"	410.95	448.12	488.18	531.96	555.92	607.55
90	8"	656.43	715.81	779.80	849.73	887.99	970.46
91	10"	942.86	1,028.14	1,120.06	1,220.51	1,275.47	1,393.92
92	12"	1,761.18	1,920.48	2,092.18	2,279.80	2,382.46	2,603.71
Consumption Charge Per 1,000 Gallons							
93	All Usage	\$ 5.02	\$ 6.28	\$ 7.42	\$ 8.67	\$ 9.35	\$ 10.81
94	Purchased Sewer Pass-Through Rate Per 1,000 Gallons [2]	\$ 6.64	\$ 6.53	\$ 6.53	\$ 6.53	\$ 6.53	\$ 6.53

Table ES-1

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Existing and Proposed Monthly Water and Sewer User Rates

Line No.	Fiscal Year Ending September 30,						
	Existing 2025	Proposed 2026	Proposed 2027	Proposed 2028	Proposed 2029	Proposed 2030	Proposed 2031
<u>Nonresidential Service</u>							
(Includes Commerical, Hotel, and City)							
Base Facility Charge							
	<u>Meter Size</u>						
95	5/8"	\$ 9.95	\$ 10.85	\$ 11.82	\$ 12.88	\$ 13.46	\$ 14.71
96	1"	22.23	24.24	26.41	28.78	30.07	32.86
97	1.5"	42.68	46.54	50.70	55.25	57.74	63.10
98	2"	67.23	73.31	79.87	87.03	90.95	99.39
99	3"	132.70	144.70	157.64	171.78	179.51	196.18
100	4"	206.35	225.01	245.13	267.11	279.14	305.07
101	6"	410.95	448.12	488.18	531.96	555.92	607.55
102	8"	656.43	715.81	779.80	849.73	887.99	970.46
103	10"	942.86	1,028.14	1,120.06	1,220.51	1,275.47	1,393.92
104	12"	1,761.18	1,920.48	2,092.18	2,279.80	2,382.46	2,603.71
Consumption Charge Per 1,000 Gallons							
105	All Usage	\$ 5.02	\$ 6.28	\$ 7.42	\$ 8.67	\$ 9.35	\$ 10.81
106	Purchased Sewer Pass-Through Rate Per 1,000 Gallons [2]	\$ 6.64	\$ 6.53	\$ 6.53	\$ 6.53	\$ 6.53	\$ 6.53

Footnotes:

- [1] The Purchased Water Pass-Through Rate Per 1,000 Gallons shall be increased or decreased each fiscal year by the percentage adjustment in the wholesale water rate charged to the City by Miami-Dade County, starting with any wholesale water rate adjustment for the Fiscal Year 2026.
- [2] The Purchased Sewer Pass-Through Rate Per 1,000 Gallons shall be increased or decreased each fiscal year by the percentage adjustment in the wholesale sewer rate charged to the City by Miami-Dade County, starting with any wholesale sewer rate adjustment for the Fiscal Year 2026.

Table ES-2

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Proposed Water and Sewer Impact Fee Schedule - City Portion Only

Line No.	Description	Meter Equivalent Factor [*]	Water	Sewer	Combined
All Customer Classes - City Portion Only					
	<u>Meter Size (Inches)</u>				
1	5/8"	1.00	\$1,630	\$2,030	\$3,660
2	1"	2.50	4,075	5,075	9,150
3	1.5"	5.00	8,150	10,150	18,300
4	2"	8.00	13,040	16,240	29,280
5	3"	16.00	26,080	32,480	58,560
6	4"	25.00	40,750	50,750	91,500
7	6"	50.00	81,500	101,500	183,000
8	8"	80.00	130,400	162,400	292,800
9	10"	115.00	187,450	233,450	420,900
10	12"	215.00	350,450	436,450	786,900

[*] Reflects meter equivalent factors implied by the size of the meter serving the premises based on information published by the American Water Works Association (AWWA) regarding meter capacities.

Table ES-3
City of Miami Beach, Florida

High-Level Water and Sewer Financial and Rate Scenario Worksheet

No.	Description	Historical Fiscal Year Ended September 30,					Fiscal Year Ending September 30,										
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
1	Overall Rate Adjustments [1]						0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%
2	Net Revenues Without Administrative Fees						\$ 31,322,898	\$ 29,609,438	\$ 35,247,198	\$ 43,848,791	\$ 53,260,592	\$ 57,838,391	\$ 62,610,440	\$ 67,609,053	\$ 68,515,410	\$ 69,381,409	\$ 70,216,371
3	Net Revenues With Administrative Fees						\$ 28,358,898	\$ 26,907,438	\$ 32,410,098	\$ 40,869,836	\$ 50,132,689	\$ 54,554,093	\$ 59,161,927	\$ 63,988,114	\$ 64,713,425	\$ 65,389,324	\$ 66,024,682
4	Rate Adjustments to Communicate (PTA = Adopted Annual Pass-Through Adjustments for Miami-Dade Wholesale Water and Sewer Charges)							0.00% + PTA	9.00% + PTA	9.00% + PTA	9.00% + PTA	4.50% + PTA	4.50% + PTA	4.50% + PTA	1.55% + PTA	1.55% + PTA	1.55% + PTA
5	Automatic Consumer Price Index Adjustment [2]							1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
6	All-In Net Revenues Debt Service Coverage (Target 200%)						254%	240%	192%	268%	205%	223%	204%	227%	233%	207%	209%
7	Debt Service Coverage Target Met? (Includes Administration Charges)						Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	Senior Lien Required Net Revenues Debt Service Coverage	271%	246%	247%	500%	310%	280%	264%	211%	289%	219%	238%	217%	241%	247%	220%	223%
9	Debt Service Coverage Requirement (110%) Met?						Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	SRF Loan Required Net Revenues Debt Service Coverage						N/A	N/A	12454%	21507%	20768%	24697%	24338%	29484%	30435%	27329%	27897%
11	Debt Service Coverage Requirement (115%) Met?						Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	Amount Available for Pay-As-You-Go Capital Funding After Payment of Operating Expenses and Debt Service						\$ 17,172,848	\$ 15,708,888	\$ 15,572,322	\$ 25,600,811	\$ 25,686,955	\$ 30,107,609	\$ 30,158,515	\$ 35,861,452	\$ 36,899,762	\$ 33,784,181	\$ 34,423,164
13	Ending Unrestricted Cash and Cash Equivalents Balance [3]						\$ 84,038,776	\$ 99,102,430	\$ 91,981,943	\$ 95,346,654	\$ 93,732,299	\$ 110,342,139	\$ 122,209,429	\$ 104,905,655	\$ 132,517,549	\$ 125,168,504	\$ 114,207,526
14	Target Cash Balance (Recognized Cash Target)						\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476
15	Cash Balance Target Met?						No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	Residential Bill as % of Median Household Income						1.79%	1.77%	1.89%	2.00%	2.12%	2.17%	2.21%	2.26%	2.25%	2.24%	2.23%
17	Is Rate and Financial Plan Affordable? (< 4.5% MHI)						Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	Residential Water and Wastewater Bill @ 5,000 Gallons Usage						\$ 97.08	\$ 97.73	\$ 106.44	\$ 115.15	\$ 124.63	\$ 129.85	\$ 135.34	\$ 140.96	\$ 143.14	\$ 145.36	\$ 147.62
19	Change in Monthly Bill						0.65	8.71	8.71	9.48	5.22	5.49	5.62	2.18	2.22	2.25	2.25
20	Cost Per Gallon of Total Monthly Bill						1.9¢	2.0¢	2.1¢	2.3¢	2.5¢	2.6¢	2.7¢	2.8¢	2.9¢	2.9¢	3.0¢
21	Average of Surveyed Utilities (Assumes 4% Annual Increase)						70.33	73.15	76.07	79.11	82.28	85.57	88.99	92.55	96.26	100.11	104.11
22	Starting Cash and Cash Equivalents Balance						\$ 102,468,853	\$ 84,038,776	\$ 99,102,430	\$ 91,981,943	\$ 95,346,654	\$ 93,732,299	\$ 110,342,139	\$ 122,209,429	\$ 104,905,655	\$ 132,517,549	\$ 125,168,504
23	Year-End Surplus / (Deficiency)						(18,430,077)	15,063,654	(7,120,486)	3,364,711	(1,614,355)	16,609,840	11,867,290	(17,303,773)	27,611,893	(7,349,044)	(10,960,978)
24	Operating Expenses: (Does Not Include Depreciation and Amortization Expenses)																
25	Personal Services	\$ 7,584,311	\$ 6,933,674	\$ 8,516,370	\$ 7,197,520	\$ 7,973,287	\$ 8,701,000	\$ 9,479,000	\$ 10,003,450	\$ 10,559,173	\$ 11,148,236	\$ 11,772,863	\$ 12,435,444	\$ 13,138,547	\$ 13,884,938	\$ 14,677,595	\$ 15,519,726
26	Operating Supplies	382,852	210,706	26,443	129,119	224,509	478,000	142,000	146,360	150,856	155,492	160,272	165,202	170,286	175,528	180,935	186,511
27	Contractual Services	46,109,389	40,721,413	44,774,995	45,568,217	56,108,003	64,138,103	63,912,684	64,744,034	65,638,338	66,600,726	67,269,571	67,968,571	68,699,076	69,187,828	69,694,399	70,219,541
28	Utilities	1,246,788	1,151,168	1,165,410	1,108,959	1,134,669	1,253,000	1,213,000	1,258,500	1,305,729	1,354,755	1,405,645	1,458,472	1,513,309	1,570,236	1,629,331	1,690,679
29	Internal Charges	3,450,731	3,222,000	3,480,587	4,333,618	4,212,000	4,286,000	4,004,000	4,204,200	4,414,410	4,635,131	4,866,887	5,110,231	5,365,743	5,634,030	5,915,732	6,211,518
30	Administrative Fees	1,768,000	2,400,000	2,596,000	2,856,000	2,518,000	2,964,000	2,702,000	2,837,100	2,978,955	3,127,903	3,284,298	3,448,513	3,620,938	3,801,985	3,992,085	4,191,689
31	Other Operating	865,668	1,934,776	1,444,349	2,199,736	2,661,924	2,933,000	2,312,000	2,416,640	2,527,592	2,645,330	2,736,162	2,830,235	2,903,183	2,978,135	3,055,150	3,126,813
32	Contingency	-	-	-	-	-	1,762,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000
33	Total Operating Expenses	\$ 61,407,739	\$ 56,573,737	\$ 62,004,154	\$ 63,393,169	\$ 74,832,392	\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476
34	Increase / (Decrease) - Percent		-7.9%	9.6%	2.2%	18.0%	15.6%	1.3%	2.1%	2.2%	2.3%	2.0%	2.0%	2.0%	1.8%	1.9%	1.9%
35	Current Expenses for Coverage Purposes (Operating Expenses Less Administrative Fees)	\$ 59,639,739	\$ 54,173,737	\$ 59,408,154	\$ 60,537,169	\$ 72,314,392	\$ 83,551,103	\$ 84,939,684	\$ 86,650,184	\$ 88,473,098	\$ 90,416,669	\$ 92,088,401	\$ 93,845,155	\$ 95,667,143	\$ 97,307,695	\$ 99,030,141	\$ 100,825,787
	Five-Year Historical Growth Rate in Total Operating Expenses:						5.1%	2.1% <== Contingency as percent of other operating expenses.									
	Five-Year Historical Growth Rate in Contractual Services:						5.0%										
36	Senior Lien Debt [4]						\$ 11,186,050	\$ 11,198,550	\$ 16,725,266	\$ 15,156,516	\$ 24,333,225	\$ 24,333,975	\$ 28,890,904	\$ 28,014,154	\$ 27,701,154	\$ 31,492,634	\$ 31,489,009
37	SRF Loans [4]						-	-	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509
38	Total Debt Service						\$ 11,186,050	\$ 11,198,550	\$ 16,837,775	\$ 15,269,025	\$ 24,445,734	\$ 24,446,484	\$ 29,003,413	\$ 28,126,663	\$ 27,813,663	\$ 31,605,143	\$ 31,601,518
39	Other Revenue Requirements																
40	Pay-As-You-Go Capital Improvement Program [5]						\$ 35,602,925	\$ 645,234	\$ 22,692,809	\$ 22,236,100	\$ 27,301,310	\$ 13,497,769	\$ 18,291,225	\$ 53,165,225	\$ 9,287,869	\$ 41,133,225	\$ 45,384,142
41	Non-Operating Expenses						0	0	0	0	0	0	0	0	0	0	0
42	Other Transfers Out - Intergovernmental Loans						-	-	-	-	-	-	-	-	-	-	-
43	Total Other Revenue Requirements						\$ 35,602,925	\$ 645,234	\$ 22,692,809	\$ 22,236,100	\$ 27,301,310	\$ 13,497,769	\$ 18,291,225	\$ 53,165,225	\$ 9,287,869	\$ 41,133,225	\$ 45,384,142
44	Gross Revenue Requirements						\$ 133,304,078	\$ 99,485,468	\$ 129,017,868	\$ 128,957,179	\$ 145,291,616	\$ 133,316,952	\$ 144,588,305	\$ 180,579,969	\$ 138,211,212	\$ 175,760,594	\$ 182,003,136
45	Less Income and Funds from Other Sources																
46	Sewer Fees - Outside					\$ 3,328,990	\$ 3,697,000	\$ 3,429,000	\$ 3,531,870	\$ 3,637,826	\$ 3,746,961	\$ 3,859,370	\$ 3,975,151	\$ 4,094,405	\$ 4,217,237	\$ 4,343,755	\$ 4,474,067
47	Other Operating Revenue					1,806,123	2,292,000	1,876,000	1,891,390	1,907,242	1,923,569	1,940,386	1,957,708	1,975,549	1,993,925	2,012,853	2,032,349
48	Other Transfers In						-	-	-	-	-	-	-	-	-	-	-
49	Impact Fees Used to Pay City Debt Service						-	-	-	-	-	-	-	-	-	-	-
50	Unrestricted Interest Income					3,120,572	5,028,000	4,222,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
51	Net Revenue Requirements						\$ 122,287,078	\$ 89,958,468	\$ 121,594,608	\$ 121,412,111	\$ 137,621,086	\$ 125,517,196	\$ 136,655,447	\$ 172,510,015	\$ 130,000,049	\$ 167,403,987	\$ 173,496,720
52	Revenue from Existing Rates																
53	Water User Rate Revenue - Retail					\$ 39,884,406	\$ 43,308,000	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742
54	Sewer User Rate Revenue - Retail					59,021,059	60,549,000	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380
55	Total System Revenue - Retail					\$ 98,905,465	\$ 103,857,001	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122
56	Prior Year Rate Adjustment						-	-	-	9,452,000	19,754,700	30,984,609	37,104,914	43,500,615	50,184,120	52,589,820	55,032,820
57	Total Applicable Rate Revenue						\$ 103,857,001	\$ 105,022,122	\$ 105,022,122	\$ 114,474,122	\$ 124,776,822	\$ 136,006,731	\$ 142,127,036	\$ 148,522,736	\$ 155,206,242	\$ 157,611,942	\$ 160,054,942
58	Rate Adjustments						0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%

Table ES-3
City of Miami Beach, Florida

High-Level Water and Sewer Financial and Rate Scenario Worksheet

Line No.	Description	Historical Fiscal Year Ended September 30,					Fiscal Year Ending September 30,										
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
56	Effective Months						12	12	12	12	12	12	12	12	12	12	12
57	Percent of Current Year Effective						100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
58	Revenue from Current Rate Adjustment w/ Effective Months						\$ -	\$ -	\$ 9,452,000	\$ 10,302,700	\$ 11,229,909	\$ 6,120,305	\$ 6,395,701	\$ 6,683,505	\$ 2,405,700	\$ 2,443,000	\$ 2,480,800
59	Total Revenue w/ Effective Months					\$ 98,905,465	\$ 103,857,001	\$ 105,022,122	\$ 114,474,122	\$ 124,776,822	\$ 136,006,731	\$ 142,127,036	\$ 148,522,736	\$ 155,206,242	\$ 157,611,942	\$ 160,054,942	\$ 162,535,743
60	Revenue Surplus/(Deficiency) Under Proposed Rates						\$ (18,430,077)	\$ 15,063,654	\$ (7,120,486)	\$ 3,364,711	\$ (1,614,355)	\$ 16,609,840	\$ 11,867,290	\$ (17,303,773)	\$ 27,611,893	\$ (7,349,044)	\$ (10,960,978)
61	Revenue Surplus/(Deficiency) as % of Revenue						-17.7%	14.3%	-6.2%	2.7%	-1.2%	11.7%	8.0%	-11.1%	17.5%	-4.6%	-6.7%

Footnotes:

[1] Should include estimated effects of pass-through and Consumer Price Index adjustments.

[2] Estimated rate adjustments due to Consumer Price Index adjustment clause:

Consumer Price Index Adjustment

Revenue Under Existing Rates With Prior Year Adjustments	\$ 103,857,001	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122
Less Miami-Dade County Purchased Water and Sewer Expenses	(51,508,103)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)	(50,651,357)
Adjusted Revenue	\$ 52,348,898	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765	\$ 54,370,765
Inflation Assumption		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Revenue With Inflationary Increase		\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888	\$ 56,001,888
Increase in Revenue		\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123	\$ 1,631,123
Overall User Rate Revenue Increase		1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%

[3] Does not include cash balances in impact fee funds or construction funds from debt financing.

[4] Breakdown of debt service:

Senior Lien Debt

Water and Sewer Revenue and Revenue Refunding Bonds, Series 2017	\$ 6,640,400	\$ 10,222,900	\$ 10,227,400	\$ 8,658,650	\$ 8,654,650	\$ 8,655,400	\$ 8,655,150	\$ 7,778,400	\$ 5,125,400	\$ 5,131,800	\$ 5,132,300						
Water and Sewer Revenue Refunding Bonds, Series 2021A	4,545,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650
Assumed Water and Sewer Revenue Bonds, Series 2025	-	-	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216
Assumed Water and Sewer Revenue Bonds, Series 2028	-	-	-	-	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709
Assumed Water and Sewer Revenue Bonds, Series 2030	-	-	-	-	-	-	-	4,557,178	4,557,178	4,557,178	4,557,178	4,557,178	4,557,178	4,557,178	4,557,178	4,557,178	4,557,178
Assumed Water and Sewer Revenue Bonds, Series 2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,788,081	3,788,081	3,788,081
Total	\$ 11,186,050	\$ 11,198,550	\$ 16,725,266	\$ 15,156,516	\$ 24,333,225	\$ 24,333,975	\$ 28,890,904	\$ 28,014,154	\$ 27,701,154	\$ 31,492,634	\$ 31,489,009						

SRF Loans

DWSRF Loan for Lead and Copper Service Line Replacement	\$ -	\$ -	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509
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[5] Represents capital needs not funded through debt, impact fees, surtaxes, grants, or developer contributions.

Cash Target

120 Days of Rate Revenue	\$ 34,144,767	\$ 34,527,821	\$ 37,635,328	\$ 41,022,517	\$ 44,714,542	\$ 46,726,697	\$ 48,829,393	\$ 51,026,710	\$ 51,817,625	\$ 52,620,803	\$ 53,436,409						
Annual Depreciation Expense	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380	7,025,380
Total	\$ 41,170,147	\$ 41,553,201	\$ 44,660,708	\$ 48,047,897	\$ 51,739,922	\$ 53,752,077	\$ 55,854,773	\$ 58,052,090	\$ 58,843,005	\$ 59,646,183	\$ 60,461,789						
365 Days Cash on Hand	\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476						

Recognized Cash Target

	\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476						
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Debt Service Coverage Target

All-In Debt Service Coverage Target	200%
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Table ES-4

**City of Miami Beach, Florida
Water and Sewer System**

Multi-Year Water and Sewer Financial Projections

High-Level Summary	Actual FY	Fiscal Year Ending September 30,										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Operating Revenue												
User Rate Revenue - Retail												
Water User Rate Revenue Before Current Year Adjustment		\$ 43,308,000	\$ 44,976,742	\$ 44,976,742	\$ 49,024,642	\$ 53,436,842	\$ 58,246,142	\$ 60,867,242	\$ 63,606,242	\$ 66,468,542	\$ 67,498,842	\$ 68,545,042
Additional User Rate Increase - Water		0.0%	0.0%	9.0%	9.0%	9.0%	4.5%	4.5%	4.5%	1.6%	1.6%	1.6%
Total Water User Rate Revenue	\$ 39,884,406	\$ 43,308,000	\$ 44,976,742	\$ 49,024,642	\$ 53,436,842	\$ 58,246,142	\$ 60,867,242	\$ 63,606,242	\$ 66,468,542	\$ 67,498,842	\$ 68,545,042	\$ 69,607,442
 Sewer User Rate Revenue Before Current Year Adjustment		\$ 60,549,000	\$ 60,045,380	\$ 60,045,380	\$ 65,449,480	\$ 71,339,880	\$ 77,760,480	\$ 81,259,780	\$ 84,916,380	\$ 88,737,680	\$ 90,113,080	\$ 91,509,880
Additional User Rate Increase - Sewer		0.0%	0.0%	9.0%	9.0%	9.0%	4.5%	4.5%	4.5%	1.6%	1.6%	1.6%
Total Sewer User Rate Revenue	\$ 59,021,059	\$ 60,549,000	\$ 60,045,380	\$ 65,449,480	\$ 71,339,980	\$ 77,760,480	\$ 81,259,680	\$ 84,916,480	\$ 88,737,580	\$ 90,113,080	\$ 91,509,880	\$ 92,928,280
 Total User Rate Revenue - Retail	\$ 98,905,465	\$ 103,857,001	\$ 105,022,122	\$ 114,474,122	\$ 124,776,822	\$ 136,006,622	\$ 142,126,922	\$ 148,522,722	\$ 155,206,122	\$ 157,611,922	\$ 160,054,922	\$ 162,535,722
 Other Operating Revenue	\$ (9,241,907)	\$ 5,989,000	\$ 5,305,000	\$ 5,423,260	\$ 5,545,068	\$ 5,670,530	\$ 5,799,756	\$ 5,932,858	\$ 6,069,954	\$ 6,211,163	\$ 6,356,608	\$ 6,506,416
TOTAL OPERATING REVENUE	\$ 89,663,558	\$ 109,846,001	\$ 110,327,122	\$ 119,897,382	\$ 130,321,890	\$ 141,677,152	\$ 147,926,678	\$ 154,455,580	\$ 161,276,076	\$ 163,823,085	\$ 166,411,530	\$ 169,042,138
Current Expenses												
Water Operating Expenses		\$ 34,965,264	\$ 35,672,637	\$ 36,560,971	\$ 37,506,188	\$ 38,512,346	\$ 39,412,396	\$ 40,359,335	\$ 41,345,690	\$ 42,266,166	\$ 43,234,270	\$ 44,247,255
Sewer Operating Expenses		51,549,839	51,969,047	52,926,313	53,945,865	55,032,226	55,960,302	56,934,333	57,942,391	58,843,515	59,787,956	60,770,221
TOTAL CURRENT EXPENSES [I]	\$ 74,832,392	\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476
Percent Change		15.6%	1.3%	2.1%	2.2%	2.3%	2.0%	2.0%	2.0%	1.8%	1.9%	1.9%
Operating Revenues Less Current Expenses	\$ 14,831,166	\$ 23,330,898	\$ 22,685,438	\$ 30,410,098	\$ 38,869,836	\$ 48,132,580	\$ 52,553,979	\$ 57,161,913	\$ 61,987,995	\$ 62,713,405	\$ 63,389,304	\$ 64,024,662
Non-Operating Revenue												
Unrestricted Interest Income	\$ 5,028,000	\$ 5,028,000	\$ 4,222,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000
Net Revenue Available for Debt Service	\$ 19,859,166	\$ 28,358,898	\$ 26,907,438	\$ 32,410,098	\$ 40,869,836	\$ 50,132,580	\$ 54,553,979	\$ 59,161,913	\$ 63,987,995	\$ 64,713,405	\$ 65,389,304	\$ 66,024,662
City Debt Service												
Existing Debt Service - Principal and Interest		\$ 11,186,050	\$ 11,198,550	\$ 11,315,559	\$ 9,746,809	\$ 9,742,809	\$ 9,743,559	\$ 9,743,309	\$ 8,866,559	\$ 8,553,559	\$ 8,556,959	\$ 8,553,334
New Debt Service - Principal and Interest		-	-	5,522,216	5,522,216	14,702,925	14,702,925	19,260,104	19,260,104	19,260,104	23,048,184	23,048,184
Less Impact Fees Used for City Growth-Related Debt Service		-	-	-	-	-	-	-	-	-	-	-
NET DEBT SERVICE	\$ 11,186,050	\$ 11,198,550	\$ 16,837,775	\$ 15,269,025	\$ 24,445,734	\$ 24,446,484	\$ 29,003,413	\$ 28,126,663	\$ 27,813,663	\$ 31,605,143	\$ 31,601,518	
Grant Reimbursements												
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Less Equipment Loan Payments												
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Revenue Available for Capital Rehabilitations / Improvements	\$ 17,172,848	\$ 15,708,888	\$ 15,572,322	\$ 25,600,811	\$ 25,686,846	\$ 30,107,495	\$ 30,158,500	\$ 35,861,332	\$ 36,899,742	\$ 33,784,160	\$ 34,423,143	
Capital Expenditures												
Capital Program as Scheduled												
Capital Projects - Water	\$ 45,679,097	\$ -	\$ 47,567,612	\$ 35,999,492	\$ 8,863,430	\$ 28,908,935	\$ 15,899,000	\$ 28,495,896	\$ 22,897,322	\$ 27,570,000	\$ 21,695,459	
Capital Projects - Sewer	73,550,840	8,234	53,030,592	45,001,992	17,865,930	31,908,935	15,899,000	28,495,896	22,897,322	27,570,000	21,695,459	
Departmental Capital - Water	3,630,000	637,000	480,800	1,430,000	505,200	461,100	1,190,683	1,190,683	1,190,683	1,190,683	1,190,683	
Departmental Capital - Sewer	3,367,000	-	732,100	400,600	66,750	248,800	802,542	802,542	802,542	802,542	802,542	
Total Capital Program as Scheduled	\$ 126,226,937	\$ 645,234	\$ 101,811,103	\$ 82,832,084	\$ 27,301,310	\$ 61,527,769	\$ 33,791,225	\$ 58,985,017	\$ 47,787,869	\$ 57,133,225	\$ 45,384,142	

Table ES-4

**City of Miami Beach, Florida
Water and Sewer System**

Multi-Year Water and Sewer Financial Projections

High-Level Summary	Actual FY	Fiscal Year Ending September 30,										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Adjustments												
Capital Projects - Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Projects - Sewer	-	-	-	-	-	-	-	-	-	-	-	-
Departmental Capital - Water	-	-	-	-	-	-	-	-	-	-	-	-
Departmental Capital - Sewer	-	-	-	-	-	-	-	-	-	-	-	-
Total Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Projects as Adjusted												
Capital Projects - Water	\$ 45,679,097	\$ -	\$ 47,567,612	\$ 35,999,492	\$ 8,863,430	\$ 28,908,935	\$ 15,899,000	\$ 28,495,896	\$ 22,897,322	\$ 27,570,000	\$ 21,695,459	
Capital Projects - Sewer	73,550,840	8,234	53,030,592	45,001,992	17,865,930	31,908,935	15,899,000	28,495,896	22,897,322	27,570,000	21,695,459	
Departmental Capital - Water	3,630,000	637,000	480,800	1,430,000	505,200	461,100	1,190,683	1,190,683	1,190,683	1,190,683	1,190,683	
Departmental Capital - Sewer	3,367,000	-	732,100	400,600	66,750	248,800	802,542	802,542	802,542	802,542	802,542	
ADJUSTED CAPITAL EXPENDITURES	\$ 126,226,937	\$ 645,234	\$ 101,811,103	\$ 82,832,084	\$ 27,301,310	\$ 61,527,769	\$ 33,791,225	\$ 58,985,017	\$ 47,787,869	\$ 57,133,225	\$ 45,384,142	
Cash Surplus / (Deficiency)												
Base Surplus / (Deficiency)	\$(109,054,089)	\$ 15,063,654	\$(86,238,781)	\$(57,231,273)	\$(1,614,464)	\$(31,420,274)	\$(3,632,725)	\$(23,123,685)	\$(10,888,127)	\$(23,349,065)	\$(10,960,999)	
Less Projects to Be Funded Through Surtax	-	-	-	-	-	-	-	-	-	-	-	
Less Projects to Be Funded by Developers	-	-	-	-	-	-	-	-	-	-	-	
Less Projects to Be Funded Through Connection / Impact Fees	-	-	-	-	-	-	-	-	-	-	-	
Less Projects to Be Funded Through Proceeds from Existing and Proposed Debt	90,624,012	-	79,118,294	60,595,984	-	48,030,000	15,500,000	5,819,792	38,500,000	16,000,000	-	
Less Unfunded Projects	-	-	-	-	-	-	-	-	-	-	-	
INCREASE / DECREASE IN UNRESTRICTED FUND BALANCES	\$ (18,430,077)	\$ 15,063,654	\$ (7,120,486)	\$ 3,364,711	\$ (1,614,464)	\$ 16,609,726	\$ 11,867,275	\$ (17,303,893)	\$ 27,611,873	\$ (7,349,065)	\$ (10,960,999)	
Debt Service Coverage												
Net Revenue Available for Debt Service	\$ 28,358,898	\$ 26,907,438	\$ 32,410,098	\$ 40,869,836	\$ 50,132,580	\$ 54,553,979	\$ 59,161,913	\$ 63,987,995	\$ 64,713,405	\$ 65,389,304	\$ 66,024,662	
Add Back Admin Fees	2,964,000	2,702,000	2,837,100	2,978,955	3,127,903	3,284,298	3,448,513	3,620,938	3,801,985	3,992,085	4,191,689	
Net Revenue Available for Debt Service without Payment of Admin Fees	\$ 31,322,898	\$ 29,609,438	\$ 35,247,198	\$ 43,848,791	\$ 53,260,483	\$ 57,838,277	\$ 62,610,426	\$ 67,608,933	\$ 68,515,390	\$ 69,381,388	\$ 70,216,351	
Total Debt Service	11,186,050	11,198,550	16,837,775	15,269,025	24,445,734	24,446,484	29,003,413	28,126,663	27,813,663	31,605,143	31,601,518	
ALL-IN DEBT SERVICE COVERAGE WITHOUT ADMIN FEES	2.80	2.64	2.09	2.87	2.18	2.37	2.16	2.40	2.46	2.20	2.22	
ALL-IN DEBT SERVICE COVERAGE	2.54	2.40	1.92	2.68	2.05	2.23	2.04	2.27	2.33	2.07	2.09	
Cash Balances												
Beginning of Year Cash Balances	\$ 117,194,523											
Less Construction / Loan Fund Balance	(6,583,222)											
Less Customer Deposits	(7,876,488)											
Less Debt Service Reserve Account	-											
Less Connection / Impact Fees	(265,960)											
Less Carryforward Projects	-											
Beginning of Year Fund Balance - Net Cash	\$ 102,468,853	\$ 84,038,776	\$ 99,102,430	\$ 91,981,943	\$ 95,346,654	\$ 93,732,190	\$ 110,341,916	\$ 122,209,191	\$ 104,905,298	\$ 132,517,171	\$ 125,168,107	
Operating/Capital Reserve (Increase/Decrease)	(18,430,077)	15,063,654	(7,120,486)	3,364,711	(1,614,464)	16,609,726	11,867,275	(17,303,893)	27,611,873	(7,349,065)	(10,960,999)	
ENDING CASH RESERVES - \$	\$ 84,038,776	\$ 99,102,430	\$ 91,981,943	\$ 95,346,654	\$ 93,732,190	\$ 110,341,916	\$ 122,209,191	\$ 104,905,298	\$ 132,517,171	\$ 125,168,107	\$ 114,207,108	
Target Minimum Cash Reserves - One Year of Operating Expenses - \$ [2]	\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476	
Cash Reserves Balance - % of Operating Expenses [2]	97%	113%	103%	104%	100%	116%	126%	106%	131%	122%	109%	
Cash Reserves Balance - Days Cash on Hand [2]	355	413	375	381	366	422	458	386	478	443	397	

Table ES-4

**City of Miami Beach, Florida
Water and Sewer System**

Multi-Year Water and Sewer Financial Projections

High-Level Summary	Actual FY	Fiscal Year Ending September 30,										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Monthly Bill and Rate Affordability												
Average Monthly Residential Water Bill (5,000 Gallons)	\$ 28.46	\$ 29.48	\$ 31.54	\$ 33.58	\$ 35.75	\$ 36.99	\$ 38.26	\$ 39.55				
Average Monthly Residential Sewer Bill (5,000 Gallons)	68.62	68.25	74.90	81.57	88.88	92.86	97.08	101.41				
Total Monthly Residential Bill (7,000 Gallons)	\$ 97.08	\$ 97.73	\$ 106.44	\$ 115.15	\$ 124.63	\$ 129.85	\$ 135.34	\$ 140.96	\$ 143.14	\$ 145.36	\$ 147.62	
Amount Increase		\$ 0.65	\$ 8.71	\$ 8.71	\$ 9.48	\$ 5.22	\$ 5.49	\$ 5.62	\$ 2.18	\$ 2.22	\$ 2.25	
Percent Increase			0.7%	8.9%	8.2%	8.2%	4.2%	4.2%	1.6%	1.6%	1.5%	
Cumulative Increase - %			0.7%	9.6%	18.6%	28.4%	33.8%	39.4%	45.2%	47.5%	49.7%	52.1%
Median Household Income in City of Miami Beach (Monthly) [3]	\$ 5,426	\$ 5,589	\$ 5,757	\$ 5,930	\$ 6,107	\$ 6,291	\$ 6,479	\$ 6,674	\$ 6,874	\$ 7,080	\$ 7,293	
Percent of Median Household Income (Target < 4.5%)	1.79%	1.75%	1.85%	1.94%	2.04%	2.06%	2.09%	2.11%	2.08%	2.05%	2.02%	

Footnotes:

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

Expenses Summary	Fiscal Year Ended September 30,							Compound Annual Growth Rate
	2017	2018	2019	2020	2021	2022	2023	
Total Operating Expenses	\$ 66,850,251	\$ 61,690,288	\$ 61,407,739	\$ 56,573,737	\$ 62,004,154	\$ 63,393,169	\$ 74,832,392	
Percent Change		-7.7%	-0.5%	-7.9%	9.6%	2.2%	18.0%	1.9%

[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] \$65,116 median household income per United States Census Bureau (www.census.gov) divided by 12 months. Assumed to increase by 3.0% per year after Fiscal Year 2024.

Additional Personnel	Fiscal Year Ending September 30,										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Additional Full Time Employees (FTE) per Year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative Additional FTE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

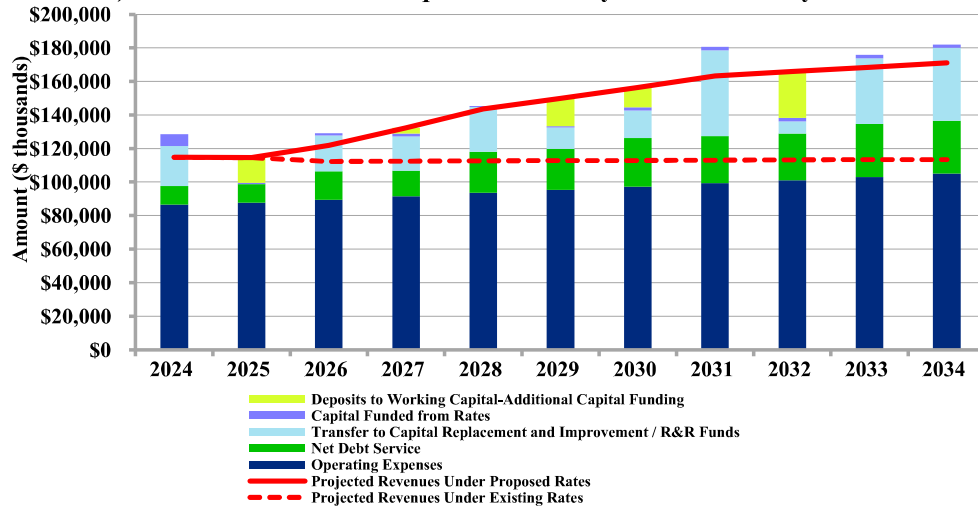
Table ES-5

City of Miami Beach, Florida Water, Sewer, and Stormwater Rate Study

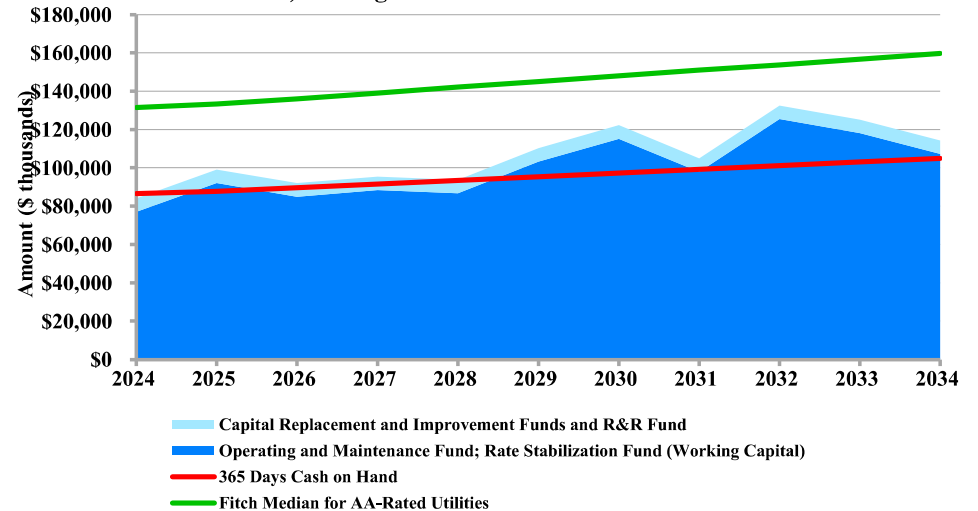
Water and Sewer System Financial Overview

High-Level Summary	Fiscal Year Ending September 30,											
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Identified Revenue Adjustments												
Water System	0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%	
Sewer System	0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%	
Combined System	0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%	
Pass-Through Adjustments (PTA)			+PTA	+PTA	+PTA	+PTA	+PTA	+PTA	+PTA	+PTA	+PTA	
Effective Months	12	12	12	12	12	12	12	12	12	12	12	
Unrestricted Cash Balance (\$ 000's)	\$ 84,039	\$ 99,102	\$ 91,982	\$ 95,347	\$ 93,732	\$ 110,342	\$ 122,209	\$ 104,905	\$ 132,517	\$ 125,168	\$ 114,207	
365 Days Cash on Hand	86,515	87,642	89,487	91,452	93,545	95,373	97,294	99,288	101,110	103,022	105,017	
All-In Net Revenues Debt Coverage	254%	240%	192%	268%	205%	223%	204%	227%	233%	207%	209%	
Senior Lien Debt Coverage (No Admin)	280%	264%	211%	289%	219%	238%	217%	241%	247%	220%	223%	
Revenue Surplus / (Deficiency) (\$ 000's):												
Combined System - Amount	(13,678)	15,064	(7,121)	3,365	(1,614)	16,610	11,867	(17,304)	27,612	(7,349)	(10,961)	
Combined System - Percent	-11.6%	16.7%	-5.9%	2.8%	-1.2%	13.2%	8.7%	-10.0%	21.2%	-4.4%	-6.3%	
Monthly Bill @ 7,000 Gallons	\$ 97.08	\$ 97.73	\$ 106.44	\$ 115.15	\$ 124.63	\$ 129.85	\$ 135.34	\$ 140.96	\$ 143.14	\$ 145.36	\$ 147.62	
Increase		0.65	8.71	8.71	9.48	5.22	5.49	5.62	2.18	2.22	2.25	
Cost Per Gallon of Total Bill	\$ 0.014	\$ 0.014	\$ 0.015	\$ 0.016	\$ 0.018	\$ 0.019	\$ 0.019	\$ 0.020	\$ 0.020	\$ 0.021	\$ 0.021	
Percent of MHI (Target < 4.5%)	1.79%	1.75%	1.85%	1.94%	2.04%	2.06%	2.09%	2.11%	2.08%	2.05%	2.02%	

1) Summarized Revenue Requirements Analysis - Combined Systems

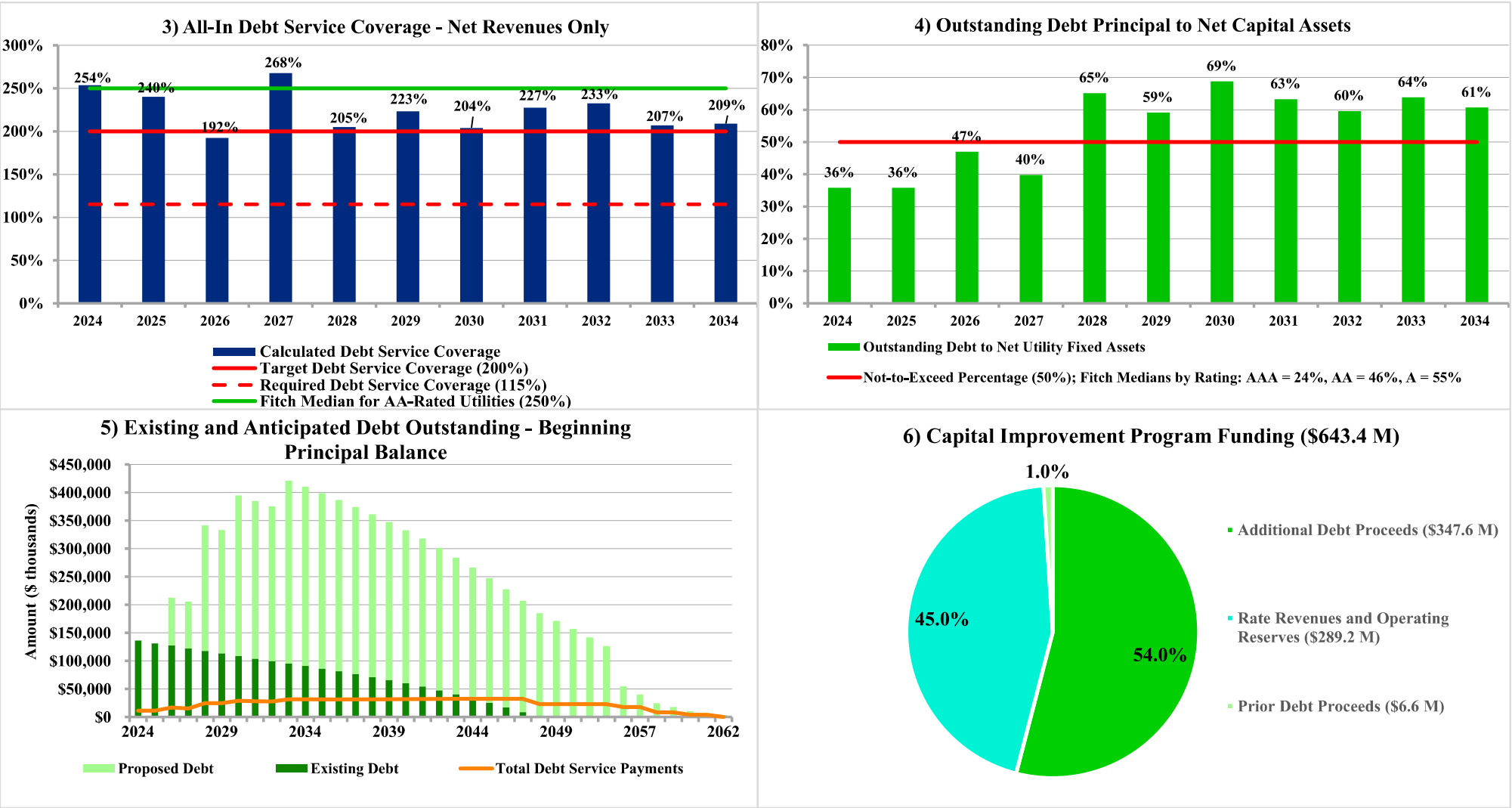


2) Ending Unrestricted Cash Balances



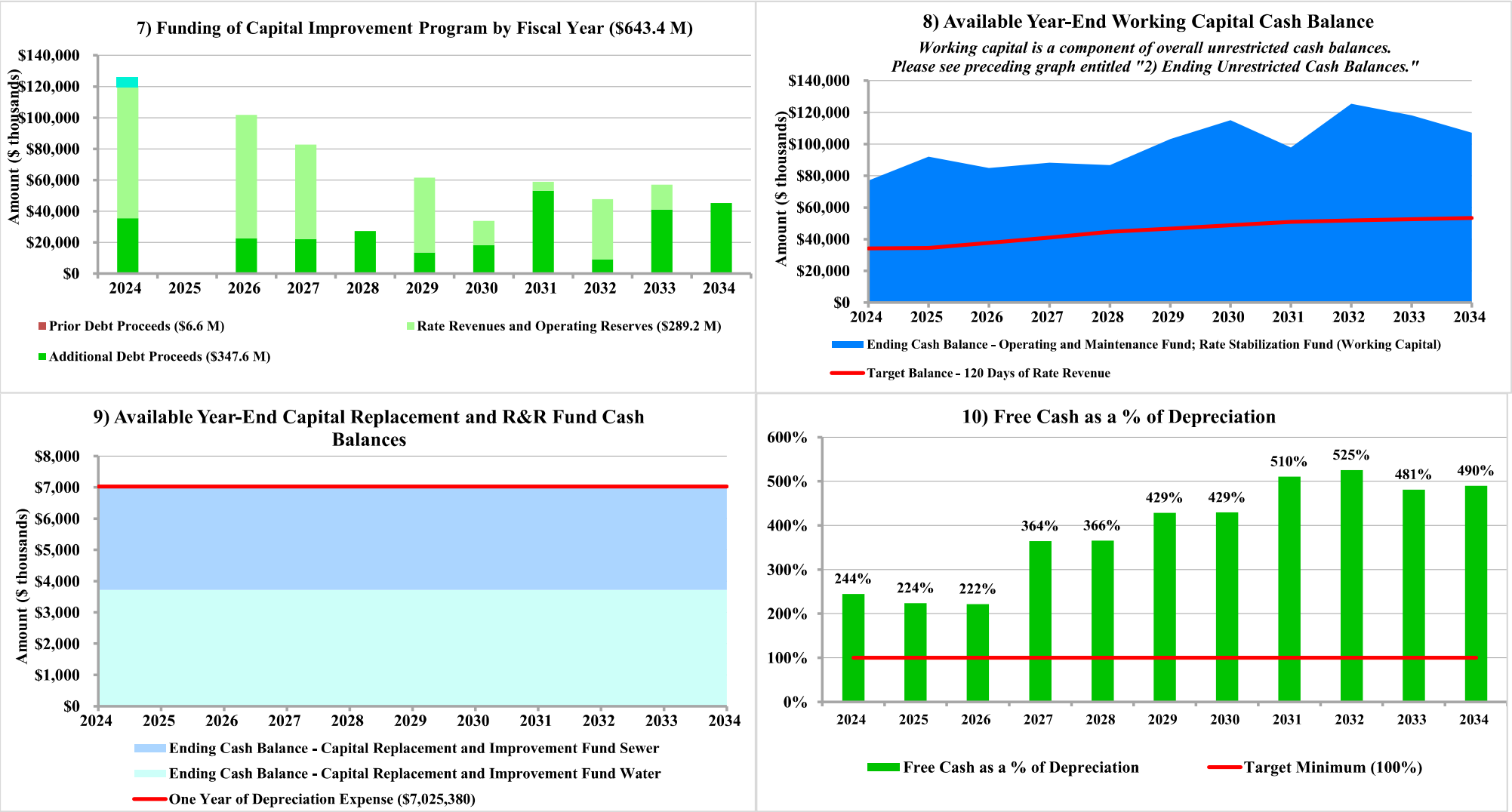
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Water and Sewer System Financial Overview



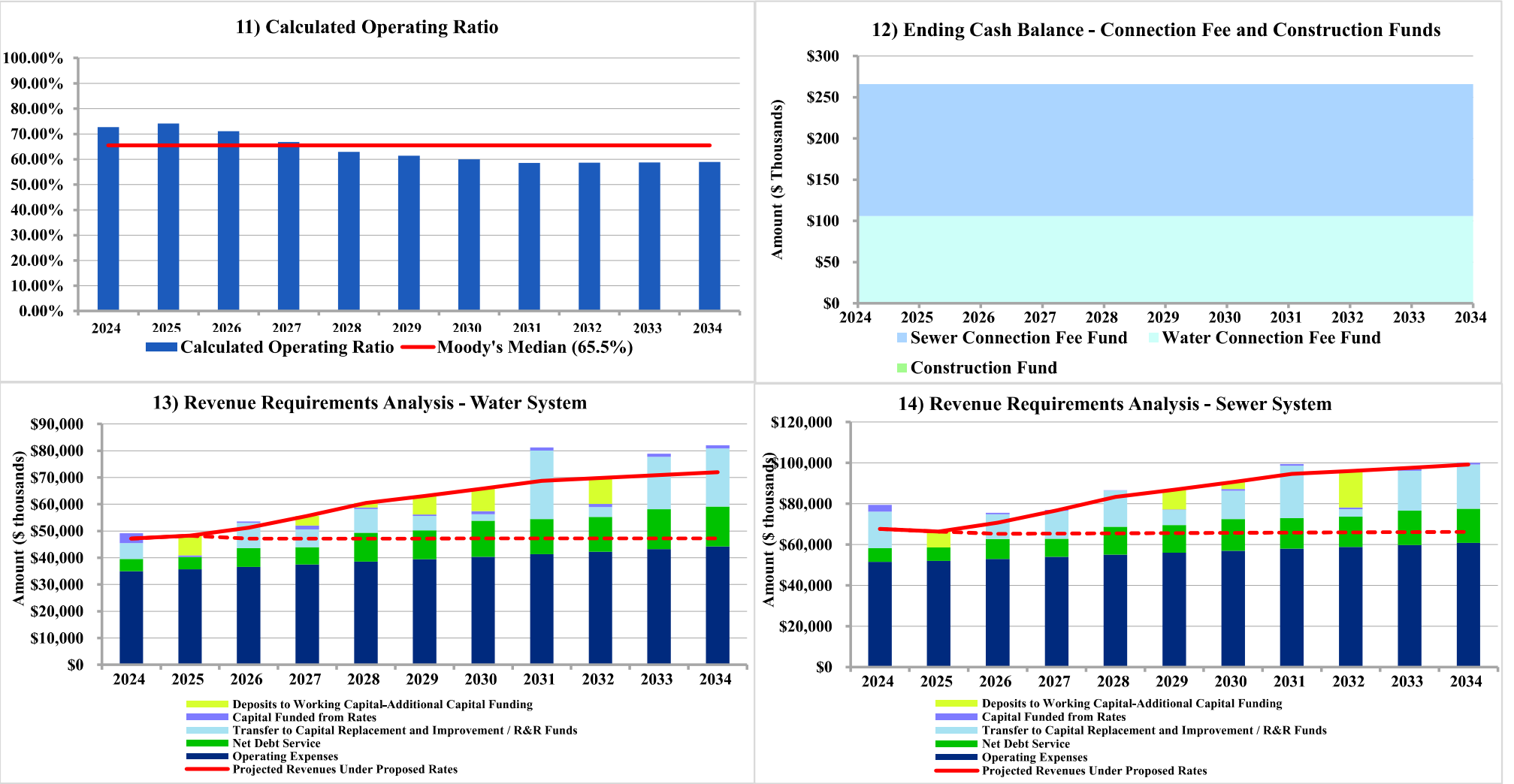
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Water and Sewer System Financial Overview



City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Water and Sewer System Financial Overview



City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Water and Sewer System Financial Overview

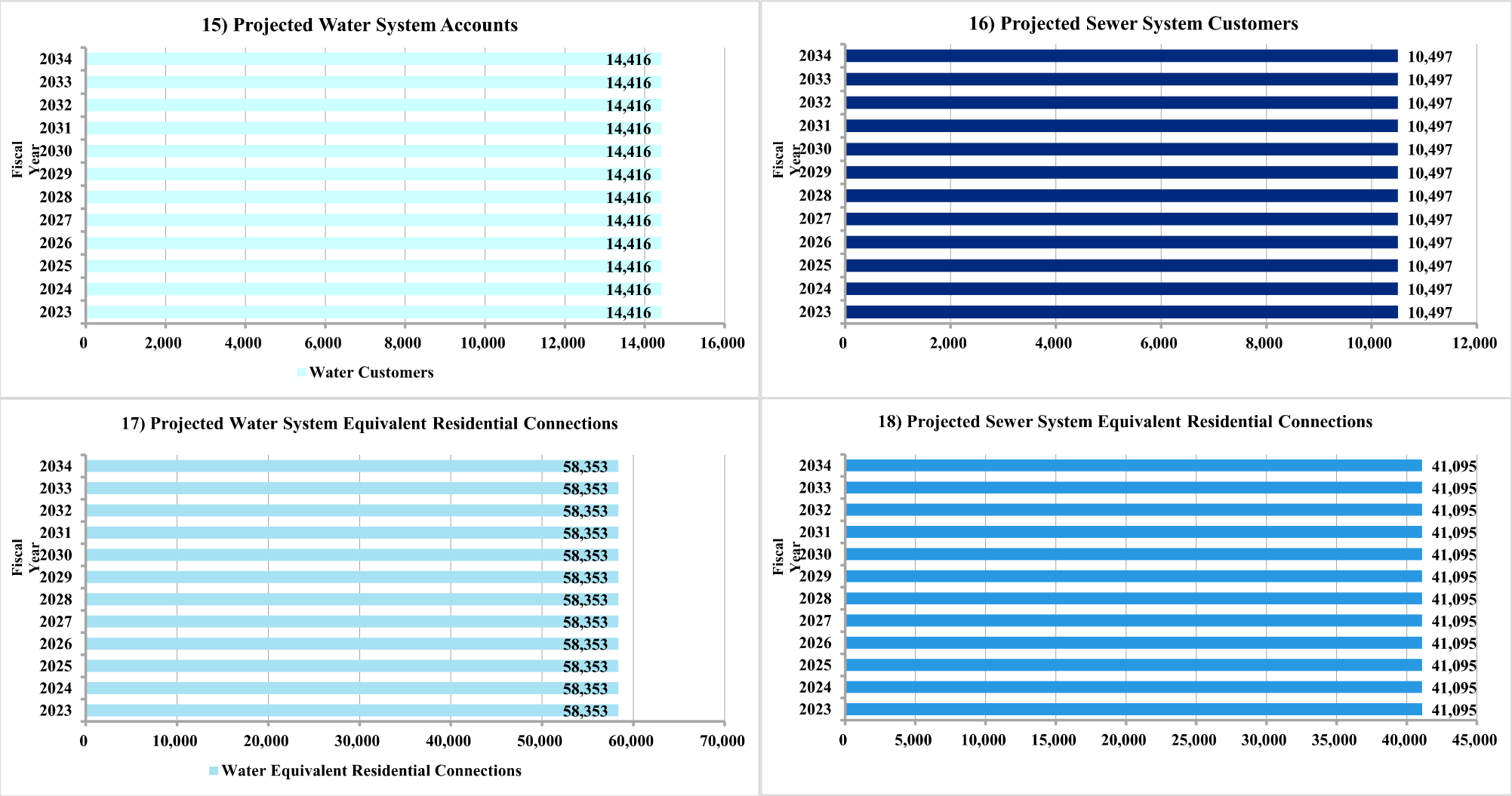
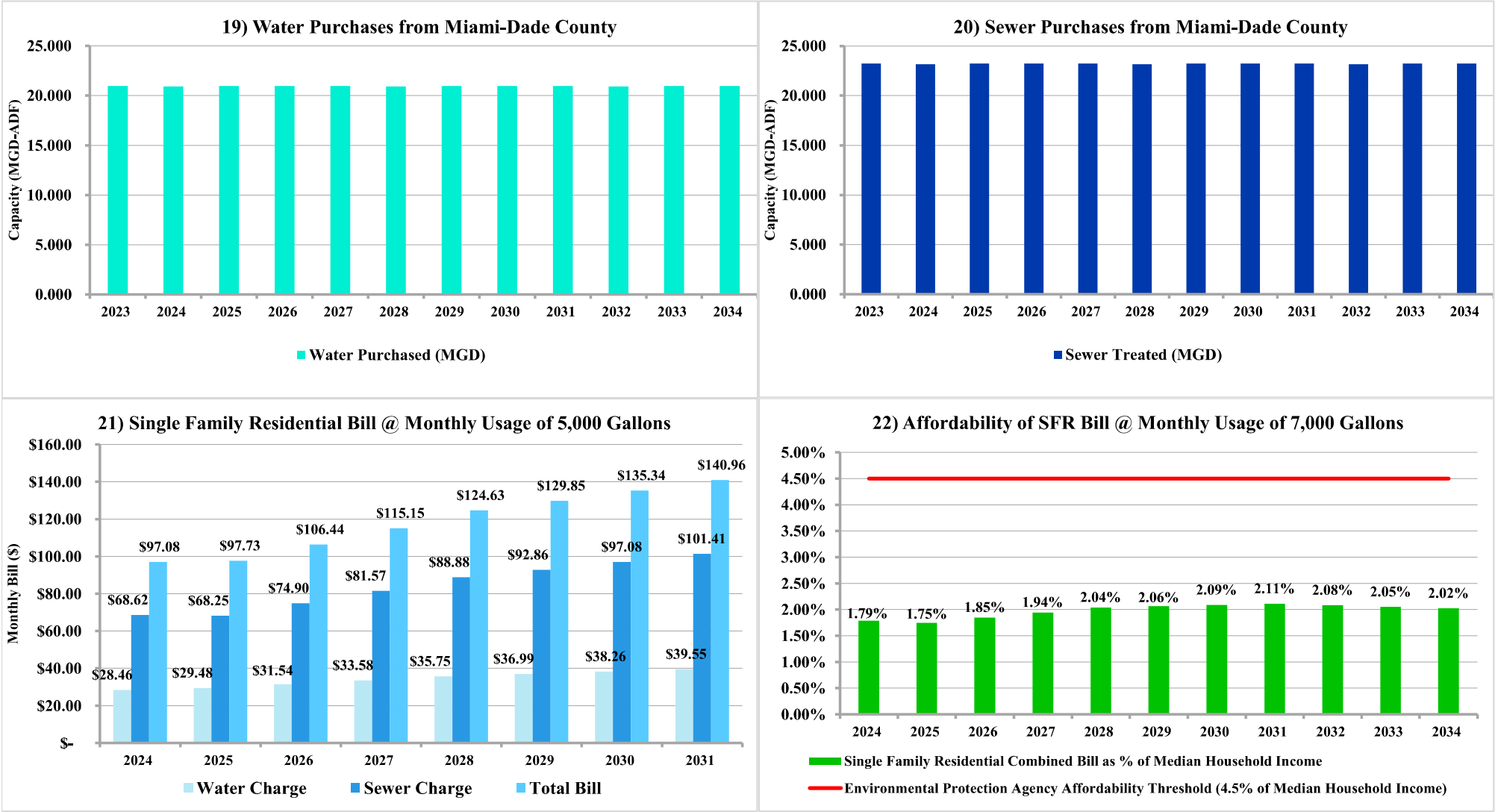


Table ES-5

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Water and Sewer System Financial Overview



City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Water and Sewer System Financial Overview

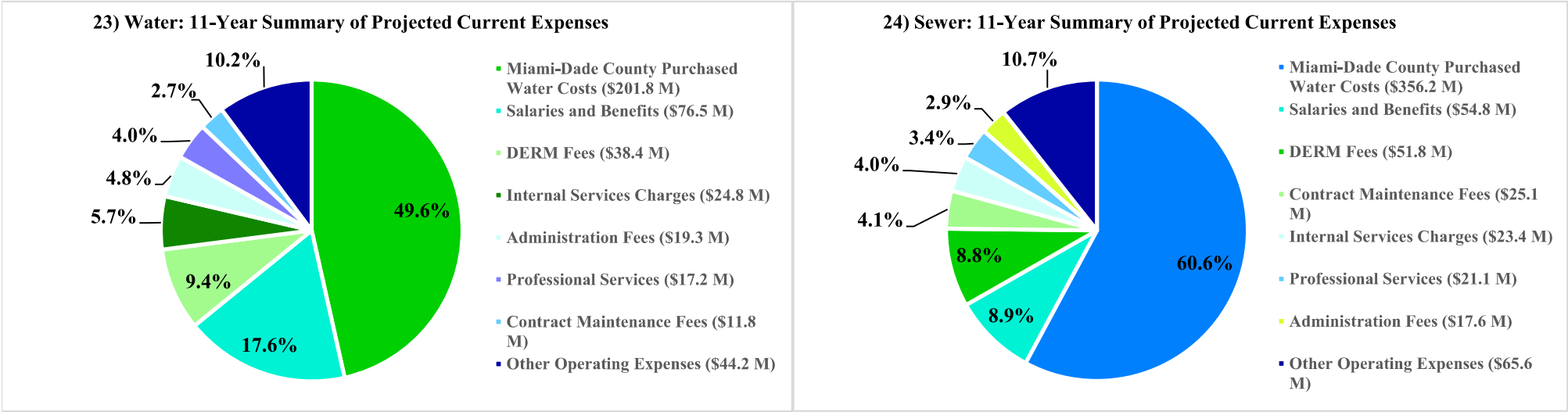


Table ES-6
City of Miami Beach, Florida

High-Level Stormwater Financial and Rate Scenario Worksheet

Line No.	Description	Historical 2023	Fiscal Year Ending September 30,										
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
1	Recognized Monthly Rate Per Equivalent Residential Unit		\$30.14	\$31.86	\$39.00	\$44.00	\$49.00	\$54.00	\$56.00	\$57.68	\$59.41	\$61.19	\$63.03
2	Change in Monthly Rate				\$7.14	\$5.00	\$5.00	\$5.00	\$2.00	\$1.68	\$1.73	\$1.78	\$1.84
3	Indexed Rate			\$30.14									
4	Overall Rate Adjustments		0.00%	5.71%	22.41%	12.82%	11.36%	10.20%	3.70%	3.00%	3.00%	3.00%	3.00%
5	All-In Net Revenues Debt Service Coverage (Target 200%)		169%	166%	203%	233%	229%	225%	217%	208%	206%	204%	209%
6	Debt Service Coverage Target Met? (Includes Administration Fes)		No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	All-In Net Revenues Debt Service Coverage Without Administration Fees		180%	176%	214%	244%	239%	235%	226%	217%	215%	213%	219%
8	Senior Lien Debt Service Coverage (110% Required)		185%	181%	220%	251%	244%	240%	230%	221%	219%	217%	222%
9	Required Coverage Met?		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	SRF Loan Debt Service Coverage (115% Required)		2393%	2276%	3709%	4853%	5424%	5987%	5962%	5854%	5907%	5980%	6288%
11	Required Coverage Met?		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	Amount Available for Pay-As-You-Go Capital Funding After Payment of Operating Expenses and Debt Service		\$ 11,880,672	\$ 11,359,985	\$ 17,737,471	\$ 22,830,437	\$ 25,647,796	\$ 28,426,301	\$ 28,485,923	\$ 28,172,446	\$ 28,499,951	\$ 28,917,804	\$ 30,286,224
13	Ending Unrestricted Cash and Cash Equivalents Balance [1]		\$ 46,298,590	\$ 57,556,544	\$ 55,668,036	\$ 18,099,319	\$ 16,792,885	\$ 41,010,143	\$ 55,925,441	\$ 17,088,755	\$ 23,418,415	\$ 26,257,413	\$ 22,102,378
14	Target Cash Balance (Recognized Cash Target)		\$ 11,681,000	\$ 13,375,000	\$ 14,501,851	\$ 15,692,975	\$ 16,420,289	\$ 17,182,920	\$ 17,959,514	\$ 18,775,860	\$ 19,634,217	\$ 20,536,991	\$ 21,474,156
15	Cash Balance Target Met?		Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
16	Affordability: Measurement Basis 1: Residential Bill as % of Median Household Income		0.56%	0.57%	0.68%	0.74%	0.80%	0.86%	0.86%	0.86%	0.86%	0.86%	0.86%
17	Is Rate and Financial Plan Affordable? (< 1% MHI)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	Measurement Basis 2: Water and Sewer Bill @ Usage of 5,000 Gallons		\$ 97.08	\$ 97.73	\$ 106.89	\$ 116.12	\$ 126.24	\$ 134.43	\$ 143.21	\$ 144.37	\$ 145.51	\$ 146.70	\$ 147.94
19	Water, Sewer, and Stormwater Bill		\$ 127.22	\$ 129.59	\$ 145.89	\$ 160.12	\$ 175.24	\$ 188.43	\$ 199.21	\$ 202.05	\$ 204.92	\$ 207.90	\$ 210.96
20	Total Bill as % of Median Household Income		2.34%	2.32%	2.53%	2.70%	2.87%	3.00%	3.07%	3.03%	2.98%	2.94%	2.89%
21	Is Rate and Financial Plan Affordable? (< 4.5% MHI)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22	Monthly Stormwater Bill Per Equivalent Residential Unit (ERU)		\$ 30.14	\$ 31.86	\$ 39.00	\$ 44.00	\$ 49.00	\$ 54.00	\$ 56.00	\$ 57.68	\$ 59.41	\$ 61.19	\$ 63.03
23	Change in Monthly Bill			1.72	7.14	5.00	5.00	5.00	2.00	1.68	1.73	1.78	1.84
24	Average of Surveyed Utilities (Assumes 4% Annual Increase)		15.97	16.61	17.28	17.97	18.69	19.43	20.21	21.02	21.86	22.73	23.64
25	Starting Cash and Cash Equivalents Balance		\$ 60,690,731	\$ 46,298,590	\$ 57,556,544	\$ 55,668,036	\$ 18,099,319	\$ 16,792,885	\$ 41,010,143	\$ 55,925,441	\$ 17,088,755	\$ 23,418,415	\$ 26,257,413
26	Year-End Surplus / (Deficiency)		(14,392,141)	11,257,954	(1,888,508)	(37,568,718)	(1,306,433)	24,217,257	14,915,298	(38,836,686)	6,329,661	2,838,997	(4,155,035)
27	Operating Expenses: (Does Not Include Depreciation and Amortization Expenses)												
27	Total Operating Expenses	\$ 11,714,443	\$ 11,681,000	\$ 13,375,000	\$ 14,501,851	\$ 15,692,975	\$ 16,420,289	\$ 17,182,920	\$ 17,959,514	\$ 18,775,860	\$ 19,634,217	\$ 20,536,991	\$ 21,474,156
28	Increase / (Decrease) - Percent		-0.3%	14.5%	8.4%	8.2%	4.6%	4.6%	4.5%	4.5%	4.6%	4.6%	4.6%
29	Less Administration Fees	\$ (1,946,102)	\$ (1,918,000)	\$ (1,759,000)	\$ (1,846,950)	\$ (1,939,298)	\$ (2,036,262)	\$ (2,138,075)	\$ (2,244,979)	\$ (2,357,228)	\$ (2,475,090)	\$ (2,598,844)	\$ (2,728,786)
30	Operating Expense for Coverage Purposes	\$ 9,768,341	\$ 9,763,000	\$ 11,616,000	\$ 12,654,901	\$ 13,753,678	\$ 14,384,027	\$ 15,044,844	\$ 15,714,534	\$ 16,418,632	\$ 17,159,127	\$ 17,938,147	\$ 18,745,370
31	Total Debt Service [2]		\$ 17,180,328	\$ 17,178,828	\$ 17,178,528	\$ 17,178,778	\$ 19,918,445	\$ 22,661,649	\$ 24,339,169	\$ 26,016,057	\$ 26,936,860	\$ 27,856,363	\$ 27,858,113
32	Other Revenue Requirements												
32	Pay-As-You-Go Capital Improvement Program [3]		\$ 25,494,813	\$ (635,969)	\$ 18,851,079	\$ 59,585,510	\$ 26,099,902	\$ 3,312,000	\$ 12,628,729	\$ 66,020,142	\$ 21,131,850	\$ 24,988,444	\$ 33,296,379
33	Transfers Out		778,000	738,000	774,900	813,645	854,327	897,044	941,896	988,991	1,038,440	1,090,362	1,144,880
34	Total Other Revenue Requirements		\$ 26,272,813	\$ 102,031	\$ 19,625,979	\$ 60,399,155	\$ 26,954,229	\$ 4,209,044	\$ 13,570,625	\$ 67,009,133	\$ 22,170,290	\$ 26,078,806	\$ 34,441,259
35	Gross Revenue Requirements		\$ 55,134,141	\$ 30,655,859	\$ 51,306,358	\$ 93,270,908	\$ 63,292,963	\$ 44,053,612	\$ 55,869,307	\$ 111,801,050	\$ 68,741,367	\$ 74,472,161	\$ 83,773,528
36	Less Income and Funds from Other Sources												
36	Estimates of Uncollectible Accounts		\$ 545,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
37	Grant Reimbursements		-	-	-	-	-	-	-	-	-	-	-
38	Unrestricted Interest Income		2,315,000	1,870,000	400,000	400,000	400,000	400,000	400,000	468,220	400,000	400,000	400,000
39	Net Revenue Requirements		\$ 52,274,141	\$ 28,785,859	\$ 50,906,358	\$ 92,870,908	\$ 62,892,963	\$ 43,653,612	\$ 55,469,307	\$ 111,332,830	\$ 68,341,367	\$ 74,072,161	\$ 83,373,528

Table ES-6
City of Miami Beach, Florida

High-Level Stormwater Financial and Rate Scenario Worksheet

Line No.	Description	Historical 2023	Fiscal Year Ending September 30,										
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Revenue from Existing Rates												
40	Stormwater System Revenue	\$ 35,166,969	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000
41	Prior Year Rate Adjustment		-	-	2,161,813	11,135,850	17,420,190	23,704,530	29,988,869	32,502,605	34,614,143	36,789,028	39,029,159
42	Total Applicable Rate Revenue		\$ 37,882,000	\$ 37,882,000	\$ 40,043,813	\$ 49,017,850	\$ 55,302,190	\$ 61,586,530	\$ 67,870,869	\$ 70,384,605	\$ 72,496,143	\$ 74,671,028	\$ 76,911,159
43	Rate Adjustments		0.00%	5.71%	22.41%	12.82%	11.36%	10.20%	3.70%	3.00%	3.00%	3.00%	3.00%
44	Effective Months		12	12	12	12	12	12	12	12	12	12	12
45	Percent of Current Year Effective		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
46	Revenue from Current Rate Adjustment w/ Effective Months		\$ -	\$ 2,161,813	\$ 8,974,037	\$ 6,284,340	\$ 6,284,340	\$ 6,284,340	\$ 2,513,736	\$ 2,111,538	\$ 2,174,884	\$ 2,240,131	\$ 2,307,335
47	Total Revenue w/ Effective Months		\$ 37,882,000	\$ 40,043,813	\$ 49,017,850	\$ 55,302,190	\$ 61,586,530	\$ 67,870,869	\$ 70,384,605	\$ 72,496,143	\$ 74,671,028	\$ 76,911,159	\$ 79,218,493
48	Revenue Surplus/(Deficiency) Under Proposed Rates		\$ (14,392,141)	\$ 11,257,954	\$ (1,888,508)	\$ (37,568,718)	\$ (1,306,433)	\$ 24,217,257	\$ 14,915,298	\$ (38,836,686)	\$ 6,329,661	\$ 2,838,997	\$ (4,155,035)
49	Revenue Surplus/(Deficiency) as % of Revenue		-38.0%	28.1%	-3.9%	-67.9%	-2.1%	35.7%	21.2%	-53.6%	8.5%	3.7%	-5.2%

Footnotes:

[1] Does not include cash balances in construction funds from debt financing.

[2] Breakdown of Debt Service:

Senior Lien Debt:

Stormwater Revenue Bonds, Series 2015	\$ 4,384,669	\$ 4,384,169	\$ 4,388,369	\$ 4,382,119	\$ 4,385,244	\$ 4,382,406	\$ 4,383,738	\$ 7,869,038	\$ 7,871,838	\$ 7,869,738	\$ 7,872,488
Stormwater Revenue Bonds, Series 2017	12,350,500	12,349,500	12,345,000	12,351,500	12,347,750	12,353,500	12,352,500	8,866,900	8,864,100	8,864,900	8,863,900
Assumed Stormwater Revenue Bonds, Series 2028	-	-	-	-	2,740,292	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583
Assumed Stormwater Revenue Bonds, Series 2030	-	-	-	-	-	-	1,677,189	3,354,377	3,354,377	3,354,377	3,354,377
Assumed Stormwater Revenue Bonds, Series 2032	-	-	-	-	-	-	-	920,803	1,841,606	1,841,606	1,841,606
Total Senior Lien Debt	\$ 16,735,169	\$ 16,733,669	\$ 16,733,369	\$ 16,733,619	\$ 19,473,285	\$ 22,216,490	\$ 23,894,010	\$ 25,570,898	\$ 26,491,701	\$ 27,411,204	\$ 27,412,954

SRF Loans

State Revolving Fund Loan Agreement SW131300	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159
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[3] Represents capital needs not funded through debt, grants, developer contributions, or other external funding sources.

Assumed Capital Improvement Program and Funding Sources

Total Multi-Year Capital Improvement Program			\$ 457,523,215																			
Pay-As-You-Go Capital Funding	\$	25,494,813	\$	(635,969)	\$	18,851,079	\$	59,585,510	\$	26,099,902	\$	3,312,000	\$	12,628,729	\$	66,020,142	\$	21,131,850	\$	24,988,444	\$	33,296,379
Proceeds from Assumed Stormwater Revenue Bonds, Series 2028		-		-		-		76,345,291		7,058,304		-		-		-		-		-		-
Proceeds from Assumed Stormwater Revenue Bonds, Series 2030		-		-		-		-		-		51,045,094		-		-		-		-		-
Proceeds from Assumed Stormwater Revenue Bonds, Series 2032		-		-		-		-		(0)		-		-		28,024,740		-		-		-
Series 2017 Bonds		4,276,907		-		-		-		-		-		-		-		-		-		-
Total Amount	\$	29,771,720	\$	(635,969)	\$	18,851,079	\$	135,930,801	\$	33,158,206	\$	54,357,094	\$	12,628,729	\$	94,044,882	\$	21,131,850	\$	24,988,444	\$	33,296,379
Initial Stormwater Rate Per Equivalent Residential Unit		\$30.14		\$30.14		\$30.14		\$30.14		\$30.14		\$30.14		\$30.14		\$30.14		\$30.14		\$30.14		\$30.14
Billable Equivalent Residential Units	108,245	108,245		108,245		108,245		108,245		108,245		108,245		108,245		108,245		108,245		108,245		108,245
Change in Effective ERUs		0		0		0		0		0		0		0		0		0		0		0
Annual Revenue Under Initial Effective Monthly Stormwater Rate		\$37,882,000		\$37,882,000		\$37,882,000		\$37,882,000		\$37,882,000		\$37,882,000		\$37,882,000		\$37,882,000		\$37,882,000		\$37,882,000		\$37,882,000
Revenue Adjustment Factor		-3.24%		-3.24%		-3.24%		-3.24%		-3.24%		-3.24%		-3.24%		-3.24%		-3.24%		-3.24%		-3.24%

Cash Target

120 Days of Rate Revenue	\$ 12,454,356	\$ 13,165,089	\$ 16,115,458	\$ 18,181,542	\$ 20,247,626	\$ 22,313,710	\$ 23,140,144	\$ 23,834,349	\$ 24,549,379	\$ 25,285,860	\$ 26,044,436
Annual Depreciation Expense	5,382,885	5,382,885	5,382,885	5,382,885	5,382,885	5,382,885	5,382,885	5,382,885	5,382,885	5,382,885	5,382,885
Total	\$ 17,837,241	\$ 18,547,974	\$ 21,498,343	\$ 23,564,427	\$ 25,630,511	\$ 27,696,595	\$ 28,523,029	\$ 29,217,234	\$ 29,932,264	\$ 30,668,745	\$ 31,427,321
365 Days Cash on Hand	\$ 11,681,000	\$ 13,375,000	\$ 14,501,851	\$ 15,692,975	\$ 16,420,289	\$ 17,182,920	\$ 17,959,514	\$ 18,775,860	\$ 19,634,217	\$ 20,536,991	\$ 21,474,156
Recognized Cash Target	\$ 11,681,000	\$ 13,375,000	\$ 14,501,851	\$ 15,692,975	\$ 16,420,289	\$ 17,182,920	\$ 17,959,514	\$ 18,775,860	\$ 19,634,217	\$ 20,536,991	\$ 21,474,156

Debt Service Coverage Target

All-In Debt Service Coverage Target	200%
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Table ES-7
City of Miami Beach, Florida

Multi-Year Stormwater Financial Projections

High-Level Summary	Actual FY	Fiscal Year Ending September 30,										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Operating Revenue												
User Rate Revenue - Retail												
Stormwater Rate Revenue Before Current Year Adjustment			\$ 37,882,000	\$ 40,043,800	\$ 49,017,900	\$ 55,302,200	\$ 61,586,500	\$ 67,870,900	\$ 70,384,600	\$ 72,496,100	\$ 74,671,000	\$ 76,911,200
Additional User Rate Increase - Stormwater			5.7%	22.4%	12.8%	11.4%	10.2%	3.7%	3.0%	3.0%	3.0%	3.0%
Total User Rate Revenue - Retail	\$ 35,166,969	\$ 37,882,000	\$ 40,043,800	\$ 49,017,800	\$ 55,302,200	\$ 61,586,500	\$ 67,870,800	\$ 70,384,600	\$ 72,496,100	\$ 74,671,000	\$ 76,911,100	\$ 79,218,500
Other Operating Revenue	\$ -	\$ 545,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL OPERATING REVENUE	\$ 35,166,969	\$ 38,427,000	\$ 40,043,800	\$ 49,017,800	\$ 55,302,200	\$ 61,586,500	\$ 67,870,800	\$ 70,384,600	\$ 72,496,100	\$ 74,671,000	\$ 76,911,100	\$ 79,218,500
Operating Expenses												
Stormwater System Operating Expenses	\$ 10,888,351	\$ 11,681,000	\$ 13,375,000	\$ 14,501,851	\$ 15,692,975	\$ 16,420,289	\$ 17,182,920	\$ 17,959,514	\$ 18,775,860	\$ 19,634,217	\$ 20,536,991	\$ 21,474,156
Percent Change		7.3%	14.5%	8.4%	8.2%	4.6%	4.6%	4.5%	4.5%	4.6%	4.6%	4.6%
Operating Revenues Less Operating Expenses	\$ 24,278,618	\$ 26,746,000	\$ 26,668,800	\$ 34,515,949	\$ 39,609,225	\$ 45,166,211	\$ 50,687,880	\$ 52,425,086	\$ 53,720,240	\$ 55,036,783	\$ 56,374,109	\$ 57,744,344
Non-Operating Revenue												
Unrestricted Interest Income	\$ 258,806	\$ 2,315,000	\$ 1,870,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 468,220	\$ 400,000	\$ 400,000	\$ 400,000
Net Revenue Available for Debt Service	\$ 24,537,424	\$ 29,061,000	\$ 28,538,800	\$ 34,915,949	\$ 40,009,225	\$ 45,566,211	\$ 51,087,880	\$ 52,825,086	\$ 54,188,460	\$ 55,436,783	\$ 56,774,109	\$ 58,144,344
City Debt Service												
Existing Debt Service - Principal and Interest		\$ 17,180,328	\$ 17,178,828	\$ 17,178,528	\$ 17,178,778	\$ 17,178,153	\$ 17,181,065	\$ 17,181,397	\$ 17,181,097	\$ 17,181,097	\$ 17,179,797	\$ 17,181,547
New Debt Service - Principal and Interest		-	-	-	-	2,740,292	5,480,583	7,157,772	8,834,961	9,755,764	10,676,567	10,676,567
Less Impact Fees Used for City Growth-Related Debt Service		-	-	-	-	-	-	-	-	-	-	-
NET DEBT SERVICE	\$ 17,180,328	\$ 17,178,828	\$ 17,178,528	\$ 17,178,778	\$ 19,918,445	\$ 22,661,649	\$ 24,339,169	\$ 26,016,057	\$ 26,936,860	\$ 27,856,363	\$ 27,858,113	
Payoff of Outstanding Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfer to General Fund	\$ 778,000	\$ 738,000	\$ 774,900	\$ 813,645	\$ 854,327	\$ 897,044	\$ 941,896	\$ 988,991	\$ 1,038,440	\$ 1,090,362	\$ 1,144,880	
Inter-Utility Loan Activity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Revenue Available for Capital Rehabilitations / Improvements	\$ 11,102,672	\$ 10,621,972	\$ 16,962,521	\$ 22,016,802	\$ 24,793,439	\$ 27,529,188	\$ 27,544,022	\$ 27,183,412	\$ 27,461,483	\$ 27,827,383	\$ 29,141,351	
Capital Expenditures												
Capital Program as Scheduled												
Capital Projects - Stormwater	\$ 26,726,720	\$ (1,197,969)	\$ 17,488,282	\$ 135,725,361	\$ 32,634,165	\$ 54,357,094	\$ 10,808,729	\$ 92,373,182	\$ 19,536,071	\$ 23,644,390	\$ 31,699,823	
Departmental Capital - Stormwater	3,045,000	562,000	1,362,797	205,440	524,041	-	1,820,000	1,671,700	1,595,779	1,344,054	1,596,556	
Total Capital Program as Scheduled	\$ 29,771,720	\$ (635,969)	\$ 18,851,079	\$ 135,930,801	\$ 33,158,206	\$ 54,357,094	\$ 12,628,729	\$ 94,044,882	\$ 21,131,850	\$ 24,988,444	\$ 33,296,379	
Adjustments												
Capital Projects - Stormwater	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Departmental Capital - Stormwater	-	-	-	-	-	-	-	-	-	-	-	-
Total Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Projects as Adjusted												
Capital Projects - Stormwater	\$ 26,726,720	\$ (1,197,969)	\$ 17,488,282	\$ 135,725,361	\$ 32,634,165	\$ 54,357,094	\$ 10,808,729	\$ 92,373,182	\$ 19,536,071	\$ 23,644,390	\$ 31,699,823	
Departmental Capital - Stormwater	3,045,000	562,000	1,362,797	205,440	524,041	-	1,820,000	1,671,700	1,595,779	1,344,054	1,596,556	
ADJUSTED CAPITAL EXPENDITURES	\$ 29,771,720	\$ (635,969)	\$ 18,851,079	\$ 135,930,801	\$ 33,158,206	\$ 54,357,094	\$ 12,628,729	\$ 94,044,882	\$ 21,131,850	\$ 24,988,444	\$ 33,296,379	

Table ES-7
City of Miami Beach, Florida

Multi-Year Stormwater Financial Projections

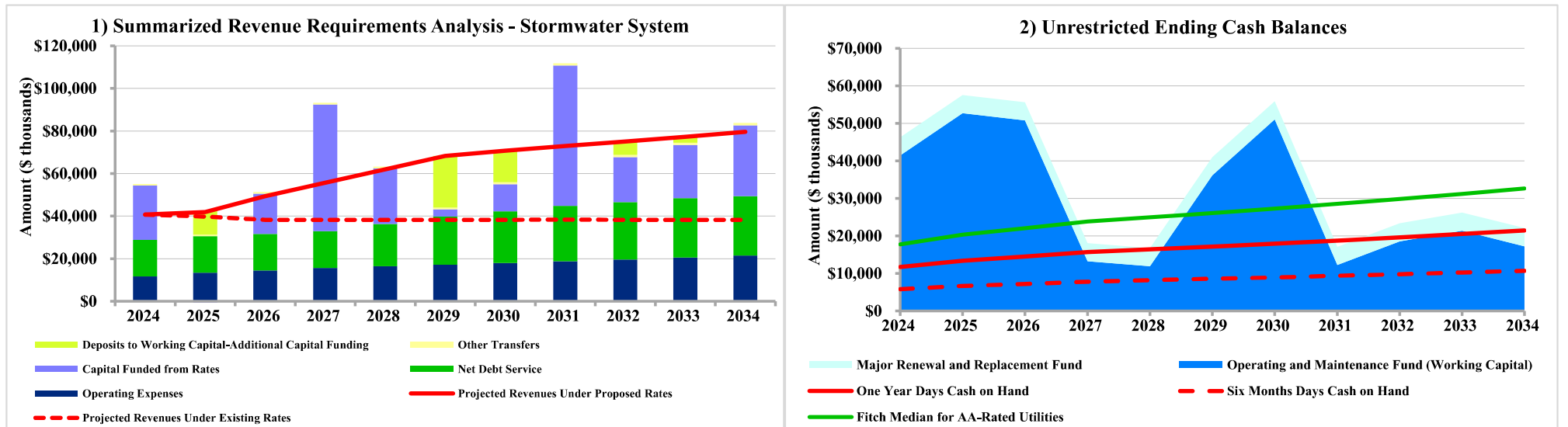
High-Level Summary	Actual FY	Fiscal Year Ending September 30,										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Cash Surplus / (Deficiency)												
Base Surplus / (Deficiency)		\$ (18,669,048)	\$ 11,257,941	\$ (1,888,558)	\$ (113,913,999)	\$ (8,364,767)	\$ (26,827,906)	\$ 14,915,293	\$ (66,861,470)	\$ 6,329,633	\$ 2,838,939	\$ (4,155,028)
Less Projects to Be Funded by Developers		-	-	-	-	-	-	-	-	-	-	-
Less Projects to Be Funded Through Connection / Impact Fees		-	-	-	-	-	-	-	-	-	-	-
Less Projects to Be Funded Through Proceeds from Existing and Proposed Debt		4,276,907	-	-	76,345,291	7,058,304	51,045,094	-	28,024,740	-	-	-
INCREASE / DECREASE IN UNRESTRICTED FUND BALANCES		\$ (14,392,141)	\$ 11,257,941	\$ (1,888,558)	\$ (37,568,708)	\$ (1,306,463)	\$ 24,217,188	\$ 14,915,293	\$ (38,836,730)	\$ 6,329,633	\$ 2,838,939	\$ (4,155,028)
Debt Service Coverage												
Net Revenue Available for Debt Service		\$ 29,061,000	\$ 28,538,800	\$ 34,915,949	\$ 40,009,225	\$ 45,566,211	\$ 51,087,880	\$ 52,825,086	\$ 54,188,460	\$ 55,436,783	\$ 56,774,109	\$ 58,144,344
Less Non-Pledged Funds		-	-	-	-	-	-	-	-	-	-	-
Adjusted Net Revenue Available for Debt Service		\$ 29,061,000	\$ 28,538,800	\$ 34,915,949	\$ 40,009,225	\$ 45,566,211	\$ 51,087,880	\$ 52,825,086	\$ 54,188,460	\$ 55,436,783	\$ 56,774,109	\$ 58,144,344
Total Debt Service		17,180,328	17,178,828	17,178,528	17,178,778	19,918,445	22,661,649	24,339,169	26,016,057	26,936,860	27,856,363	27,858,113
ALL-IN DEBT SERVICE COVERAGE - 2.00x MIN TARGET		1.69	1.66	2.03	2.33	2.29	2.25	2.17	2.08	2.06	2.04	2.09
Cash Balances												
Beginning of Year Cash Balances		\$ 64,967,638										
Less Construction / Loan Fund Balance		(4,276,907)										
Less Customer Deposits		-										
Less Debt Service Reserve Account		-										
Less Connection / Impact Fees		-										
Less Carryforward Projects		-										
Beginning of Year Fund Balance - Net Cash		\$ 60,690,731	\$ 46,298,590	\$ 57,556,532	\$ 55,667,973	\$ 18,099,266	\$ 16,792,803	\$ 41,009,991	\$ 55,925,284	\$ 17,088,554	\$ 23,418,187	\$ 26,257,126
Operating/Capital Reserve (Increase/Decrease)		(14,392,141)	11,257,941	(1,888,558)	(37,568,708)	(1,306,463)	24,217,188	14,915,293	(38,836,730)	6,329,633	2,838,939	(4,155,028)
ENDING CASH RESERVES - \$		\$ 46,298,590	\$ 57,556,532	\$ 55,667,973	\$ 18,099,266	\$ 16,792,803	\$ 41,009,991	\$ 55,925,284	\$ 17,088,554	\$ 23,418,187	\$ 26,257,126	\$ 22,102,098
Target Minimum Cash Reserves - One Year of Operating Expenses - \$		\$ 11,681,000	\$ 13,375,000	\$ 14,501,851	\$ 15,692,975	\$ 16,420,289	\$ 17,182,920	\$ 17,959,514	\$ 18,775,860	\$ 19,634,217	\$ 20,536,991	\$ 21,474,156
Cash Reserves Balance - % of Operating Expenses		396%	430%	384%	115%	102%	239%	311%	91%	119%	128%	103%
Cash Reserves Balance - Days Cash on Hand		1,447	1,571	1,401	421	373	871	1,137	332	435	467	376
Effective Monthly Rate and Rate Affordability												
Monthly Residential Stormwater Bill	\$	30.14	\$ 31.86	\$ 39.00	\$ 44.00	\$ 49.00	\$ 54.00	\$ 56.00	\$ 57.68	\$ 59.41	\$ 61.19	\$ 63.03
Amount Increase			\$ 1.72	\$ 7.14	\$ 5.00	\$ 5.00	\$ 5.00	\$ 2.00	\$ 1.68	\$ 1.73	\$ 1.78	\$ 1.84
Percent Increase			5.7%	22.4%	12.8%	11.4%	10.2%	3.7%	3.0%	3.0%	3.0%	3.0%
Cumulative Increase - %			5.7%	29.4%	46.0%	62.6%	79.2%	85.8%	91.4%	97.1%	103.0%	109.1%
Median Household Income in City of Miami Beach (Monthly)	\$	5,426	\$ 5,589	\$ 5,757	\$ 5,930	\$ 6,107	\$ 6,291	\$ 6,479	\$ 6,674	\$ 6,874	\$ 7,080	\$ 7,293
Percent of Median Household Income (Target < 1.0%)		0.56%	0.57%	0.68%	0.74%	0.80%	0.86%	0.86%	0.86%	0.86%	0.86%	0.86%

Table ES-8

City of Miami Beach, Florida Water, Sewer, and Stormwater Rate Study

Stormwater System Financial Overview

High-Level Summary	Fiscal Year Ending September 30,										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Identified Rate Adjustments											
Recognized Monthly Rate	\$30.14	\$31.86	\$39.00	\$44.00	\$49.00	\$54.00	\$56.00	\$57.68	\$59.41	\$61.19	\$63.03
Indexed Rate		\$30.14									
Change in Monthly Rate - Amount	\$0.00	\$1.72	\$7.14	\$5.00	\$5.00	\$5.00	\$2.00	\$1.68	\$1.73	\$1.78	\$1.84
Change in Monthly Rate - %	0.0%	5.7%	22.4%	12.8%	11.4%	10.2%	3.7%	3.0%	3.0%	3.0%	3.0%
Effective Months	12	12	12	12	12	12	12	12	12	12	12
Unrestricted Cash Balance (\$ 000's)											
One Year Days Cash on Hand	\$ 46,299	\$ 57,557	\$ 55,668	\$ 18,099	\$ 16,793	\$ 41,010	\$ 55,925	\$ 17,089	\$ 23,418	\$ 26,257	\$ 22,102
	11,681	13,375	14,502	15,693	16,420	17,183	17,960	18,776	19,634	20,537	21,474
All-In Net Revenues - Debt Service Coverage											
	169%	166%	203%	233%	229%	225%	217%	208%	206%	204%	209%
ERU's - Stormwater											
	108,245	108,245	108,245	108,245	108,245	108,245	108,245	108,245	108,245	108,245	108,245
Difference - Amount		0	0	0	0	0	0	0	0	0	0
Difference - Percent		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Stormwater System Financial Overview

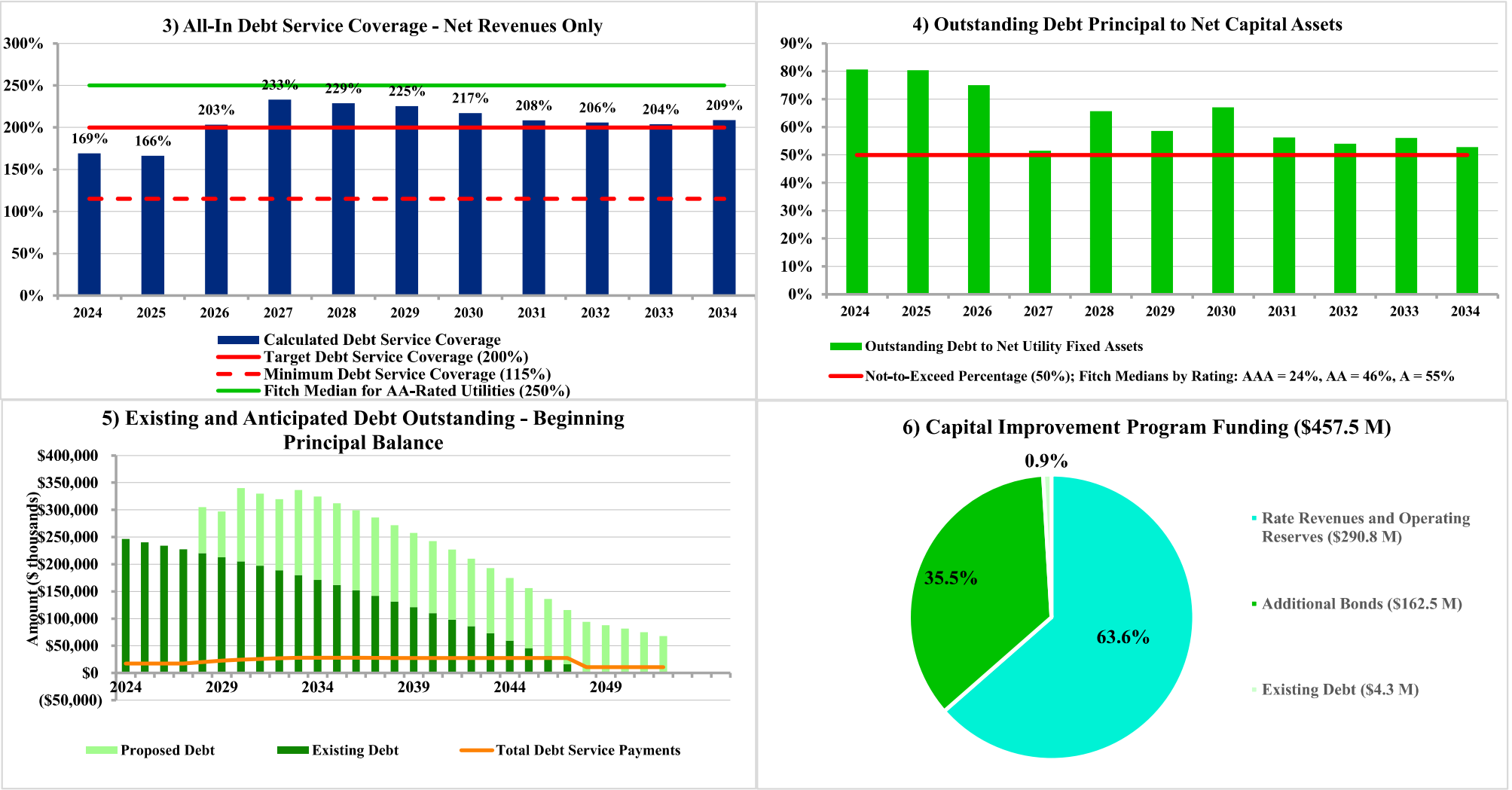
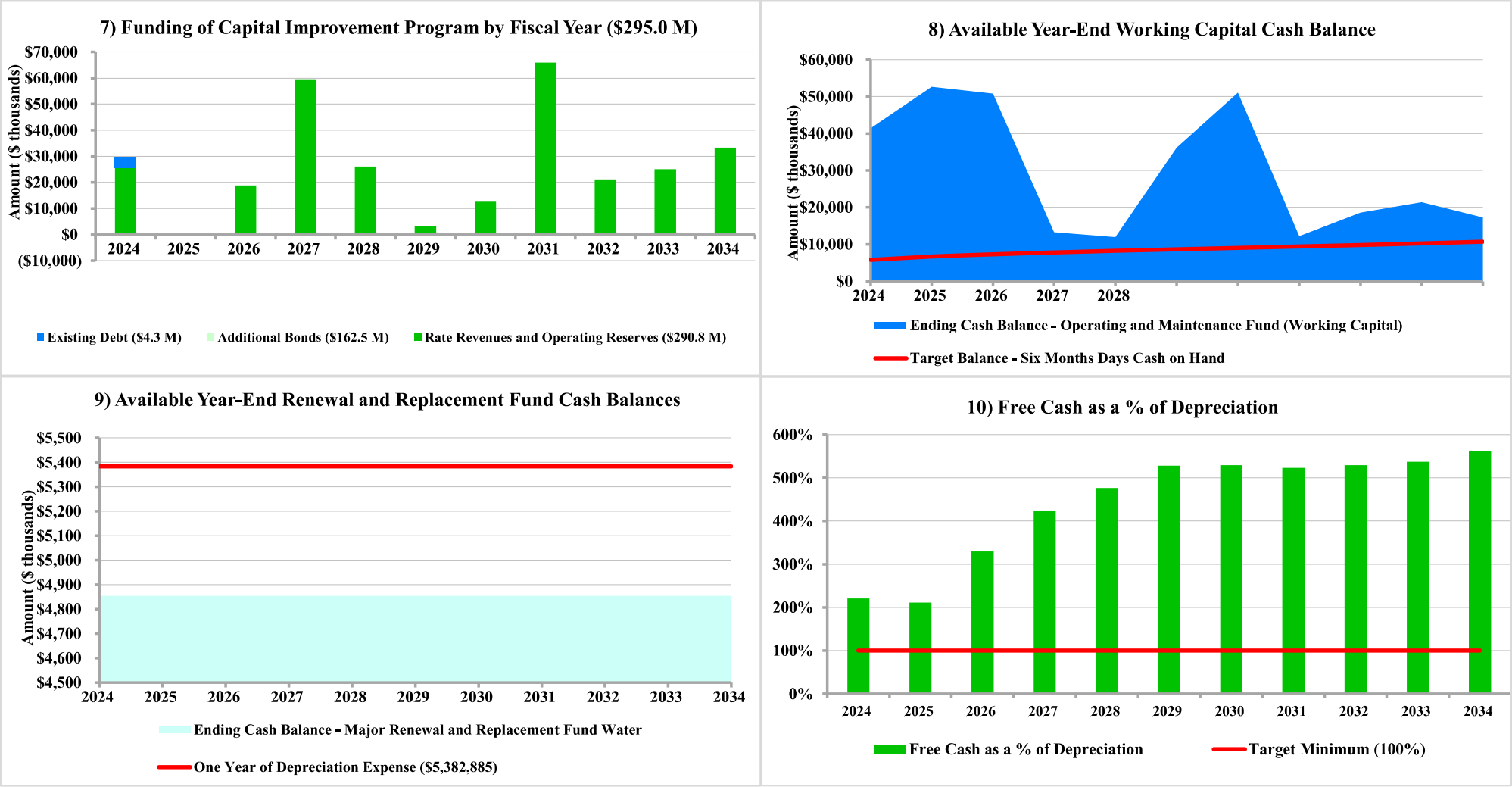


Table ES-8

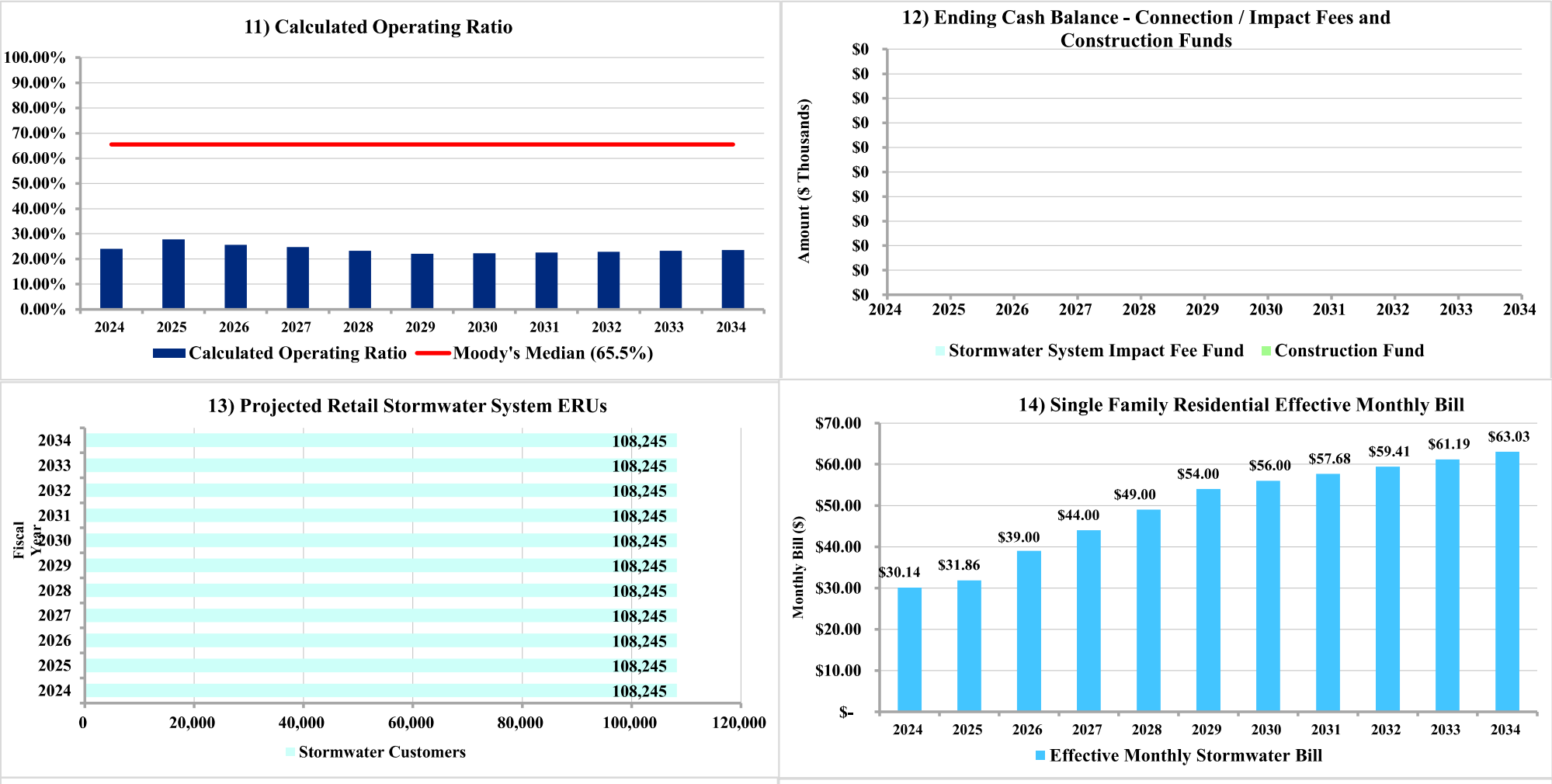
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Stormwater System Financial Overview



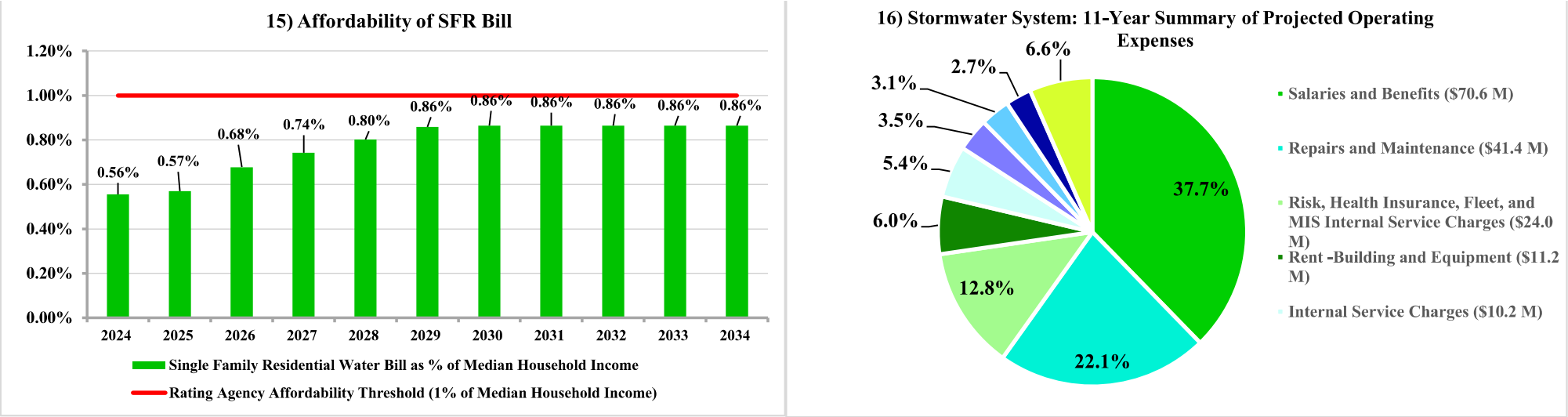
City of Miami Beach, Florida
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Stormwater System Financial Overview



City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Stormwater System Financial Overview



SECTION 1:
Water and Sewer System
Financial Forecast and User Rate Design

SECTION 1:

WATER AND SEWER SYSTEM FINANCIAL FORECAST AND USER RATE DESIGN

1-1: Water and Sewer System Customer Statistics

During the Fiscal Year 2023, it is estimated that the City's utility service requirements included providing water service to an average of 14,416 retail domestic and irrigation water accounts and 53,853 retail water equivalent residential connections ("ERCs") based on meter equivalency factors. An ERC represents the annual average use of an individually metered residential (single-family) customer. For the determination of the estimated number of ERCs served, such estimates were based on the use of meter equivalent factors applied to the meters in service. The meter equivalent factors were based on information published by the American Water Works Association (AWWA), which documents the capacities of the various meter sizes typically used by utilities. The meter equivalent factors are based on the equivalent hydraulic throughput capacity of the meters and are shown in the following Exhibit 1-1 by meter size:

Exhibit 1-1: Meter Equivalent Factors

Meter Size (Inches)	Meter Equivalent (ERC Factor)
5/8" and 3/4"	1
1"	2.5
1-1/2"	5
2"	8
3"	16
4"	25
6"	50
8"	80
10"	115
12"	215

During the Fiscal Year 2023, the City provided sewer service to an estimated 10,497 retail accounts and 11,788 retail ERCs. The City currently provides wholesale sewer service to the Village of Bal Harbour, the Town of Bay Harbor Islands, Indian Creek Village, and the Town of Surfside.

Based on discussions with the City staff, since the water and sewer system is essentially built out, no customer growth was assumed for the water and sewer system during the Forecast Period. The customer statistics are summarized in Table 1-1 at the end of this section.

1-2: Revenues Under Existing Monthly Water and Sewer User Rates - Retail

The forecast of retail revenues from existing water and sewer rates was based on i) the projection of accounts and corresponding water and sewer consumption as shown in Table 1-1; and ii) the existing rates for monthly water and sewer service as currently adopted by the City as shown in Table ES-1. A summary of the projected retail water and sewer user rate revenues derived under existing rates is included in Table 1-2 at the end of this section.

1-3: Water and Sewer System 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 public utilities such as the City's Systems. The sum of these costs, after adjusting for other operating and non-operating revenues available to the utility (e.g., interest income), 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 Systems 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 through the Fiscal Year ending September 30, 2034 (previously defined as the "Forecast Period"). A forecast of system operations was prepared to i) assess the adequacy of utility rates in the near future; ii) recognize potential cost recovery strategies based on the phase-in of any required rate 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 Tables 1-3 and 1-4 at the end of this section for the water system and sewer system, respectively, while the combined revenue requirements are shown in Table 1-5. 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 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 for the City's water system and sewer system have been based on the schedule of rates and charges currently in effect. Such rates were applied to the customer and sales usage forecast discussed previously.
2. The adopted Fiscal Year 2025 Operating and Capital Budgets 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. The operation and maintenance expenses for the water and sewer systems identified for the Fiscal Year 2025 were projected for the remaining years of the Forecast Period (through Fiscal Year 2034). These projections are displayed on Tables 1-6 and 1-7 at the end of this section for the water and sewer systems, respectively, while Table 1-8 shows the projected operation and maintenance expenses on a combined basis. Major cost escalation factors assumed were based on discussions with City staff and include:

- General Inflation: 3.0% per year
- Salaries and Wages: 5.0% per year
- Health Insurance: 10.0% per year
- Repair and Maintenance Expenses: 4.0% per year
- Property / General Insurance: 4.0% per year
- Electricity Commodity Cost: 4.0% per year
- Chemicals Commodity Cost: 4.0% per year
- Gas / Fuel Commodity Cost: 5.0% per year

It has been assumed that there will be some price stabilization during the Forecast Period. To the extent that cost inflation is higher than what is projected, the rate and financial plan will need to be adjusted.

4. The wholesale water and sewer charges from Miami-Dade County were held constant after Fiscal Year 2025 under the assumption that the City would pass through all future wholesale adjustments, starting with any adjustments effective for Fiscal Year 2026. via the pass-through formula currently in the City's Code of Ordinances. Table 1-9 at the end of this section contains the projected wholesale water and sewer charges.
5. Based on discussions with City staff, no additional personnel above Fiscal Year 2025 budget levels have been recognized for purposes of developing the financial forecast.
6. The projection of variable costs for water and sewer systems operations, which would include such expenses as chemicals and electricity, was based on the projected growth in water and sewer flow, respectively, plus an allowance for commodity cost increases.
7. In the projection of the estimated expenditure requirements, a contingency allowance has been included for Fiscal Years 2025 through 2034. This annual allowance of about \$3 million has been included as an operating expense to have additional funds to meet unknown or unplanned expenses throughout the fiscal year and to recognize potential changes in revenues that may result due to weather, conservation, and other factors. 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.
8. For the purposes of this analysis, 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.

9. The water and sewer system's outstanding and assumed debt is summarized in Table 1-10 at the end of this section. It was assumed that the City would issue four additional 30-year senior lien bond issues with level debt service during the Forecast Period for water and sewer projects. The City will most likely adopt "intent to issue" resolutions in advance of the bond issues to enable the City to incur expenses associated with the projects that will later be reimbursed from bond proceeds. An intent to issue resolution has already been adopted for the assumed Water and Sewer Revenue Bonds, Series 2025. The assumptions for all the additional bond issues are:

Water and Sewer Revenue Bonds, Series 2025

Fiscal Year of issuance:	2025
Project costs financed:	\$84,040,791
Principal amount of bonds:	\$84,890,000
Bond term:	30 years
Interest rate:	5.0%
Issuance costs as a percentage of principal:	1.0%
Annual payment:	\$5,522,216

Water and Sewer Revenue Bonds, Series 2028

Fiscal Year of issuance:	2028
Project costs financed:	\$139,714,278
Principal amount of bonds:	\$141,130,000
Bond term:	30 years
Interest rate:	5.0%
Issuance costs as a percentage of principal:	1.0%
Annual payment:	\$9,180,709

Water and Sewer Revenue Bonds, Series 2030

Fiscal Year of issuance:	2030
Project costs financed:	\$69,349,792
Principal amount of bonds:	\$70,055,000
Bond term:	30 years
Interest rate:	5.0%
Issuance costs as a percentage of principal:	1.0%
Annual payment:	\$4,557,178

Water and Sewer Revenue Bonds, Series 2033

Fiscal Year of issuance:	2033
Project costs financed:	\$54,500,000
Principal amount of bonds:	\$55,055,000
Bond term:	30 years
Interest rate:	5.5%
Issuance costs as a percent of principal:	1.0%
Annual payment:	\$3,788,081

10. The projected capital expenditures through the Fiscal Year ending September 30, 2034 for the water and sewer system were based on discussions with the City staff. Table 1-11 at the end of this section provides a detailed listing of the capital projects for the water and sewer system as well as projected funding sources for such projects within the analysis period.
11. Interest income has been recognized as an available revenue source to fund the expenditure needs of the water and sewer system. The assumed interest earnings during the Forecast Period were based on discussions with the City staff. Table 1-12 at the end of this section contains the projection of fund balances and interest income.
12. The City receives other operating revenues from miscellaneous charges for specific customer service requests or needs which serve to reduce rate revenue requirements. Examples of such revenues include turn-on and turn-off charges, initiation of service charges, meter installation and tap-in charges, late payment fees, and fire protection charges. Such amounts were generally held constant during the Forecast Period.

Table 1-13 at the end of this section contains the projection of these other revenues.

1-4: Water and Sewer System Debt Service Coverage and Rate Covenants

A key financial aspect of the water and sewer system is ensuring compliance with the rate covenants outlined in the Bond Resolution. Among other things, the Bond Resolution contains certain covenants which must be satisfied, the purpose of which is to provide a surety to the bondholders that the debt payments will be made during the term of such bonds. Generally, these covenants are in the form of i) certain debt service coverage ratios which are applicable to the level of rates charged and the revenue margins achieved; ii) application of funds; and iii) certain requirements associated with the provision of service.

The water and sewer system's Bond Resolution contains a covenant under which the City will establish rates such that:

"Net Revenues...will be sufficient to provide an amount in each Fiscal Year at least equal to one hundred ten per centum (110%) of the Principal and Interest Requirements for such Fiscal Year on account of the Bonds then Outstanding..."

Net Revenues do not include administration fees. For the purposes of this rate study, the primary focus is the overall or "all-in" (senior and subordinate issues added together) debt coverage ratio. As discussed in the executive summary section of this report, a 200% all-in coverage target was recognized.

Table 1-14 at the end of this section summarizes the ability of the water and sewer net revenues to meet the target and required debt service coverage.

1-5: Projected Water and Sewer System Sources and Uses of Funds

To provide additional information to the City, a summary of the projected sources and uses of funds for each of the water and sewer system's major funds is shown in Table 1-15 at the end of this section. The projected sources equal the projected uses.

1-6: Proposed Monthly Water and Sewer User Rate Design

The proposed water and sewer rates are shown in Table ES-1 of the executive summary of this report. The rate designs are consistent with the methodology of the last rate study completed in 2020.

1-7: Water and Sewer Bill Comparisons – Neighboring Utilities

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 rates for customers served by a 5/8-inch or 3/4-inch meter (representative of the single family residential class and a large portion of the commercial class) with charges for similar service by other southeast Florida utilities has been prepared. It should be noted that a bill comparison is not a "report card" on how well a utility is performing, as there are several factors that have an effect on the level of rates charged. These factors may include, but are not limited to, the following:

1. Source of water supply and level of treatment required before the distribution of water to the ultimate customer, including how much of the water supply is purchased from other utilities.

2. Plant capacity utilization, age and assistance in the funding of such plant capacity by federal grants, impact fees, etc.
3. Overall size of the customer base (economies of scale) served as well as the type of customers served (certain customers may have higher usage requirements which may dampen per unit rates which is common for high commercial or industrialized customer bases for utilities).
4. Geographic density of the customer base (utilities with many high-density multifamily customers may have lower unit costs).
5. General fund and administrative fee transfers made by municipal and county systems which may account for differences in level of rates charged.
6. Bond covenants and funding requirements of the rates.
7. Level of capital improvements required to meet service area needs, including the construction of growth-related assets in relation to service area expansion.
8. Time of last rate review.

For the utilities included in the rate comparisons on Tables 1-16 through 1-18 at the end of this section, no analysis has been made of the above-mentioned factors as they relate to the reported water and sewer rates currently being charged by the other utilities surveyed for the purposes of this analysis. However, the proposed water and sewer rates for the City produce bills that are comparable with those of neighboring utilities.

Figure 1-1 at the end of this section shows a graphical comparison of how bills under the proposed Fiscal Year 2025 rates compare with those of other southeast Florida utilities for a single family residential customer with a monthly usage of 5,000 gallons – a typical monthly usage for a 5/8" or 3/4" meter customer within the State of Florida. It is important to note that almost all of the surveyed utilities are currently evaluating the sufficiency of their water and sewer rates or have already scheduled future rate adjustments.

Table 1-1

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Historical and Projected Water and Sewer System Customer Statistics

Line No.	Description	Historical	Fiscal Year Ending September 30,										
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
WATER													
Residential - Domestic													
1	Average Monthly Customers	5,911	5,911	5,911	5,911	5,911	5,911	5,911	5,911	5,911	5,911	5,911	5,911
2	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
3	Average Monthly ERCs	15,977	15,977	15,977	15,977	15,977	15,977	15,977	15,977	15,977	15,977	15,977	15,977
4	Average Monthly ERCs Per Customer	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
5	Annual Water Sales (kgal)	711,353	711,353	711,353	711,353	711,353	711,353	711,353	711,353	711,353	711,353	711,353	711,353
6	Average Monthly Water Sales Per Customer (kgal)	10.03	10.03	10.03	10.03	10.03	10.03	10.03	10.03	10.03	10.03	10.03	10.03
7	Average Monthly Water Sales Per ERC (kgal)	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71
Residential - Irrigation													
8	Average Monthly Customers	2,049	2,049	2,049	2,049	2,049	2,049	2,049	2,049	2,049	2,049	2,049	2,049
9	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
10	Average Monthly ERCs	6,771	6,771	6,771	6,771	6,771	6,771	6,771	6,771	6,771	6,771	6,771	6,771
11	Average Monthly ERCs Per Customer	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
12	Annual Water Sales (kgal)	532,760	532,760	532,760	532,760	532,760	532,760	532,760	532,760	532,760	532,760	532,760	532,760
13	Average Monthly Water Sales Per Customer (kgal)	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67
14	Average Monthly Water Sales Per ERC (kgal)	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56
Apartment - Domestic													
15	Average Monthly Customers	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364
16	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
17	Average Monthly ERCs	4,634	4,634	4,634	4,634	4,634	4,634	4,634	4,634	4,634	4,634	4,634	4,634
18	Average Monthly ERCs Per Customer	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40
19	Annual Water Sales (kgal)	618,624	618,624	618,624	618,624	618,624	618,624	618,624	618,624	618,624	618,624	618,624	618,624
20	Average Monthly Water Sales Per Customer (kgal)	37.79	37.79	37.79	37.79	37.79	37.79	37.79	37.79	37.79	37.79	37.79	37.79
21	Average Monthly Water Sales Per ERC (kgal)	11.13	11.13	11.13	11.13	11.13	11.13	11.13	11.13	11.13	11.13	11.13	11.13
Apartment - Irrigation													
22	Average Monthly Customers	66	66	66	66	66	66	66	66	66	66	66	66
23	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
24	Average Monthly ERCs	246	246	246	246	246	246	246	246	246	246	246	246
25	Average Monthly ERCs Per Customer	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73
26	Annual Water Sales (kgal)	31,992	31,992	31,992	31,992	31,992	31,992	31,992	31,992	31,992	31,992	31,992	31,992
27	Average Monthly Water Sales Per Customer (kgal)	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50
28	Average Monthly Water Sales Per ERC (kgal)	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86
Condominium - Domestic													
29	Average Monthly Customers	1,366	1,366	1,366	1,366	1,366	1,366	1,366	1,366	1,366	1,366	1,366	1,366
30	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
31	Average Monthly ERCs	10,173	10,173	10,173	10,173	10,173	10,173	10,173	10,173	10,173	10,173	10,173	10,173
32	Average Monthly ERCs Per Customer	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45
33	Annual Water Sales (kgal)	1,954,310	1,954,310	1,954,310	1,954,310	1,954,310	1,954,310	1,954,310	1,954,310	1,954,310	1,954,310	1,954,310	1,954,310
34	Average Monthly Water Sales Per Customer (kgal)	119.22	119.22	119.22	119.22	119.22	119.22	119.22	119.22	119.22	119.22	119.22	119.22
35	Average Monthly Water Sales Per ERC (kgal)	16.01	16.01	16.01	16.01	16.01	16.01	16.01	16.01	16.01	16.01	16.01	16.01

Table 1-1

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Historical and Projected Water and Sewer System Customer Statistics

Line No.	Description	Historical 2023	2024	2025	2026	2027	Fiscal Year Ending September 30,						
							2028	2029	2030	2031	2032	2033	2034
Condominium - Irrigation													
36	Average Monthly Customers	256	256	256	256	256	256	256	256	256	256	256	256
37	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
38	Average Monthly ERCs	1,601	1,601	1,601	1,601	1,601	1,601	1,601	1,601	1,601	1,601	1,601	1,601
39	Average Monthly ERCs Per Customer	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25
40	Annual Water Sales (kgal)	298,870	298,870	298,870	298,870	298,870	298,870	298,870	298,870	298,870	298,870	298,870	298,870
41	Average Monthly Water Sales Per Customer (kgal)	97.23	97.23	97.23	97.23	97.23	97.23	97.23	97.23	97.23	97.23	97.23	97.23
42	Average Monthly Water Sales Per ERC (kgal)	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55
Duplex - Domestic													
43	Average Monthly Customers	46	46	46	46	46	46	46	46	46	46	46	46
44	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
45	Average Monthly ERCs	99	99	99	99	99	99	99	99	99	99	99	99
46	Average Monthly ERCs Per Customer	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16
47	Annual Water Sales (kgal)	4,640	4,640	4,640	4,640	4,640	4,640	4,640	4,640	4,640	4,640	4,640	4,640
48	Average Monthly Water Sales Per Customer (kgal)	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45
49	Average Monthly Water Sales Per ERC (kgal)	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Duplex - Irrigation													
50	Average Monthly Customers	1	1	1	1	1	1	1	1	1	1	1	1
51	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
52	Average Monthly ERCs	6	6	6	6	6	6	6	6	6	6	6	6
53	Average Monthly ERCs Per Customer	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
54	Annual Water Sales (kgal)	118	118	118	118	118	118	118	118	118	118	118	118
55	Average Monthly Water Sales Per Customer (kgal)	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43
56	Average Monthly Water Sales Per ERC (kgal)	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Commercial - Domestic													
57	Average Monthly Customers	2,019	2,019	2,019	2,019	2,019	2,019	2,019	2,019	2,019	2,019	2,019	2,019
58	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
59	Average Monthly ERCs	9,263	9,263	9,263	9,263	9,263	9,263	9,263	9,263	9,263	9,263	9,263	9,263
60	Average Monthly ERCs Per Customer	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59
61	Annual Water Sales (kgal)	1,102,775	1,102,775	1,102,775	1,102,775	1,102,775	1,102,775	1,102,775	1,102,775	1,102,775	1,102,775	1,102,775	1,102,775
62	Average Monthly Water Sales Per Customer (kgal)	45.51	45.51	45.51	45.51	45.51	45.51	45.51	45.51	45.51	45.51	45.51	45.51
63	Average Monthly Water Sales Per ERC (kgal)	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92
Commercial - Irrigation													
64	Average Monthly Customers	302	302	302	302	302	302	302	302	302	302	302	302
65	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
66	Average Monthly ERCs	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058
67	Average Monthly ERCs Per Customer	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82
68	Annual Water Sales (kgal)	361,807	361,807	361,807	361,807	361,807	361,807	361,807	361,807	361,807	361,807	361,807	361,807
69	Average Monthly Water Sales Per Customer (kgal)	99.95	99.95	99.95	99.95	99.95	99.95	99.95	99.95	99.95	99.95	99.95	99.95
70	Average Monthly Water Sales Per ERC (kgal)	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65

Table 1-1

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Historical and Projected Water and Sewer System Customer Statistics

Line No.	Description	Historical	Fiscal Year Ending September 30,										
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Hotel - Domestic													
71	Average Monthly Customers	294	294	294	294	294	294	294	294	294	294	294	294
72	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
73	Average Monthly ERCs	2,671	2,671	2,671	2,671	2,671	2,671	2,671	2,671	2,671	2,671	2,671	2,671
74	Average Monthly ERCs Per Customer	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09
75	Annual Water Sales (kgal)	688,991	688,991	688,991	688,991	688,991	688,991	688,991	688,991	688,991	688,991	688,991	688,991
76	Average Monthly Water Sales Per Customer (kgal)	195.46	195.46	195.46	195.46	195.46	195.46	195.46	195.46	195.46	195.46	195.46	195.46
77	Average Monthly Water Sales Per ERC (kgal)	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50
Hotel - Irrigation													
78	Average Monthly Customers	74	74	74	74	74	74	74	74	74	74	74	74
79	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
80	Average Monthly ERCs	511	511	511	511	511	511	511	511	511	511	511	511
81	Average Monthly ERCs Per Customer	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89
82	Annual Water Sales (kgal)	127,628	127,628	127,628	127,628	127,628	127,628	127,628	127,628	127,628	127,628	127,628	127,628
83	Average Monthly Water Sales Per Customer (kgal)	143.56	143.56	143.56	143.56	143.56	143.56	143.56	143.56	143.56	143.56	143.56	143.56
84	Average Monthly Water Sales Per ERC (kgal)	20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83
Religious - Domestic													
85	Average Monthly Customers	7	7	7	7	7	7	7	7	7	7	7	7
86	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
87	Average Monthly ERCs	32	32	32	32	32	32	32	32	32	32	32	32
88	Average Monthly ERCs Per Customer	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
89	Annual Water Sales (kgal)	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161
90	Average Monthly Water Sales Per Customer (kgal)	36.33	36.33	36.33	36.33	36.33	36.33	36.33	36.33	36.33	36.33	36.33	36.33
91	Average Monthly Water Sales Per ERC (kgal)	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34
Religious - Irrigation													
92	Average Monthly Customers	2	2	2	2	2	2	2	2	2	2	2	2
93	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
94	Average Monthly ERCs	5	5	5	5	5	5	5	5	5	5	5	5
95	Average Monthly ERCs Per Customer	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
96	Annual Water Sales (kgal)	122	122	122	122	122	122	122	122	122	122	122	122
97	Average Monthly Water Sales Per Customer (kgal)	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07
98	Average Monthly Water Sales Per ERC (kgal)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
City - Domestic													
99	Average Monthly Customers	122	122	122	122	122	122	122	122	122	122	122	122
100	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
101	Average Monthly ERCs	948	948	948	948	948	948	948	948	948	948	948	948
102	Average Monthly ERCs Per Customer	7.79	7.79	7.79	7.79	7.79	7.79	7.79	7.79	7.79	7.79	7.79	7.79
103	Annual Water Sales (kgal)	95,411	95,411	95,411	95,411	95,411	95,411	95,411	95,411	95,411	95,411	95,411	95,411
104	Average Monthly Water Sales Per Customer (kgal)	65.39	65.39	65.39	65.39	65.39	65.39	65.39	65.39	65.39	65.39	65.39	65.39
105	Average Monthly Water Sales Per ERC (kgal)	8.39	8.39	8.39	8.39	8.39	8.39	8.39	8.39	8.39	8.39	8.39	8.39

Table 1-1

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Historical and Projected Water and Sewer System Customer Statistics

Line No.	Description	Historical	Fiscal Year Ending September 30,										
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
City - Irrigation													
106	Average Monthly Customers	537	537	537	537	537	537	537	537	537	537	537	537
107	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
108	Average Monthly ERCs	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360
109	Average Monthly ERCs Per Customer	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26
110	Annual Water Sales (kgal)	365,691	365,691	365,691	365,691	365,691	365,691	365,691	365,691	365,691	365,691	365,691	365,691
111	Average Monthly Water Sales Per Customer (kgal)	56.75	56.75	56.75	56.75	56.75	56.75	56.75	56.75	56.75	56.75	56.75	56.75
112	Average Monthly Water Sales Per ERC (kgal)	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07
Total Water													
113	Average Monthly Customers	14,416	14,416	14,416	14,416	14,416	14,416	14,416	14,416	14,416	14,416	14,416	14,416
114	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
115	Average Monthly ERCs	58,353	58,353	58,353	58,353	58,353	58,353	58,353	58,353	58,353	58,353	58,353	58,353
116	Change in Average Monthly ERCs		0	0	0	0	0	0	0	0	0	0	0
117	Average Monthly ERCs Per Customer	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05
118	Annual Water Sales (kgal)	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252
119	Average Monthly Water Sales Per Customer (kgal)	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88
120	Average Monthly Water Sales Per ERC (kgal)	9.85	9.85	9.85	9.85	9.85	9.85	9.85	9.85	9.85	9.85	9.85	9.85
121	Total Water Purchased (MGD)	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057
122	Non-Revenue Water Percentage	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%
SEWER - RETAIL													
Residential - Domestic													
123	Average Monthly Customers	5,409	5,409	5,409	5,409	5,409	5,409	5,409	5,409	5,409	5,409	5,409	5,409
124	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
125	Average Monthly ERCs	14,329	14,329	14,329	14,329	14,329	14,329	14,329	14,329	14,329	14,329	14,329	14,329
126	Average Monthly ERCs Per Customer	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65
127	Annual Sewer Revenue Flow (kgal)	580,785	580,785	580,785	580,785	580,785	580,785	580,785	580,785	580,785	580,785	580,785	580,785
128	Average Monthly Sewer Revenue Flow Per Customer (kgal)	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95
129	Average Monthly Sewer Revenue Flow Per ERC (kgal)	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Apartment - Domestic													
130	Average Monthly Customers	1,339	1,339	1,339	1,339	1,339	1,339	1,339	1,339	1,339	1,339	1,339	1,339
131	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
132	Average Monthly ERCs	4,505	4,505	4,505	4,505	4,505	4,505	4,505	4,505	4,505	4,505	4,505	4,505
133	Average Monthly ERCs Per Customer	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37
134	Annual Sewer Revenue Flow (kgal)	597,233	597,233	597,233	597,233	597,233	597,233	597,233	597,233	597,233	597,233	597,233	597,233
135	Average Monthly Sewer Revenue Flow Per Customer (kgal)	37.18	37.18	37.18	37.18	37.18	37.18	37.18	37.18	37.18	37.18	37.18	37.18
136	Average Monthly Sewer Revenue Flow Per ERC (kgal)	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05

Table 1-1

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Historical and Projected Water and Sewer System Customer Statistics

Line No.	Description	Historical 2023	2024	2025	2026	2027	Fiscal Year Ending September 30,						
							2028	2029	2030	2031	2032	2033	2034
Condominium - Domestic													
137	Average Monthly Customers	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330
138	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
139	Average Monthly ERCs	9,719	9,719	9,719	9,719	9,719	9,719	9,719	9,719	9,719	9,719	9,719	9,719
140	Average Monthly ERCs Per Customer	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31
141	Annual Sewer Revenue Flow (kgal)	1,783,004	1,783,004	1,783,004	1,783,004	1,783,004	1,783,004	1,783,004	1,783,004	1,783,004	1,783,004	1,783,004	1,783,004
142	Average Monthly Sewer Revenue Flow Per Customer (kgal)	111.74	111.74	111.74	111.74	111.74	111.74	111.74	111.74	111.74	111.74	111.74	111.74
143	Average Monthly Sewer Revenue Flow Per ERC (kgal)	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29
Duplex - Domestic													
144	Average Monthly Customers	43	43	43	43	43	43	43	43	43	43	43	43
145	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
146	Average Monthly ERCs	92	92	92	92	92	92	92	92	92	92	92	92
147	Average Monthly ERCs Per Customer	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13
148	Annual Sewer Revenue Flow (kgal)	4,156	4,156	4,156	4,156	4,156	4,156	4,156	4,156	4,156	4,156	4,156	4,156
149	Average Monthly Sewer Revenue Flow Per Customer (kgal)	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04
150	Average Monthly Sewer Revenue Flow Per ERC (kgal)	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78
Commercial - Domestic													
151	Average Monthly Customers	1,963	1,963	1,963	1,963	1,963	1,963	1,963	1,963	1,963	1,963	1,963	1,963
152	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
153	Average Monthly ERCs	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888
154	Average Monthly ERCs Per Customer	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53
155	Annual Sewer Revenue Flow (kgal)	1,054,742	1,054,742	1,054,742	1,054,742	1,054,742	1,054,742	1,054,742	1,054,742	1,054,742	1,054,742	1,054,742	1,054,742
156	Average Monthly Sewer Revenue Flow Per Customer (kgal)	44.78	44.78	44.78	44.78	44.78	44.78	44.78	44.78	44.78	44.78	44.78	44.78
157	Average Monthly Sewer Revenue Flow Per ERC (kgal)	9.89	9.89	9.89	9.89	9.89	9.89	9.89	9.89	9.89	9.89	9.89	9.89
Hotel - Domestic													
158	Average Monthly Customers	292	292	292	292	292	292	292	292	292	292	292	292
159	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
160	Average Monthly ERCs	2,660	2,660	2,660	2,660	2,660	2,660	2,660	2,660	2,660	2,660	2,660	2,660
161	Average Monthly ERCs Per Customer	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10
162	Annual Sewer Revenue Flow (kgal)	686,068	686,068	686,068	686,068	686,068	686,068	686,068	686,068	686,068	686,068	686,068	686,068
163	Average Monthly Sewer Revenue Flow Per Customer (kgal)	195.52	195.52	195.52	195.52	195.52	195.52	195.52	195.52	195.52	195.52	195.52	195.52
164	Average Monthly Sewer Revenue Flow Per ERC (kgal)	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50
Religious - Domestic													
165	Average Monthly Customers	7	7	7	7	7	7	7	7	7	7	7	7
166	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
167	Average Monthly ERCs	31	31	31	31	31	31	31	31	31	31	31	31
168	Average Monthly ERCs Per Customer	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31
169	Annual Sewer Revenue Flow (kgal)	2,290	2,290	2,290	2,290	2,290	2,290	2,290	2,290	2,290	2,290	2,290	2,290
170	Average Monthly Sewer Revenue Flow Per Customer (kgal)	26.63	26.63	26.63	26.63	26.63	26.63	26.63	26.63	26.63	26.63	26.63	26.63
171	Average Monthly Sewer Revenue Flow Per ERC (kgal)	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17

Table 1-1

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Historical and Projected Water and Sewer System Customer Statistics

Line No.	Description	Historical	Fiscal Year Ending September 30,										
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
City - Domestic													
172	Average Monthly Customers	115	115	115	115	115	115	115	115	115	115	115	115
173	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
174	Average Monthly ERCs	872	872	872	872	872	872	872	872	872	872	872	872
175	Average Monthly ERCs Per Customer	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60
176	Annual Sewer Revenue Flow (kgal)	67,907	67,907	67,907	67,907	67,907	67,907	67,907	67,907	67,907	67,907	67,907	67,907
177	Average Monthly Sewer Revenue Flow Per Customer (kgal)	49.32	49.32	49.32	49.32	49.32	49.32	49.32	49.32	49.32	49.32	49.32	49.32
178	Average Monthly Sewer Revenue Flow Per ERC (kgal)	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49
Total Retail Sewer													
179	Average Monthly Customers	10,497	10,497	10,497	10,497	10,497	10,497	10,497	10,497	10,497	10,497	10,497	10,497
180	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
181	Average Monthly ERCs	41,095	41,095	41,095	41,095	41,095	41,095	41,095	41,095	41,095	41,095	41,095	41,095
182	Change in Average Monthly ERCs		0	0	0	0	0	0	0	0	0	0	0
183	Average Monthly ERCs Per Customer	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91
184	Annual Sewer Revenue Flow (kgal)	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184
185	Average Monthly Sewer Revenue Flow Per Customer (kgal)	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92
186	Average Monthly Sewer Revenue Flow Per ERC (kgal)	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69
SEWER - WHOLESALE													
Village of Bal Harbour													
187	Average Monthly Customers	1	1	1	1	1	1	1	1	1	1	1	1
188	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
189	Annual Sewer Revenue Flow (kgal)	297,749	297,749	297,749	297,749	297,749	297,749	297,749	297,749	297,749	297,749	297,749	297,749
190	Average Monthly Sewer Revenue Flow Per Customer (kgal)	24,812.4	24,812.4	24,812.4	24,812.4	24,812.4	24,812.4	24,812.4	24,812.4	24,812.4	24,812.4	24,812.4	24,812.4
Town of Bay Harbor Islands													
191	Average Monthly Customers	1	1	1	1	1	1	1	1	1	1	1	1
192	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
193	Annual Sewer Revenue Flow (kgal)	256,808	256,808	256,808	256,808	256,808	256,808	256,808	256,808	256,808	256,808	256,808	256,808
194	Average Monthly Sewer Revenue Flow Per Customer (kgal)	21,400.7	21,400.7	21,400.7	21,400.7	21,400.7	21,400.7	21,400.7	21,400.7	21,400.7	21,400.7	21,400.7	21,400.7
Indian Creek Village													
195	Average Monthly Customers	1	1	1	1	1	1	1	1	1	1	1	1
196	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
197	Annual Sewer Revenue Flow (kgal)	14,588	14,588	14,588	14,588	14,588	14,588	14,588	14,588	14,588	14,588	14,588	14,588
198	Average Monthly Sewer Revenue Flow Per Customer (kgal)	1,215.7	1,215.7	1,215.7	1,215.7	1,215.7	1,215.7	1,215.7	1,215.7	1,215.7	1,215.7	1,215.7	1,215.7
Town of Surfside													
199	Average Monthly Customers	1	1	1	1	1	1	1	1	1	1	1	1
200	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
201	Annual Sewer Revenue Flow (kgal)	270,885	270,885	270,885	270,885	270,885	270,885	270,885	270,885	270,885	270,885	270,885	270,885
202	Average Monthly Sewer Revenue Flow Per Customer (kgal)	22,573.8	22,573.8	22,573.8	22,573.8	22,573.8	22,573.8	22,573.8	22,573.8	22,573.8	22,573.8	22,573.8	22,573.8

Table 1-1

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Historical and Projected Water and Sewer System Customer Statistics

Line No.	Description	Historical 2023	2024	2025	2026	2027	Fiscal Year Ending September 30,						
							2028	2029	2030	2031	2032	2033	2034
Total Wholesale Sewer													
203	Average Monthly Customers	3	3	3	3	3	3	3	3	3	3	3	3
204	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
205	Annual Sewer Revenue Flow (kgal)	840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030
206	Average Monthly Sewer Revenue Flow Per Customer (kgal)	23,334.17	23,334.17	23,334.17	23,334.17	23,334.17	23,334.17	23,334.17	23,334.17	23,334.17	23,334.17	23,334.17	23,334.17
TOTAL RETAIL AND WHOLESALE SEWER													
207	Average Monthly Customers	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
208	Change in Average Monthly Accounts		0	0	0	0	0	0	0	0	0	0	0
209	Annual Sewer Revenue Flow (kgal)	5,616,214	5,616,214	5,616,214	5,616,214	5,616,214	5,616,214	5,616,214	5,616,214	5,616,214	5,616,214	5,616,214	5,616,214
207	Total Sewer Purchased (kgal)	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598
210	Total Wastewater Purchased (MGD)	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22

Table 1-2

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Water and Sewer Retail User Rate Revenue Under Existing Rates

Line No.	Description	Historical 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
WATER USER RATE REVENUE													
Residential - Domestic													
1	Base Facility Charges	\$ 685,694	\$ 698,194	\$ 736,501	\$ 736,501	\$ 736,501	\$ 736,501	\$ 736,501	\$ 736,501	\$ 736,501	\$ 736,501	\$ 736,501	\$ 736,501
2	Consumption Charges	2,029,138	2,066,762	2,181,089	2,181,089	2,181,089	2,181,089	2,181,089	2,181,089	2,181,089	2,181,089	2,181,089	2,181,089
3	Purchased Water Pass-Through Charges	1,553,463	1,860,197	1,887,961	1,887,961	1,887,961	1,887,961	1,887,961	1,887,961	1,887,961	1,887,961	1,887,961	1,887,961
4	Total	\$ 4,268,294	\$ 4,625,153	\$ 4,805,551	\$ 4,805,551	\$ 4,805,551	\$ 4,805,551	\$ 4,805,551	\$ 4,805,551	\$ 4,805,551	\$ 4,805,551	\$ 4,805,551	\$ 4,805,551
Residential - Irrigation													
5	Base Facility Charges	\$ 242,299	\$ 246,706	\$ 260,266	\$ 260,266	\$ 260,266	\$ 260,266	\$ 260,266	\$ 260,266	\$ 260,266	\$ 260,266	\$ 260,266	\$ 260,266
6	Consumption Charges	2,510,156	2,556,057	2,697,879	2,697,879	2,697,879	2,697,879	2,697,879	2,697,879	2,697,879	2,697,879	2,697,879	2,697,879
7	Purchased Water Pass-Through Charges	1,163,448	1,393,173	1,413,967	1,413,967	1,413,967	1,413,967	1,413,967	1,413,967	1,413,967	1,413,967	1,413,967	1,413,967
8	Total	\$ 3,915,903	\$ 4,195,936	\$ 4,372,112	\$ 4,372,112	\$ 4,372,112	\$ 4,372,112	\$ 4,372,112	\$ 4,372,112	\$ 4,372,112	\$ 4,372,112	\$ 4,372,112	\$ 4,372,112
Apartment - Domestic													
9	Base Facility Charges	\$ 428,957	\$ 436,653	\$ 460,544	\$ 460,544	\$ 460,544	\$ 460,544	\$ 460,544	\$ 460,544	\$ 460,544	\$ 460,544	\$ 460,544	\$ 460,544
10	Consumption Charges	1,468,965	1,495,036	1,578,394	1,578,394	1,578,394	1,578,394	1,578,394	1,578,394	1,578,394	1,578,394	1,578,394	1,578,394
11	Purchased Water Pass-Through Charges	1,350,960	1,617,710	1,641,855	1,641,855	1,641,855	1,641,855	1,641,855	1,641,855	1,641,855	1,641,855	1,641,855	1,641,855
12	Total	\$ 3,248,882	\$ 3,549,398	\$ 3,680,793	\$ 3,680,793	\$ 3,680,793	\$ 3,680,793	\$ 3,680,793	\$ 3,680,793	\$ 3,680,793	\$ 3,680,793	\$ 3,680,793	\$ 3,680,793
Apartment - Irrigation													
13	Base Facility Charges	\$ 22,582	\$ 22,988	\$ 24,246	\$ 24,246	\$ 24,246	\$ 24,246	\$ 24,246	\$ 24,246	\$ 24,246	\$ 24,246	\$ 24,246	\$ 24,246
14	Consumption Charges	134,664	137,143	144,768	144,768	144,768	144,768	144,768	144,768	144,768	144,768	144,768	144,768
15	Purchased Water Pass-Through Charges	69,864	83,658	84,907	84,907	84,907	84,907	84,907	84,907	84,907	84,907	84,907	84,907
16	Total	\$ 227,110	\$ 243,789	\$ 253,922	\$ 253,922	\$ 253,922	\$ 253,922	\$ 253,922	\$ 253,922	\$ 253,922	\$ 253,922	\$ 253,922	\$ 253,922
Condominium - Domestic													
17	Base Facility Charges	\$ 897,412	\$ 913,530	\$ 963,575	\$ 963,575	\$ 963,575	\$ 963,575	\$ 963,575	\$ 963,575	\$ 963,575	\$ 963,575	\$ 963,575	\$ 963,575
18	Consumption Charges	5,158,078	5,250,013	5,540,981	5,540,981	5,540,981	5,540,981	5,540,981	5,540,981	5,540,981	5,540,981	5,540,981	5,540,981
19	Purchased Water Pass-Through Charges	4,267,850	5,110,545	5,186,822	5,186,822	5,186,822	5,186,822	5,186,822	5,186,822	5,186,822	5,186,822	5,186,822	5,186,822
20	Total	\$ 10,323,339	\$ 11,274,089	\$ 11,691,378	\$ 11,691,378	\$ 11,691,378	\$ 11,691,378	\$ 11,691,378	\$ 11,691,378	\$ 11,691,378	\$ 11,691,378	\$ 11,691,378	\$ 11,691,378
Condominium - Irrigation													
21	Base Facility Charges	\$ 142,703	\$ 145,267	\$ 153,226	\$ 153,226	\$ 153,226	\$ 153,226	\$ 153,226	\$ 153,226	\$ 153,226	\$ 153,226	\$ 153,226	\$ 153,226
22	Consumption Charges	1,089,617	1,109,863	1,171,766	1,171,766	1,171,766	1,171,766	1,171,766	1,171,766	1,171,766	1,171,766	1,171,766	1,171,766
23	Purchased Water Pass-Through Charges	652,677	781,550	793,215	793,215	793,215	793,215	793,215	793,215	793,215	793,215	793,215	793,215
24	Total	\$ 1,884,997	\$ 2,036,679	\$ 2,118,206	\$ 2,118,206	\$ 2,118,206	\$ 2,118,206	\$ 2,118,206	\$ 2,118,206	\$ 2,118,206	\$ 2,118,206	\$ 2,118,206	\$ 2,118,206
Duplex - Domestic													
25	Base Facility Charges	\$ 9,571	\$ 9,743	\$ 10,276	\$ 10,276	\$ 10,276	\$ 10,276	\$ 10,276	\$ 10,276	\$ 10,276	\$ 10,276	\$ 10,276	\$ 10,276
26	Consumption Charges	9,266	9,429	9,961	9,961	9,961	9,961	9,961	9,961	9,961	9,961	9,961	9,961
27	Purchased Water Pass-Through Charges	10,133	12,133	12,314	12,314	12,314	12,314	12,314	12,314	12,314	12,314	12,314	12,314
28	Total	\$ 28,970	\$ 31,306	\$ 32,551	\$ 32,551	\$ 32,551	\$ 32,551	\$ 32,551	\$ 32,551	\$ 32,551	\$ 32,551	\$ 32,551	\$ 32,551
Duplex - Irrigation													
29	Base Facility Charges	\$ 528	\$ 537	\$ 567	\$ 567	\$ 567	\$ 567	\$ 567	\$ 567	\$ 567	\$ 567	\$ 567	\$ 567
30	Consumption Charges	342	349	368	368	368	368	368	368	368	368	368	368
31	Purchased Water Pass-Through Charges	258	309	313	313	313	313	313	313	313	313	313	313
32	Total	\$ 1,128	\$ 1,195	\$ 1,248	\$ 1,248	\$ 1,248	\$ 1,248	\$ 1,248	\$ 1,248	\$ 1,248	\$ 1,248	\$ 1,248	\$ 1,248

Table 1-2

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Water and Sewer Retail User Rate Revenue Under Existing Rates

Line No.	Description	Historical 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
33	Commercial - Domestic Base Facility Charges	\$ 838,404	\$ 853,480	\$ 900,206	\$ 900,206	\$ 900,206	\$ 900,206	\$ 900,206	\$ 900,206	\$ 900,206	\$ 900,206	\$ 900,206	\$ 900,206
34	Consumption Charges	2,859,583	2,910,555	3,072,057	3,072,057	3,072,057	3,072,057	3,072,057	3,072,057	3,072,057	3,072,057	3,072,057	3,072,057
35	Purchased Water Pass-Through Charges	2,408,254	2,883,769	2,926,810	2,926,810	2,926,810	2,926,810	2,926,810	2,926,810	2,926,810	2,926,810	2,926,810	2,926,810
36	Total	\$ 6,106,241	\$ 6,647,804	\$ 6,899,074	\$ 6,899,074	\$ 6,899,074	\$ 6,899,074	\$ 6,899,074	\$ 6,899,074	\$ 6,899,074	\$ 6,899,074	\$ 6,899,074	\$ 6,899,074
37	Commercial - Irrigation Base Facility Charges	\$ 181,834	\$ 185,100	\$ 195,241	\$ 195,241	\$ 195,241	\$ 195,241	\$ 195,241	\$ 195,241	\$ 195,241	\$ 195,241	\$ 195,241	\$ 195,241
38	Consumption Charges	1,359,240	1,384,444	1,461,609	1,461,609	1,461,609	1,461,609	1,461,609	1,461,609	1,461,609	1,461,609	1,461,609	1,461,609
39	Purchased Water Pass-Through Charges	790,119	946,130	960,251	960,251	960,251	960,251	960,251	960,251	960,251	960,251	960,251	960,251
40	Total	\$ 2,331,193	\$ 2,515,674	\$ 2,617,101	\$ 2,617,101	\$ 2,617,101	\$ 2,617,101	\$ 2,617,101	\$ 2,617,101	\$ 2,617,101	\$ 2,617,101	\$ 2,617,101	\$ 2,617,101
41	Hotel - Domestic Base Facility Charges	\$ 234,121	\$ 238,328	\$ 251,389	\$ 251,389	\$ 251,389	\$ 251,389	\$ 251,389	\$ 251,389	\$ 251,389	\$ 251,389	\$ 251,389	\$ 251,389
42	Consumption Charges	1,987,427	2,023,012	2,134,659	2,134,659	2,134,659	2,134,659	2,134,659	2,134,659	2,134,659	2,134,659	2,134,659	2,134,659
43	Purchased Water Pass-Through Charges	1,504,627	1,801,719	1,828,610	1,828,610	1,828,610	1,828,610	1,828,610	1,828,610	1,828,610	1,828,610	1,828,610	1,828,610
44	Total	\$ 3,726,175	\$ 4,063,059	\$ 4,214,658	\$ 4,214,658	\$ 4,214,658	\$ 4,214,658	\$ 4,214,658	\$ 4,214,658	\$ 4,214,658	\$ 4,214,658	\$ 4,214,658	\$ 4,214,658
45	Hotel - Irrigation Base Facility Charges	\$ 45,411	\$ 46,227	\$ 48,761	\$ 48,761	\$ 48,761	\$ 48,761	\$ 48,761	\$ 48,761	\$ 48,761	\$ 48,761	\$ 48,761	\$ 48,761
46	Consumption Charges	535,606	545,466	575,798	575,798	575,798	575,798	575,798	575,798	575,798	575,798	575,798	575,798
47	Purchased Water Pass-Through Charges	278,715	333,748	338,730	338,730	338,730	338,730	338,730	338,730	338,730	338,730	338,730	338,730
48	Total	\$ 859,732	\$ 925,441	\$ 963,288	\$ 963,288	\$ 963,288	\$ 963,288	\$ 963,288	\$ 963,288	\$ 963,288	\$ 963,288	\$ 963,288	\$ 963,288
49	Religious - Domestic Base Facility Charges	\$ 2,877	\$ 2,928	\$ 3,089	\$ 3,089	\$ 3,089	\$ 3,089	\$ 3,089	\$ 3,089	\$ 3,089	\$ 3,089	\$ 3,089	\$ 3,089
50	Consumption Charges	7,816	7,955	8,398	8,398	8,398	8,398	8,398	8,398	8,398	8,398	8,398	8,398
51	Purchased Water Pass-Through Charges	6,903	8,266	8,390	8,390	8,390	8,390	8,390	8,390	8,390	8,390	8,390	8,390
52	Total	\$ 17,596	\$ 19,150	\$ 19,877	\$ 19,877	\$ 19,877	\$ 19,877	\$ 19,877	\$ 19,877	\$ 19,877	\$ 19,877	\$ 19,877	\$ 19,877
53	Religious - Irrigation Base Facility Charges	\$ 475	\$ 483	\$ 510	\$ 510	\$ 510	\$ 510	\$ 510	\$ 510	\$ 510	\$ 510	\$ 510	\$ 510
54	Consumption Charges	353	360	380	380	380	380	380	380	380	380	380	380
55	Purchased Water Pass-Through Charges	266	318	323	323	323	323	323	323	323	323	323	323
56	Total	\$ 1,093	\$ 1,161	\$ 1,212	\$ 1,212	\$ 1,212	\$ 1,212	\$ 1,212	\$ 1,212	\$ 1,212	\$ 1,212	\$ 1,212	\$ 1,212
57	City - Domestic Base Facility Charges	\$ 83,542	\$ 85,043	\$ 89,704	\$ 89,704	\$ 89,704	\$ 89,704	\$ 89,704	\$ 89,704	\$ 89,704	\$ 89,704	\$ 89,704	\$ 89,704
58	Consumption Charges	236,850	241,063	254,471	254,471	254,471	254,471	254,471	254,471	254,471	254,471	254,471	254,471
59	Purchased Water Pass-Through Charges	208,360	249,501	253,225	253,225	253,225	253,225	253,225	253,225	253,225	253,225	253,225	253,225
60	Total	\$ 528,752	\$ 575,607	\$ 597,400	\$ 597,400	\$ 597,400	\$ 597,400	\$ 597,400	\$ 597,400	\$ 597,400	\$ 597,400	\$ 597,400	\$ 597,400
61	City - Irrigation Base Facility Charges	\$ 298,951	\$ 304,324	\$ 320,994	\$ 320,994	\$ 320,994	\$ 320,994	\$ 320,994	\$ 320,994	\$ 320,994	\$ 320,994	\$ 320,994	\$ 320,994
62	Consumption Charges	1,317,450	1,341,949	1,416,818	1,416,818	1,416,818	1,416,818	1,416,818	1,416,818	1,416,818	1,416,818	1,416,818	1,416,818
63	Purchased Water Pass-Through Charges	798,601	956,286	970,559	970,559	970,559	970,559	970,559	970,559	970,559	970,559	970,559	970,559
64	Total	\$ 2,415,001	\$ 2,602,559	\$ 2,708,371	\$ 2,708,371	\$ 2,708,371	\$ 2,708,371	\$ 2,708,371	\$ 2,708,371	\$ 2,708,371	\$ 2,708,371	\$ 2,708,371	\$ 2,708,371

Table 1-2

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Water and Sewer Retail User Rate Revenue Under Existing Rates

Line No.	Description	Historical 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total Water User Rate Revenue													
65	Base Facility Charges	\$ 4,115,359	\$ 4,189,532	\$ 4,419,093	\$ 4,419,093	\$ 4,419,093	\$ 4,419,093	\$ 4,419,093	\$ 4,419,093	\$ 4,419,093	\$ 4,419,093	\$ 4,419,093	\$ 4,419,093
66	Consumption Charges	20,704,550	21,079,456	22,249,397	22,249,397	22,249,397	22,249,397	22,249,397	22,249,397	22,249,397	22,249,397	22,249,397	22,249,397
67	Purchased Water Pass-Through Charges	15,064,497	18,039,012	18,308,251	18,308,251	18,308,251	18,308,251	18,308,251	18,308,251	18,308,251	18,308,251	18,308,251	18,308,251
68	Total	\$ 39,884,406	\$ 43,308,000	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742
SEWER USER RATE REVENUE													
Residential - Domestic													
69	Base Facility Charges	\$ 635,672	\$ 641,238	\$ 656,411	\$ 656,411	\$ 656,411	\$ 656,411	\$ 656,411	\$ 656,411	\$ 656,411	\$ 656,411	\$ 656,411	\$ 656,411
70	Consumption Charges	2,868,150	2,892,718	2,963,560	2,963,560	2,963,560	2,963,560	2,963,560	2,963,560	2,963,560	2,963,560	2,963,560	2,963,560
71	Purchased Sewer Pass-Through Charges	3,904,038	4,061,612	3,919,928	3,919,928	3,919,928	3,919,928	3,919,928	3,919,928	3,919,928	3,919,928	3,919,928	3,919,928
72	Total	\$ 7,407,860	\$ 7,595,567	\$ 7,539,898	\$ 7,539,898	\$ 7,539,898	\$ 7,539,898	\$ 7,539,898	\$ 7,539,898	\$ 7,539,898	\$ 7,539,898	\$ 7,539,898	\$ 7,539,898
Apartment - Domestic													
73	Base Facility Charges	\$ 463,311	\$ 467,539	\$ 478,523	\$ 478,523	\$ 478,523	\$ 478,523	\$ 478,523	\$ 478,523	\$ 478,523	\$ 478,523	\$ 478,523	\$ 478,523
74	Consumption Charges	2,949,380	2,974,643	3,047,492	3,047,492	3,047,492	3,047,492	3,047,492	3,047,492	3,047,492	3,047,492	3,047,492	3,047,492
75	Purchased Sewer Pass-Through Charges	4,014,605	4,176,642	4,030,945	4,030,945	4,030,945	4,030,945	4,030,945	4,030,945	4,030,945	4,030,945	4,030,945	4,030,945
76	Total	\$ 7,427,297	\$ 7,618,824	\$ 7,556,960	\$ 7,556,960	\$ 7,556,960	\$ 7,556,960	\$ 7,556,960	\$ 7,556,960	\$ 7,556,960	\$ 7,556,960	\$ 7,556,960	\$ 7,556,960
Condominium - Domestic													
77	Base Facility Charges	\$ 967,074	\$ 975,871	\$ 998,766	\$ 998,766	\$ 998,766	\$ 998,766	\$ 998,766	\$ 998,766	\$ 998,766	\$ 998,766	\$ 998,766	\$ 998,766
78	Consumption Charges	8,805,197	8,880,618	9,098,103	9,098,103	9,098,103	9,098,103	9,098,103	9,098,103	9,098,103	9,098,103	9,098,103	9,098,103
79	Purchased Sewer Pass-Through Charges	11,985,362	12,469,113	12,034,144	12,034,144	12,034,144	12,034,144	12,034,144	12,034,144	12,034,144	12,034,144	12,034,144	12,034,144
80	Total	\$ 21,757,632	\$ 22,325,602	\$ 22,131,012	\$ 22,131,012	\$ 22,131,012	\$ 22,131,012	\$ 22,131,012	\$ 22,131,012	\$ 22,131,012	\$ 22,131,012	\$ 22,131,012	\$ 22,131,012
Duplex - Domestic													
81	Base Facility Charges	\$ 9,763	\$ 9,852	\$ 10,084	\$ 10,084	\$ 10,084	\$ 10,084	\$ 10,084	\$ 10,084	\$ 10,084	\$ 10,084	\$ 10,084	\$ 10,084
82	Consumption Charges	20,524	20,700	21,207	21,207	21,207	21,207	21,207	21,207	21,207	21,207	21,207	21,207
83	Purchased Sewer Pass-Through Charges	27,937	29,064	28,050	28,050	28,050	28,050	28,050	28,050	28,050	28,050	28,050	28,050
84	Total	\$ 58,224	\$ 59,616	\$ 59,341	\$ 59,341	\$ 59,341	\$ 59,341	\$ 59,341	\$ 59,341	\$ 59,341	\$ 59,341	\$ 59,341	\$ 59,341
Commercial - Domestic													
85	Base Facility Charges	\$ 899,954	\$ 908,135	\$ 929,458	\$ 929,458	\$ 929,458	\$ 929,458	\$ 929,458	\$ 929,458	\$ 929,458	\$ 929,458	\$ 929,458	\$ 929,458
86	Consumption Charges	5,208,742	5,253,358	5,382,011	5,382,011	5,382,011	5,382,011	5,382,011	5,382,011	5,382,011	5,382,011	5,382,011	5,382,011
87	Purchased Sewer Pass-Through Charges	7,089,979	7,376,143	7,118,836	7,118,836	7,118,836	7,118,836	7,118,836	7,118,836	7,118,836	7,118,836	7,118,836	7,118,836
88	Total	\$ 13,198,675	\$ 13,537,636	\$ 13,430,305	\$ 13,430,305	\$ 13,430,305	\$ 13,430,305	\$ 13,430,305	\$ 13,430,305	\$ 13,430,305	\$ 13,430,305	\$ 13,430,305	\$ 13,430,305
Hotel - Domestic													
89	Base Facility Charges	\$ 263,165	\$ 265,558	\$ 271,787	\$ 271,787	\$ 271,787	\$ 271,787	\$ 271,787	\$ 271,787	\$ 271,787	\$ 271,787	\$ 271,787	\$ 271,787
90	Consumption Charges	3,388,080	3,417,101	3,500,785	3,500,785	3,500,785	3,500,785	3,500,785	3,500,785	3,500,785	3,500,785	3,500,785	3,500,785
91	Purchased Sewer Pass-Through Charges	4,611,750	4,797,888	4,630,520	4,630,520	4,630,520	4,630,520	4,630,520	4,630,520	4,630,520	4,630,520	4,630,520	4,630,520
92	Total	\$ 8,262,995	\$ 8,480,548	\$ 8,403,092	\$ 8,403,092	\$ 8,403,092	\$ 8,403,092	\$ 8,403,092	\$ 8,403,092	\$ 8,403,092	\$ 8,403,092	\$ 8,403,092	\$ 8,403,092
Religious - Domestic													
93	Base Facility Charges	\$ 3,137	\$ 3,166	\$ 3,240	\$ 3,240	\$ 3,240	\$ 3,240	\$ 3,240	\$ 3,240	\$ 3,240	\$ 3,240	\$ 3,240	\$ 3,240
94	Consumption Charges	11,309	11,406	11,686	11,686	11,686	11,686	11,686	11,686	11,686	11,686	11,686	11,686
95	Purchased Sewer Pass-Through Charges	15,394	16,015	15,457	15,457	15,457	15,457	15,457	15,457	15,457	15,457	15,457	15,457
96	Total	\$ 29,841	\$ 30,588	\$ 30,383	\$ 30,383	\$ 30,383	\$ 30,383	\$ 30,383	\$ 30,383	\$ 30,383	\$ 30,383	\$ 30,383	\$ 30,383

Table 1-2

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Water and Sewer Retail User Rate Revenue Under Existing Rates

Line No.	Description	Historical 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Fiscal Year Ending September 30,													
	City - Domestic												
97	Base Facility Charges	\$ 86,708	\$ 87,497	\$ 89,549	\$ 89,549	\$ 89,549	\$ 89,549	\$ 89,549	\$ 89,549	\$ 89,549	\$ 89,549	\$ 89,549	\$ 89,549
98	Consumption Charges	335,354	338,226	346,509	346,509	346,509	346,509	346,509	346,509	346,509	346,509	346,509	346,509
99	Purchased Sewer Pass-Through Charges	456,473	474,897	458,331	458,331	458,331	458,331	458,331	458,331	458,331	458,331	458,331	458,331
100	Total	\$ 878,535	\$ 900,620	\$ 894,390	\$ 894,390	\$ 894,390	\$ 894,390	\$ 894,390	\$ 894,390	\$ 894,390	\$ 894,390	\$ 894,390	\$ 894,390
Total Sewer User Rate Revenue													
101	Base Facility Charges	\$ 3,328,784	\$ 3,358,856	\$ 3,437,818	\$ 3,437,818	\$ 3,437,818	\$ 3,437,818	\$ 3,437,818	\$ 3,437,818	\$ 3,437,818	\$ 3,437,818	\$ 3,437,818	\$ 3,437,818
102	Consumption Charges	23,586,737	23,788,770	24,371,352	24,371,352	24,371,352	24,371,352	24,371,352	24,371,352	24,371,352	24,371,352	24,371,352	24,371,352
103	Purchased Sewer Pass-Through Charges	32,105,538	33,401,375	32,236,211	32,236,211	32,236,211	32,236,211	32,236,211	32,236,211	32,236,211	32,236,211	32,236,211	32,236,211
104	Total	\$ 59,021,059	\$ 60,549,000	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380
TOTAL USER RATE REVENUE													
105	RECOGNIZED	<u>\$ 98,905,465</u>	<u>\$ 103,857,001</u>	<u>\$ 105,022,122</u>	<u>\$ 105,022,122</u>	<u>\$ 105,022,122</u>	<u>\$ 105,022,122</u>	<u>\$ 105,022,122</u>	<u>\$ 105,022,122</u>	<u>\$ 105,022,122</u>	<u>\$ 105,022,122</u>	<u>\$ 105,022,122</u>	<u>\$ 105,022,122</u>

Table 1-3

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water System

Development of Net Revenue Requirements from User Rates and Projected Revenue Adjustments - Water System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Operating Expenses											
1	Water System Expenses (425-0410)	\$ 34,965,264	\$ 35,672,637	\$ 36,560,971	\$ 37,506,188	\$ 38,512,346	\$ 39,412,396	\$ 40,359,335	\$ 41,345,690	\$ 42,266,166	\$ 43,234,270	\$ 44,247,255
2	Total Operating Expenses	\$ 34,965,264	\$ 35,672,637	\$ 36,560,971	\$ 37,506,188	\$ 38,512,346	\$ 39,412,396	\$ 40,359,335	\$ 41,345,690	\$ 42,266,166	\$ 43,234,270	\$ 44,247,255
	Debt Service											
3	Water and Sewer Revenue and Revenue Refunding Bonds, Series 2017	\$ 2,722,564	\$ 4,191,389	\$ 4,193,234	\$ 3,550,047	\$ 3,548,407	\$ 3,548,714	\$ 3,548,612	\$ 3,189,144	\$ 2,101,414	\$ 2,104,038	\$ 2,104,243
4	Water and Sewer Revenue Refunding Bonds, Series 2021A	1,863,717	400,017	400,017	400,017	400,017	400,017	400,017	400,017	1,359,417	1,358,187	1,356,495
5	DWSRF Loan for Lead and Copper Service Line	-	-	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509
8	Assumed Water and Sewer Revenue Bonds, Series	-	-	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594
9	Assumed Water and Sewer Revenue Bonds, Series	-	-	-	-	4,430,948	4,430,948	4,430,948	4,430,948	4,430,948	4,430,948	4,430,948
10	Assumed Water and Sewer Revenue Bonds, Series	-	-	-	-	-	-	2,623,582	2,623,582	2,623,582	2,623,582	2,623,582
11	Assumed Water and Sewer Revenue Bonds, Series	-	-	-	-	-	-	-	-	-	1,894,040	1,894,040
12	Total Debt Service	\$ 4,586,281	\$ 4,591,406	\$ 7,060,353	\$ 6,417,166	\$ 10,846,474	\$ 10,846,782	\$ 13,470,261	\$ 13,110,794	\$ 12,982,464	\$ 14,877,898	\$ 14,876,412
	Other Revenue Requirements											
13	Transfer to Capital Replacement and Improvement Fund	\$ 5,941,852	\$ -	\$ 9,434,346	\$ 6,701,500	\$ 8,863,430	\$ 5,393,935	\$ 2,399,000	\$ 25,586,000	\$ 3,647,322	\$ 19,570,000	\$ 21,695,459
14	Capital Funded from Rates	3,630,000	637,000	480,800	1,430,000	505,200	461,100	1,190,683	1,190,683	1,190,683	1,190,683	1,190,683
15	Total Other Revenue Requirements	\$ 9,571,852	\$ 637,000	\$ 9,915,146	\$ 8,131,500	\$ 9,368,630	\$ 5,855,035	\$ 3,589,683	\$ 26,776,683	\$ 4,838,005	\$ 20,760,683	\$ 22,886,142
16	Gross Revenue Requirements	\$ 49,123,397	\$ 40,901,043	\$ 53,536,471	\$ 52,054,854	\$ 58,727,450	\$ 56,114,213	\$ 57,419,279	\$ 81,233,167	\$ 60,086,634	\$ 78,872,851	\$ 82,009,809
	Less Income and Funds from Other Sources											
17	Other Operating Revenue	\$ 1,390,000	\$ 1,166,000	\$ 1,181,240	\$ 1,196,937	\$ 1,213,105	\$ 1,229,758	\$ 1,246,911	\$ 1,264,579	\$ 1,282,776	\$ 1,301,519	\$ 1,320,825
18	Unrestricted Interest Income	2,514,000	2,111,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
20	Net Revenue Requirements	\$ 45,219,397	\$ 37,624,043	\$ 51,355,231	\$ 49,857,917	\$ 56,514,345	\$ 53,884,454	\$ 55,172,368	\$ 78,968,588	\$ 57,803,859	\$ 76,571,332	\$ 79,688,984
	Revenue from Existing Rates											
21	Water System Rate Revenue	\$ 43,308,000	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742
22	Prior Year Rate Adjustment	-	-	-	4,047,900	8,460,100	13,269,400	15,890,500	18,629,500	21,491,800	22,522,100	23,568,300
23	Total Applicable Rate Revenue	\$ 43,308,000	\$ 44,976,742	\$ 44,976,742	\$ 49,024,642	\$ 53,436,842	\$ 58,246,142	\$ 60,867,242	\$ 63,606,242	\$ 66,468,542	\$ 67,498,842	\$ 68,545,042
24	Rate Adjustments	0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%
25	Effective Months	12	12	12	12	12	12	12	12	12	12	12
26	Percent of Current Year Effective	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
27	Revenue from Current Rate Adjustment	\$ -	\$ -	\$ 4,047,900	\$ 4,412,200	\$ 4,809,300	\$ 2,621,100	\$ 2,739,000	\$ 2,862,300	\$ 1,030,300	\$ 1,046,200	\$ 1,062,400
28	Total Rate Revenue	\$ 43,308,000	\$ 44,976,742	\$ 49,024,642	\$ 53,436,842	\$ 58,246,142	\$ 60,867,242	\$ 63,606,242	\$ 66,468,542	\$ 67,498,842	\$ 68,545,042	\$ 69,607,442
29	Revenue Surplus/(Deficiency) Under Proposed Rates	\$ (1,911,396)	\$ 7,352,699	\$ (2,330,590)	\$ 3,578,925	\$ 1,731,797	\$ 6,982,787	\$ 8,433,873	\$ (12,500,047)	\$ 9,694,983	\$ (8,026,290)	\$ (10,081,543)

Table 1-4

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Sewer System

Development of Net Revenue Requirements from User Rates and Projected Revenue Adjustments - Sewer System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Operating Expenses											
1	Sewer System Expenses (425-0420)	\$ 51,549,839	\$ 51,969,047	\$ 52,926,313	\$ 53,945,865	\$ 55,032,226	\$ 55,960,302	\$ 56,934,333	\$ 57,942,391	\$ 58,843,515	\$ 59,787,956	\$ 60,770,221
2	Total Operating Expenses	\$ 51,549,839	\$ 51,969,047	\$ 52,926,313	\$ 53,945,865	\$ 55,032,226	\$ 55,960,302	\$ 56,934,333	\$ 57,942,391	\$ 58,843,515	\$ 59,787,956	\$ 60,770,221
	Debt Service											
3	Water and Sewer Revenue and Revenue Refunding Bonds, Series 2017	\$ 3,917,836	\$ 6,031,511	\$ 6,034,166	\$ 5,108,604	\$ 5,106,244	\$ 5,106,686	\$ 5,106,539	\$ 4,589,256	\$ 3,023,986	\$ 3,027,762	\$ 3,028,057
4	Water and Sewer Revenue Refunding Bonds, Series 2021A	2,681,934	575,634	575,634	575,634	575,634	575,634	575,634	575,634	1,956,234	1,954,464	1,952,030
5	Assumed Water and Sewer Revenue Bonds, Series	-	-	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622
6	Assumed Water and Sewer Revenue Bonds, Series	-	-	-	-	4,749,761	4,749,761	4,749,761	4,749,761	4,749,761	4,749,761	4,749,761
7	Assumed Water and Sewer Revenue Bonds, Series	-	-	-	-	-	-	1,933,596	1,933,596	1,933,596	1,933,596	1,933,596
8	Assumed Water and Sewer Revenue Bonds, Series	-	-	-	-	-	-	-	-	-	1,894,040	1,894,040
9	Total Debt Service	\$ 6,599,770	\$ 6,607,145	\$ 9,777,422	\$ 8,851,859	\$ 13,599,260	\$ 13,599,703	\$ 15,533,151	\$ 15,015,869	\$ 14,831,199	\$ 16,727,245	\$ 16,725,107
	Other Revenue Requirements											
10	Transfer to Capital Replacement and Improvement Fund	\$ 17,912,127	\$ 8,234	\$ 12,045,562	\$ 13,704,000	\$ 17,865,930	\$ 7,393,935	\$ 13,899,000	\$ 25,586,000	\$ 3,647,322	\$ 19,570,000	\$ 21,695,459
11	Capital Funded from Rates	3,367,000	-	732,100	400,600	66,750	248,800	802,542	802,542	802,542	802,542	802,542
12	Total Other Revenue Requirements	\$ 21,279,127	\$ 8,234	\$ 12,777,662	\$ 14,104,600	\$ 17,932,680	\$ 7,642,735	\$ 14,701,542	\$ 26,388,542	\$ 4,449,864	\$ 20,372,542	\$ 22,498,000
13	Gross Revenue Requirements	\$ 79,428,736	\$ 58,584,425	\$ 75,481,397	\$ 76,902,325	\$ 86,564,166	\$ 77,202,739	\$ 87,169,026	\$ 99,346,802	\$ 78,124,577	\$ 96,887,743	\$ 99,993,327
	Less Income and Funds from Other Sources											
14	Other Operating Revenue	\$ 4,599,000	\$ 4,139,000	\$ 4,242,020	\$ 4,348,131	\$ 4,457,425	\$ 4,569,997	\$ 4,685,947	\$ 4,805,376	\$ 4,928,387	\$ 5,055,088	\$ 5,185,591
15	Unrestricted Interest Income	2,514,000	2,111,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
16	Net Revenue Requirements	\$ 72,315,736	\$ 52,334,425	\$ 70,239,377	\$ 71,554,194	\$ 81,106,741	\$ 71,632,742	\$ 81,483,078	\$ 93,541,426	\$ 72,196,190	\$ 90,832,655	\$ 93,807,736
	Revenue from Existing Rates											
17	Wastewater System Rate Revenue	\$ 60,549,000	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380	\$ 60,045,380
18	Prior Year Rate Adjustment	-	-	-	5,404,100	11,294,500	17,715,100	21,214,400	24,871,000	28,692,300	30,067,700	31,464,500
19	Total Applicable Rate Revenue	\$ 60,549,000	\$ 60,045,380	\$ 60,045,380	\$ 65,449,480	\$ 71,339,880	\$ 77,760,480	\$ 81,259,780	\$ 84,916,380	\$ 88,737,680	\$ 90,113,080	\$ 91,509,880
20	Rate Adjustments	0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%
21	Effective Months	12	12	12	12	12	12	12	12	12	12	12
22	Percent of Current Year Effective	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
23	Revenue from Current Rate Adjustment	\$ -	\$ -	\$ 5,404,100	\$ 5,890,500	\$ 6,420,600	\$ 3,499,200	\$ 3,656,700	\$ 3,821,200	\$ 1,375,400	\$ 1,396,800	\$ 1,418,400
24	Total Rate Revenue	\$ 60,549,000	\$ 60,045,380	\$ 65,449,480	\$ 71,339,980	\$ 77,760,480	\$ 81,259,680	\$ 84,916,480	\$ 88,737,580	\$ 90,113,080	\$ 91,509,880	\$ 92,928,280
25	Revenue Surplus/(Deficiency) Under Proposed Rates	\$ (11,766,735)	\$ 7,710,955	\$ (4,789,897)	\$ (214,214)	\$ (3,346,261)	\$ 9,626,938	\$ 3,433,402	\$ (4,803,846)	\$ 17,916,890	\$ 677,226	\$ (879,456)

Table 1-5
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Combined Water and Wastewater System

Projected Net Revenue Requirements - Combined Water and Sewer System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Operating Expenses											
1	Water System Expenses (425-0410)	\$ 34,965,264	\$ 35,672,637	\$ 36,560,971	\$ 37,506,188	\$ 38,512,346	\$ 39,412,396	\$ 40,359,335	\$ 41,345,690	\$ 42,266,166	\$ 43,234,270	\$ 44,247,255
2	Wastewater Division - 5300	51,549,839	51,969,047	52,926,313	53,945,865	55,032,226	55,960,302	56,934,333	57,942,391	58,843,515	59,787,956	60,770,221
3	Total Operating Expenses	\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476
	Debt Service											
4	Water and Sewer Revenue and Revenue Refunding Bonds, Series 2017	\$ 6,640,400	\$ 10,222,900	\$ 10,227,400	\$ 8,658,650	\$ 8,654,650	\$ 8,655,400	\$ 8,655,150	\$ 7,778,400	\$ 5,125,400	\$ 5,131,800	\$ 5,132,300
5	Water and Sewer Revenue Refunding Bonds, Series 2021A	4,545,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	3,315,650	3,312,650	3,308,525
6	DWSRF Loan for Lead and Copper Service Line Replacement	-	-	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509
7	Assumed Water and Sewer Revenue Bonds, Series 2025	-	-	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216
8	Assumed Water and Sewer Revenue Bonds, Series 2028	-	-	-	-	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709
9	Assumed Water and Sewer Revenue Bonds, Series 2030	-	-	-	-	-	-	4,557,178	4,557,178	4,557,178	4,557,178	4,557,178
10	Assumed Water and Sewer Revenue Bonds, Series 2033	-	-	-	-	-	-	-	-	3,788,081	3,788,081	3,788,081
11	Total Debt Service	\$ 11,186,050	\$ 11,198,550	\$ 16,837,775	\$ 15,269,025	\$ 24,445,734	\$ 24,446,484	\$ 29,003,413	\$ 28,126,663	\$ 27,813,663	\$ 31,605,143	\$ 31,601,518
	Other Revenue Requirements											
12	Transfer to Capital Replacement Fund	\$ 23,853,979	\$ 8,234	\$ 21,479,909	\$ 20,405,500	\$ 26,729,360	\$ 12,787,869	\$ 16,298,000	\$ 51,172,000	\$ 7,294,644	\$ 39,140,000	\$ 43,390,917
13	Capital Funded from Rates	6,997,000	637,000	1,212,900	1,830,600	571,950	709,900	1,993,225	1,993,225	1,993,225	1,993,225	1,993,225
14	Total Other Revenue Requirements	\$ 30,850,979	\$ 645,234	\$ 22,692,809	\$ 22,236,100	\$ 27,301,310	\$ 13,497,769	\$ 18,291,225	\$ 53,165,225	\$ 9,287,869	\$ 41,133,225	\$ 45,384,142
15	Gross Revenue Requirements	\$ 128,552,132	\$ 99,485,468	\$ 129,017,868	\$ 128,957,179	\$ 145,291,616	\$ 133,316,952	\$ 144,588,305	\$ 180,579,969	\$ 138,211,212	\$ 175,760,594	\$ 182,003,136
	Less Income and Funds from Other Sources											
16	Other Operating Revenue	\$ 5,989,000	\$ 5,305,000	\$ 5,423,260	\$ 5,545,068	\$ 5,670,530	\$ 5,799,756	\$ 5,932,858	\$ 6,069,954	\$ 6,211,163	\$ 6,356,608	\$ 6,506,416
17	Unrestricted Interest Income	5,028,000	4,222,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
19	Net Revenue Requirements	\$ 117,535,132	\$ 89,958,468	\$ 121,594,608	\$ 121,412,111	\$ 137,621,086	\$ 125,517,196	\$ 136,655,447	\$ 172,510,015	\$ 130,000,049	\$ 167,403,987	\$ 173,496,720
	Revenue from Existing Rates											
20	System Rate Revenue	\$ 103,857,001	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122	\$ 105,022,122
21	Prior Year Rate Adjustment	-	-	-	9,452,000	19,754,600	30,984,500	37,104,900	43,500,500	50,184,100	52,589,800	55,032,800
22	Total Applicable Rate Revenue	\$ 103,857,001	\$ 105,022,122	\$ 105,022,122	\$ 114,474,122	\$ 124,776,722	\$ 136,006,622	\$ 142,127,022	\$ 148,522,622	\$ 155,206,222	\$ 157,611,922	\$ 160,054,922
23	Effective Months	12	12	12	12	12	12	12	12	12	12	12
24	Percent of Current Year Effective	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
25	Revenue from Current Rate Adjustment w/ Effective Months	\$ -	\$ -	\$ 9,452,000	\$ 10,302,700	\$ 11,229,900	\$ 6,120,300	\$ 6,395,700	\$ 6,683,500	\$ 2,405,700	\$ 2,443,000	\$ 2,480,800
26	Revenue from Current Rate Adjustment w/ Full Year Implementat	\$ -	\$ -	\$ 9,452,000	\$ 10,302,700	\$ 11,229,900	\$ 6,120,300	\$ 6,395,700	\$ 6,683,500	\$ 2,405,700	\$ 2,443,000	\$ 2,480,800
27	Total Revenue w/ Effective Months	\$ 103,857,001	\$ 105,022,122	\$ 114,474,122	\$ 124,776,822	\$ 136,006,622	\$ 142,126,922	\$ 148,522,722	\$ 155,206,122	\$ 157,611,922	\$ 160,054,922	\$ 162,535,722
28	Total Revenue w/ Full Year Implementation	\$ 103,857,001	\$ 105,022,122	\$ 114,474,122	\$ 124,776,822	\$ 136,006,622	\$ 142,126,922	\$ 148,522,722	\$ 155,206,122	\$ 157,611,922	\$ 160,054,922	\$ 162,535,722
29	Revenue Adjustment w/ Effective Months	0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%
30	Revenue Adjustment w/ Full Year Implementation	0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%

Table 1-6

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water System

Projected Operating Expenses - Water System

Line No.	Expense Code	Description	Escalation Reference	Fiscal Year Ending September 30,										
				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Water System Expenses (425-0410)														
Personnel Services														
1	111	Salaries and Wages	Labor	\$ 2,769,000	\$ 3,231,000	\$ 3,392,550	\$ 3,562,178	\$ 3,740,286	\$ 3,927,301	\$ 4,123,666	\$ 4,329,849	\$ 4,546,341	\$ 4,773,659	\$ 5,012,341
2	132	Shift Differential	Labor	3,000	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
3	AddPers	Additional Personnel	Input	-	-	-	-	-	-	-	-	-	-	-
4		133	Steeplejack	Labor	8,000	4,000	4,200	4,410	4,631	4,862	5,105	5,360	5,628	5,910
5	135	Overtime	Labor	396,000	273,000	286,650	300,983	316,032	331,833	348,425	365,846	384,138	403,345	423,513
6	136	Holiday Pay - Overtime	Labor	13,000	18,000	18,900	19,845	20,837	21,879	22,973	24,122	25,328	26,594	27,924
7	139	Work Above Classification	Labor	1,000	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
8	153	Allowances	Labor	151,000	125,000	131,250	137,813	144,703	151,938	159,535	167,512	175,888	184,682	193,916
9	161	Retirement Contributions - Pension	Labor	730,000	812,000	852,600	895,230	939,992	986,991	1,036,341	1,088,158	1,142,566	1,199,694	1,259,679
10	162	Health and Life Insurance	HealthIns	444,000	598,000	657,800	723,580	795,938	875,532	963,085	1,059,393	1,165,333	1,281,866	1,410,053
11	163	Workmen's Compensation	Labor	2,000	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
12	165	Social Security and Medicare	Labor	49,000	54,000	56,700	59,535	62,512	65,637	68,919	72,365	75,983	79,783	83,772
13	167	OPEB Contributions	Labor	81,000	47,000	49,350	51,818	54,408	57,129	59,985	62,984	66,134	69,440	72,912
14	168	OPEB PayGo	Labor	326,000	357,000	374,850	393,593	413,272	433,936	455,633	478,414	502,335	527,452	553,824
15	357	Employee Fringe Benefits	Labor	60,000	-	-	-	-	-	-	-	-	-	-
16		Total Personnel Services		\$ 5,033,000	\$ 5,525,000	\$ 5,831,150	\$ 6,155,598	\$ 6,499,556	\$ 6,864,331	\$ 7,251,324	\$ 7,662,045	\$ 8,098,117	\$ 8,561,289	\$ 9,053,447
Operating Expenses														
17	312	Professional Services	Labor	\$ 1,244,000	\$ 1,272,000	\$ 1,335,600	\$ 1,402,380	\$ 1,472,499	\$ 1,546,124	\$ 1,623,430	\$ 1,704,602	\$ 1,789,832	\$ 1,879,323	\$ 1,973,289
18	313	Bank Fees	WRevenue	250,000	243,000	264,870	288,708	314,692	328,853	343,652	348,978	354,387	359,880	359,880
19	314	Electricity	ElectricW	492,000	477,000	496,080	515,923	536,560	558,023	580,343	603,557	627,699	652,807	678,920
20	316	Telephone	Inflation	47,000	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,046	44,337	45,667
21	317	Water	Inflation	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
22	318	Sewer Charges	Inflation	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
23	320	Revenue Consulting Fee	Constant	264,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
24	321	Postage and Shipping	Inflation	10,000	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
25	322	Administration Fees	Labor	1,469,000	1,421,000	1,492,050	1,566,653	1,644,985	1,727,234	1,813,596	1,904,276	1,999,490	2,099,464	2,204,437
26	323	Rent - Building and Equipment	Inflation	34,000	39,000	40,170	41,375	42,616	43,895	45,212	46,568	47,965	49,404	50,886
27	324	Printing - External	Inflation	46,000	41,000	42,230	43,497	44,802	46,146	47,530	48,956	50,425	51,938	53,496
28	325	Contract Maintenance	Repair	883,000	913,000	949,520	987,501	1,027,001	1,068,081	1,110,804	1,155,236	1,201,446	1,249,504	1,299,484
29	326	Supplies - Other	Inflation	294,000	-	-	-	-	-	-	-	-	-	-
30	329	Storm Water	Inflation	117,000	117,000	120,510	124,125	127,849	131,685	135,635	139,704	143,895	148,212	152,658
31	331	Supplies - Information Technology	Inflation	3,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
32	336	Water for Resale	Calculated	18,110,264	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033
33	341	Supplies - Office	Inflation	2,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
34	343	Other Operating Expenditures	Inflation	919,000	600,000	618,000	636,540	655,636	675,305	695,564	716,431	737,924	760,062	782,864
35	349	Other Contractual Services (DERM)	Calculated	2,219,000	2,698,604	2,941,478	3,206,210	3,494,768	3,652,034	3,816,374	3,988,112	4,049,930	4,112,702	4,176,446
36	351	Engine Fuel and Lubricants	Fuel	13,000	3,000	3,150	3,308	3,473	3,647	3,829	4,020	4,221	4,432	4,654
37	356	Contingencies	Constant	1,218,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000
38	360	E-Recording Fees	Inflation	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
39	361	Dues and Memberships	Inflation	2,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
40	363	Travel	Fuel	24,000	-	-	-	-	-	-	-	-	-	-
41	367	Training and Awards	Inflation	68,000	42,000	43,260	44,558	45,895	47,271	48,690	50,150	51,655	53,204	54,800
42	402	Uniform Expense	Inflation	38,000	32,000	32,960	33,949	34,967	36,016	37,097	38,210	39,356	40,537	41,753
43		Total Operating Expenses		\$ 27,769,264	\$ 28,163,637	\$ 28,646,621	\$ 29,163,231	\$ 29,716,062	\$ 30,136,501	\$ 30,575,868	\$ 31,024,896	\$ 31,376,362	\$ 31,741,709	\$ 32,115,973

Table 1-6
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water System

Projected Operating Expenses - Water System

Line No.	Expense Code	Description	Escalation Reference	Fiscal Year Ending September 30,										
				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
		Internal Charges												
44	501	Internal Services - Central Services	Labor	\$ 4,000	\$ 3,000	\$ 3,150	\$ 3,308	\$ 3,473	\$ 3,647	\$ 3,829	\$ 4,020	\$ 4,221	\$ 4,432	\$ 4,654
45	502	Internal Services - Property Management	Labor	6,000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757
46	503	Internal Services - Fleet Management	Labor	330,000	292,000	306,600	321,930	338,027	354,928	372,674	391,308	410,873	431,417	452,988
47	505	Internal Services - Self-Insurance	Labor	1,282,000	1,129,000	1,185,450	1,244,723	1,306,959	1,372,307	1,440,922	1,512,968	1,588,616	1,668,047	1,751,450
48	506	Internal Services - Applications / Computer Hardware	Labor	401,000	379,000	397,950	417,848	438,740	460,677	483,711	507,896	533,291	559,956	587,953
49	511	OIG Funding	Labor	140,000	176,000	184,800	194,040	203,742	213,929	224,626	235,857	247,650	260,032	273,034
50		Total Internal Charges		\$ 2,163,000	\$ 1,984,000	\$ 2,083,200	\$ 2,187,360	\$ 2,296,728	\$ 2,411,564	\$ 2,532,143	\$ 2,658,750	\$ 2,791,687	\$ 2,931,272	\$ 3,077,835
51		TOTAL WATER SYSTEM OPERATING EXPENSES		\$ 34,965,264	\$ 35,672,637	\$ 36,560,971	\$ 37,506,188	\$ 38,512,346	\$ 39,412,396	\$ 40,359,335	\$ 41,345,690	\$ 42,266,166	\$ 43,234,270	\$ 44,247,255

Table 1-7

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Sewer System

Projected Operating Expenses - Sewer System

Line No.	Expense Code	Description	Escalation Reference	Fiscal Year Ending September 30,										
				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Sewer System Expenses (425-0420)														
Personnel Services														
1	111	Salaries and Wages	Labor	\$ 1,934,000	\$ 2,331,000	\$ 2,447,550	\$ 2,569,928	\$ 2,698,424	\$ 2,833,345	\$ 2,975,012	\$ 3,123,763	\$ 3,279,951	\$ 3,443,949	\$ 3,616,146
2	132	Shift Differential	Labor	4,000	3,000	3,150	3,308	3,473	3,647	3,829	4,020	4,221	4,432	4,654
3	AddPers	Additional Personnel	Input	-	-	-	-	-	-	-	-	-	-	-
4		133	Steeplejack	Labor	18,000	16,000	16,800	17,640	18,522	19,448	20,421	21,442	22,514	23,639
5	135	Overtime	Labor	406,000	166,000	174,300	183,015	192,166	201,774	211,863	222,456	233,579	245,258	257,520
6	136	Holiday Pay - Overtime	Labor	20,000	22,000	23,100	24,255	25,468	26,741	28,078	29,482	30,956	32,504	34,129
7	139	Work Above Classification	Labor	1,000	1,000	1,050	1,103	1,158	1,216	1,276	1,340	1,407	1,477	1,551
8	153	Allowances	Labor	107,000	98,000	102,900	108,045	113,447	119,120	125,076	131,329	137,896	144,791	152,030
9	161	Retirement Contributions - Pension	Labor	508,000	586,000	615,300	646,065	678,368	712,287	747,901	785,296	824,561	865,789	909,078
10	162	Health and Life Insurance	HealthIns	323,000	412,000	453,200	498,520	548,372	603,209	663,530	729,883	802,871	883,159	971,474
11	163	Workmen's Compensation	Labor	2,000	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
12	165	Social Security and Medicare	Labor	37,000	39,000	40,950	42,998	45,147	47,405	49,775	52,264	54,877	57,621	60,502
13	167	OPEB Contributions	Labor	53,000	33,000	34,650	36,383	38,202	40,112	42,117	44,223	46,434	48,756	51,194
14	168	OPEB PayGo	Labor	215,000	245,000	257,250	270,113	283,618	297,799	312,689	328,323	344,740	361,977	380,075
15	357	Employee Fringe Benefits	Labor	40,000	-	-	-	-	-	-	-	-	-	-
16		Total Personnel Services		\$ 3,668,000	\$ 3,954,000	\$ 4,172,300	\$ 4,403,575	\$ 4,648,680	\$ 4,908,532	\$ 5,184,119	\$ 5,476,502	\$ 5,786,821	\$ 6,116,306	\$ 6,466,279
Operating Expenses														
17	312	Professional Services	Labor	\$ 1,416,000	\$ 1,568,000	\$ 1,646,400	\$ 1,728,720	\$ 1,815,156	\$ 1,905,914	\$ 2,001,209	\$ 2,101,270	\$ 2,206,333	\$ 2,316,650	\$ 2,432,483
18	313	Bank Fees	SRevenue	386,000	344,000	374,960	408,707	445,490	465,537	486,485	494,026	501,684	509,460	509,460
19	314	Electricity	ElectricS	428,000	434,000	451,360	469,414	488,191	507,719	528,027	549,148	571,114	593,959	617,717
20	316	Telephone	Inflation	28,000	28,000	28,840	29,705	30,596	31,514	32,460	33,433	34,436	35,470	36,534
21	317	Water	Inflation	59,000	44,000	45,320	46,680	48,080	49,522	51,008	52,538	54,114	55,738	57,410
22	318	Sewer Charges	Inflation	77,000	73,000	75,190	77,446	79,769	82,162	84,627	87,166	89,781	92,474	95,248
23	320	Revenue Consulting Fee	Constant	280,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
24	321	Postage and Shipping	Inflation	10,000	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
25	322	Administration Fees	Labor	1,495,000	1,281,000	1,345,050	1,412,303	1,482,918	1,557,064	1,634,917	1,716,663	1,802,496	1,892,620	1,987,251
26	323	Rent - Building and Equipment	Inflation	107,000	152,000	156,560	161,257	166,095	171,077	176,210	181,496	186,941	192,549	198,326
27	324	Printing - External	Inflation	8,000	-	-	-	-	-	-	-	-	-	-
28	325	Contract Maintenance	Repair	2,482,000	1,888,000	1,963,520	2,042,061	2,123,743	2,208,693	2,297,041	2,388,922	2,484,479	2,583,858	2,687,213
29	329	Storm Water	Inflation	3,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
30	331	Supplies - Information Technology	Inflation	4,000	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,896	38,003	39,143
31	337	Sewer Treatment	Calculated	33,397,839	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324
32	341	Supplies - Office	Inflation	2,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
33	342	Contracted Services - Repair and Maintenance	Repair	50,000	62,000	64,480	67,059	69,742	72,531	75,432	78,450	81,588	84,851	88,245
34	343	Other Operating Expenditures	Inflation	1,357,000	1,088,000	1,120,640	1,154,259	1,188,887	1,224,554	1,261,290	1,299,129	1,338,103	1,378,246	1,419,593
35	349	Other Contractual Services (DERM)	Calculated	3,548,000	3,602,723	3,926,969	4,280,399	4,665,629	4,875,581	5,094,989	5,324,255	5,406,785	5,490,593	5,575,697
36	351	Engine Fuel and Lubricants	Fuel	15,000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757
37	356	Contingencies	Constant	544,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000
38	361	Dues and Memberships	Inflation	1,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
39	363	Travel	Fuel	2,000	-	-	-	-	-	-	-	-	-	-
40	367	Training and Awards	Inflation	33,000	32,000	32,960	33,949	34,967	36,016	37,097	38,210	39,356	40,537	41,753
41	402	Uniform Expense	Inflation	26,000	26,000	26,780	27,583	28,411	29,263	30,141	31,045	31,977	32,936	33,924
42		Total Operating Expenses		\$ 45,758,839	\$ 45,995,047	\$ 46,633,013	\$ 47,315,240	\$ 48,045,143	\$ 48,596,447	\$ 49,172,124	\$ 49,758,896	\$ 50,214,351	\$ 50,687,190	\$ 51,170,259

Table 1-7
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Sewer System

Projected Operating Expenses - Sewer System

Line No.	Expense Code	Description	Escalation Reference	Fiscal Year Ending September 30,										
				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
		Internal Charges												
43	501	Internal Services - Central Services	Labor	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
44	502	Internal Services - Property Management	Labor	6,000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757
45	503	Internal Services - Fleet Management	Labor	407,000	399,000	418,950	439,898	461,892	484,987	509,236	534,698	561,433	589,505	618,980
46	505	Internal Services - Self-Insurance	Labor	1,290,000	1,085,000	1,139,250	1,196,213	1,256,023	1,318,824	1,384,765	1,454,004	1,526,704	1,603,039	1,683,191
47	506	Internal Services - Applications / Computer Hardware	Labor	172,000	222,000	233,100	244,755	256,993	269,842	283,335	297,501	312,376	327,995	344,395
48	511	OIG Funding	Labor	247,000	309,000	324,450	340,673	357,706	375,591	394,371	414,090	434,794	456,534	479,360
49		Total Internal Charges		\$ 2,123,000	\$ 2,020,000	\$ 2,121,000	\$ 2,227,050	\$ 2,338,403	\$ 2,455,323	\$ 2,578,089	\$ 2,706,993	\$ 2,842,343	\$ 2,984,460	\$ 3,133,683
50		TOTAL SEWER SYSTEM OPERATING EXPENSES		\$ 51,549,839	\$ 51,969,047	\$ 52,926,313	\$ 53,945,865	\$ 55,032,226	\$ 55,960,302	\$ 56,934,333	\$ 57,942,391	\$ 58,843,515	\$ 59,787,956	\$ 60,770,221

Table 1-8

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Operating Expenses - Combined Water and Sewer System [*]

Line No.	Expense Code	Description	ACFR Classification	Escalation Reference	Fiscal Year Ending September 30,										
					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Water System Expenses (425-0410)															
Personnel Services															
1	111	Salaries and Wages	Personal Services	Labor	\$ 2,769,000	\$ 3,231,000	\$ 3,392,550	\$ 3,562,178	\$ 3,740,286	\$ 3,927,301	\$ 4,123,666	\$ 4,329,849	\$ 4,546,341	\$ 4,773,659	\$ 5,012,341
2	132	Shift Differential	Personal Services	Labor	3,000	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
3	AddPers	Additional Personnel	Personal Services	Input	-	-	-	-	-	-	-	-	-	-	-
4	133	Steeplejack	Personal Services	Labor	8,000	4,000	4,200	4,410	4,631	4,862	5,105	5,360	5,628	5,910	6,205
5	135	Overtime	Personal Services	Labor	396,000	273,000	286,650	300,983	316,032	331,833	348,425	365,846	384,138	403,345	423,513
6	136	Holiday Pay - Overtime	Personal Services	Labor	13,000	18,000	18,900	19,845	20,837	21,879	22,973	24,122	25,328	26,594	27,924
7	139	Work Above Classification	Personal Services	Labor	1,000	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
8	153	Allowances	Personal Services	Labor	151,000	125,000	131,250	137,813	144,703	151,938	159,535	167,512	175,888	184,682	193,916
9	161	Retirement Contributions - Pension	Personal Services	Labor	730,000	812,000	852,600	895,230	939,992	986,991	1,036,341	1,088,158	1,142,566	1,199,694	1,259,679
10	162	Health and Life Insurance	Personal Services	HealthIns	444,000	598,000	657,800	723,580	795,938	875,532	963,085	1,059,393	1,165,333	1,281,866	1,410,053
11	163	Workmen's Compensation	Personal Services	Labor	2,000	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
12	165	Social Security and Medicare	Personal Services	Labor	49,000	54,000	56,700	59,535	62,512	65,637	68,919	72,365	75,983	79,783	83,772
13	167	OPEB Contributions	Personal Services	Labor	81,000	47,000	49,350	51,818	54,408	57,129	59,985	62,984	66,134	69,440	72,912
14	168	OPEB PayGo	Personal Services	Labor	326,000	357,000	374,850	393,593	413,272	433,936	455,633	478,414	502,335	527,452	553,824
15	357	Employee Fringe Benefits	Personal Services	Labor	60,000	-	-	-	-	-	-	-	-	-	-
16		Total Personnel Services			\$ 5,033,000	\$ 5,525,000	\$ 5,831,150	\$ 6,155,598	\$ 6,499,556	\$ 6,864,331	\$ 7,251,324	\$ 7,662,045	\$ 8,098,117	\$ 8,561,289	\$ 9,053,447
Operating Expenses															
17	312	Professional Services	Contractual Services	Labor	\$ 1,244,000	\$ 1,272,000	\$ 1,335,600	\$ 1,402,380	\$ 1,472,499	\$ 1,546,124	\$ 1,623,430	\$ 1,704,602	\$ 1,789,832	\$ 1,879,323	\$ 1,973,289
18	313	Bank Fees	Other Operating	WRevenue	250,000	243,000	264,870	288,708	314,692	328,853	343,652	348,978	354,387	359,880	359,880
19	314	Electricity	Utilities	ElectricW	492,000	477,000	496,080	515,923	536,560	558,023	580,343	603,557	627,699	652,807	678,920
20	316	Telephone	Utilities	Inflation	47,000	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,046	44,337	45,667
21	317	Water	Utilities	Inflation	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
22	318	Sewer Charges	Utilities	Inflation	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
23	320	Revenue Consulting Fee	Contractual Services	Constant	264,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
24	321	Postage and Shipping	Contractual Services	Inflation	10,000	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
25	322	Administration Fees	Administrative Fees	Labor	1,469,000	1,421,000	1,492,050	1,566,653	1,644,985	1,727,234	1,813,596	1,904,276	1,999,490	2,099,464	2,204,437
26	323	Rent - Building and Equipment	Contractual Services	Inflation	34,000	39,000	40,170	41,375	42,616	43,895	45,212	46,568	47,965	49,404	50,886
27	324	Printing - External	Contractual Services	Inflation	46,000	41,000	42,230	43,497	44,802	46,146	47,530	48,956	50,425	51,938	53,496
28	325	Contract Maintenance	Contractual Services	Repair	883,000	913,000	949,520	987,501	1,027,001	1,068,081	1,110,804	1,155,236	1,201,446	1,249,504	1,299,484
29	326	Supplies - Other	Operating Supplies	Inflation	294,000	-	-	-	-	-	-	-	-	-	-
30	329	Storm Water	Utilities	Inflation	117,000	117,000	120,510	124,125	127,849	131,685	135,635	139,704	143,895	148,212	152,658
31	331	Supplies - Information Technology	Other Operating	Inflation	3,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
32	336	Water for Resale	Contractual Services	Calculated	18,110,264	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033	18,372,033
33	341	Supplies - Office	Operating Supplies	Inflation	2,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
34	343	Other Operating Expenditures	Other Operating	Inflation	919,000	600,000	618,000	636,540	655,636	675,305	695,564	716,431	737,924	760,062	782,864
35	349	Other Contractual Services (DERM)	Contractual Services	Calculated	2,219,000	2,698,604	2,941,478	3,206,210	3,494,768	3,652,034	3,816,374	3,988,112	4,049,930	4,112,702	4,176,446
36	351	Engine Fuel and Lubricants	Other Operating	Fuel	13,000	3,000	3,150	3,308	3,473	3,647	3,829	4,020	4,221	4,432	4,654
37	356	Contingencies	Contingency	Constant	1,218,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000	1,436,000
38	360	E-Recording Fees	Other Operating	Inflation	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
39	361	Dues and Memberships	Contractual Services	Inflation	2,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
40	363	Travel	Contractual Services	Fuel	24,000	-	-	-	-	-	-	-	-	-	-
41	367	Training and Awards	Operating Supplies	Inflation	68,000	42,000	43,260	44,558	45,895	47,271	48,690	50,150	51,655	53,204	54,800
42	402	Uniform Expense	Operating Supplies	Inflation	38,000	32,000	32,960	33,949	34,967	36,016	37,097	38,210	39,356	40,537	41,753
43		Total Operating Expenses			\$ 27,769,264	\$ 28,163,637	\$ 28,646,621	\$ 29,163,231	\$ 29,716,062	\$ 30,136,501	\$ 30,575,868	\$ 31,024,896	\$ 31,376,362	\$ 31,741,709	\$ 32,115,973
Internal Charges															
44	501	Internal Services - Central Services	Internal Charges	Labor	\$ 4,000	\$ 3,000	\$ 3,150	\$ 3,308	\$ 3,473	\$ 3,647	\$ 3,829	\$ 4,020	\$ 4,221	\$ 4,432	\$ 4,654
45	502	Internal Services - Property Management	Internal Charges	Labor	6,000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757
46	503	Internal Services - Fleet Management	Internal Charges	Labor	330,000	292,000	306,600	321,930	338,027	354,928	372,674	391,308	410,873	431,417	452,988
47	505	Internal Services - Self-Insurance	Internal Charges	Labor	1,282,000	1,129,000	1,185,450	1,244,723	1,306,959	1,372,307	1,440,922	1,512,968	1,588,616	1,668,047	1,751,450
48	506	Internal Services - Applications / Computer Hardware	Internal Charges	Labor	401,000	379,000	397,950	417,848	438,740	460,677	483,711	507,896	533,291	559,956	587,953
49	511	OIG Funding	Internal Charges	Labor	140,000	176,000	184,800	194,040	203,742	213,929	224,626	235,857	247,650	260,032	273,034
50		Total Internal Charges			\$ 2,163,000	\$ 1,984,000	\$ 2,083,200	\$ 2,187,360	\$ 2,296,728	\$ 2,411,564	\$ 2,532,143	\$ 2,658,750	\$ 2,791,687	\$ 2,931,272	\$ 3,077,835
51		Total Water System Expenses (425-0410) Expenses			\$ 34,965,264	\$ 35,672,637	\$ 36,560,971	\$ 37,506,188	\$ 38,512,346	\$ 39,412,396	\$ 40,359,335	\$ 41,345,690	\$ 42,266,166	\$ 43,234,270	\$ 44,247,255

Table 1-8

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Operating Expenses - Combined Water and Sewer System [*]

Line No.	Expense Code	Description	ACFR Classification	Escalation Reference	Fiscal Year Ending September 30,										
					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Sewer System Expenses (425-0420)															
Personnel Services															
52	111	Salaries and Wages	Personal Services	Labor	\$ 1,934,000	\$ 2,331,000	\$ 2,447,550	\$ 2,569,928	\$ 2,698,424	\$ 2,833,345	\$ 2,975,012	\$ 3,123,763	\$ 3,279,951	\$ 3,443,949	\$ 3,616,146
53	132	Shift Differential	Personal Services	Labor	4,000	3,000	3,150	3,308	3,473	3,647	3,829	4,020	4,221	4,432	4,654
54	AddPers	Additional Personnel	Personal Services	Input	-	-	-	-	-	-	-	-	-	-	-
55	133	Steeplejack	Personal Services	Labor	18,000	16,000	16,800	17,640	18,522	19,448	20,421	21,442	22,514	23,639	24,821
56	135	Overtime	Personal Services	Labor	406,000	166,000	174,300	183,015	192,166	201,774	211,863	222,456	233,579	245,258	257,520
57	136	Holiday Pay - Overtime	Personal Services	Labor	20,000	22,000	23,100	24,255	25,468	26,741	28,078	29,482	30,956	32,504	34,129
58	139	Work Above Classification	Personal Services	Labor	1,000	1,000	1,050	1,103	1,158	1,216	1,276	1,340	1,407	1,477	1,551
59	153	Allowances	Personal Services	Labor	107,000	98,000	102,900	108,045	113,447	119,120	125,076	131,329	137,896	144,791	152,030
60	161	Retirement Contributions - Pension	Personal Services	Labor	508,000	586,000	615,300	646,065	678,368	712,287	747,901	785,296	824,561	865,789	909,078
61	162	Health and Life Insurance	Personal Services	HealthIns	323,000	412,000	453,200	498,520	548,372	603,209	663,530	729,883	802,871	883,159	971,474
62	163	Workmen's Compensation	Personal Services	Labor	2,000	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
63	165	Social Security and Medicare	Personal Services	Labor	37,000	39,000	40,950	42,998	45,147	47,405	49,775	52,264	54,877	57,621	60,502
64	167	OPEB Contributions	Personal Services	Labor	53,000	33,000	34,650	36,383	38,202	40,112	42,117	44,223	46,434	48,756	51,194
65	168	OPEB PayGo	Personal Services	Labor	215,000	245,000	257,250	270,113	283,618	297,799	312,689	328,323	344,740	361,977	380,075
66	357	Employee Fringe Benefits	Personal Services		40,000	-	-	-	-	-	-	-	-	-	-
67		Total Personnel Services			\$ 3,668,000	\$ 3,954,000	\$ 4,172,300	\$ 4,403,575	\$ 4,648,680	\$ 4,908,532	\$ 5,184,119	\$ 5,476,502	\$ 5,786,821	\$ 6,116,306	\$ 6,466,279
Operating Expenses															
68	312	Professional Services	Contractual Services	Labor	\$ 1,416,000	\$ 1,568,000	\$ 1,646,400	\$ 1,728,720	\$ 1,815,156	\$ 1,905,914	\$ 2,001,209	\$ 2,101,270	\$ 2,206,333	\$ 2,316,650	\$ 2,432,483
69	313	Bank Fees	Other Operating	SRevenue	386,000	344,000	374,960	408,707	445,490	465,537	486,485	494,026	501,684	509,460	509,460
70	314	Electricity	Utilities	ElectricS	428,000	434,000	451,360	469,414	488,191	507,719	528,027	549,148	571,114	593,959	617,717
71	316	Telephone	Utilities	Inflation	28,000	28,000	28,840	29,705	30,596	31,514	32,460	33,433	34,436	35,470	36,534
72	317	Water	Utilities	Inflation	59,000	44,000	45,320	46,680	48,080	49,522	51,008	52,538	54,114	55,738	57,410
73	318	Sewer Charges	Utilities	Inflation	77,000	73,000	75,190	77,446	79,769	82,162	84,627	87,166	89,781	92,474	95,248
74	320	Revenue Consulting Fee	Contractual Services	Constant	280,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
75	321	Postage and Shipping	Contractual Services	Inflation	10,000	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
76	322	Administration Fees	Administrative Fees	Labor	1,495,000	1,281,000	1,345,050	1,412,303	1,482,918	1,557,064	1,634,917	1,716,663	1,802,496	1,892,620	1,987,251
77	323	Rent - Building and Equipment	Contractual Services	Inflation	107,000	152,000	156,560	161,257	166,095	171,077	176,210	181,496	186,941	192,549	198,326
78	324	Printing - External	Contractual Services	Inflation	8,000	-	-	-	-	-	-	-	-	-	-
79	325	Contract Maintenance	Contractual Services	Repair	2,482,000	1,888,000	1,963,520	2,042,061	2,123,743	2,208,693	2,297,041	2,388,922	2,484,479	2,583,858	2,687,213
80	329	Storm Water	Utilities	Inflation	3,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
81	331	Supplies - Information Technology	Other Operating	Inflation	4,000	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,896	38,003	39,143
82	337	Sewer Treatment	Contractual Services	Calculated	33,397,839	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324	32,279,324
83	341	Supplies - Office	Operating Supplies	Inflation	2,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
84	342	Contracted Services - Repair and Maintenance	Contractual Services	Repair	50,000	62,000	64,480	67,059	69,742	72,531	75,432	78,450	81,588	84,851	88,245
85	343	Other Operating Expenditures	Other Operating	Inflation	1,357,000	1,088,000	1,120,640	1,154,259	1,188,887	1,224,554	1,261,290	1,299,129	1,338,103	1,378,246	1,419,593
86	349	Other Contractual Services (DERM)	Contractual Services	Calculated	3,548,000	3,602,723	3,926,969	4,280,399	4,665,629	4,875,581	5,094,989	5,324,255	5,406,785	5,490,593	5,575,697
87	351	Engine Fuel and Lubricants	Operating Supplies	Fuel	15,000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757
88	356	Contingencies	Contingency	Constant	544,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000	2,441,000
89	361	Dues and Memberships	Contractual Services	Inflation	1,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
90	363	Travel	Contractual Services	Fuel	2,000	-	-	-	-	-	-	-	-	-	-
91	367	Training and Awards	Operating Supplies	Inflation	33,000	32,000	32,960	33,949	34,967	36,016	37,097	38,210	39,356	40,537	41,753
92	402	Uniform Expense	Operating Supplies	Inflation	26,000	26,000	26,780	27,583	28,411	29,263	30,141	31,045	31,977	32,936	33,924
93		Total Operating Expenses			\$ 45,758,839	\$ 45,995,047	\$ 46,633,013	\$ 47,315,240	\$ 48,045,143	\$ 48,596,447	\$ 49,172,124	\$ 49,758,896	\$ 50,214,351	\$ 50,687,190	\$ 51,170,259
Internal Charges															
94	501	Internal Services - Central Services	Internal Charges	Labor	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
95	502	Internal Services - Property Management	Internal Charges	Labor	6,000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757
96	503	Internal Services - Fleet Management	Internal Charges	Labor	407,000	399,000	418,950	439,898	461,892	484,987	509,236	534,698	561,433	589,505	618,980
97	505	Internal Services - Self-Insurance	Internal Charges	Labor	1,290,000	1,085,000	1,139,250	1,196,213	1,256,023	1,318,824	1,384,765	1,454,004	1,526,704	1,603,039	1,683,191

Table 1-8

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Operating Expenses - Combined Water and Sewer System [*]

Line No.	Expense Code	Description	ACFR Classification	Escalation Reference	Fiscal Year Ending September 30,										
					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
98	506	Internal Services - Applications / Computer Hardware	Internal Charges	Labor	172,000	222,000	233,100	244,755	256,993	269,842	283,335	297,501	312,376	327,995	344,395
99	511	OIG Funding	Internal Charges	Labor	247,000	309,000	324,450	340,673	357,706	375,591	394,371	414,090	434,794	456,534	479,360
100		Total Internal Charges			\$ 2,123,000	\$ 2,020,000	\$ 2,121,000	\$ 2,227,050	\$ 2,338,403	\$ 2,455,323	\$ 2,578,089	\$ 2,706,993	\$ 2,842,343	\$ 2,984,460	\$ 3,133,683
101		Total Sewer System Expenses (425-0420) Expenses			\$ 51,549,839	\$ 51,969,047	\$ 52,926,313	\$ 53,945,865	\$ 55,032,226	\$ 55,960,302	\$ 56,934,333	\$ 57,942,391	\$ 58,843,515	\$ 59,787,956	\$ 60,770,221
102		TOTAL COMBINED SYSTEM OPERATING EXPENSES			\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476
		CAFR Format:													
103		Personal Services			\$ 8,701,000	\$ 9,479,000	\$ 10,003,450	\$ 10,559,173	\$ 11,148,236	\$ 11,772,863	\$ 12,435,444	\$ 13,138,547	\$ 13,884,938	\$ 14,677,595	\$ 15,519,726
104		Operating Supplies			478,000	142,000	146,360	150,856	155,492	160,272	165,202	170,286	175,528	180,935	186,511
105		Contractual Services			64,138,103	63,912,684	64,744,034	65,638,338	66,600,726	67,269,571	67,968,571	68,699,076	69,187,828	69,694,399	70,219,541
106		Utilities			1,253,000	1,213,000	1,258,500	1,305,729	1,354,755	1,405,645	1,458,472	1,513,309	1,570,236	1,629,331	1,690,679
107		Insurance			-	-	-	-	-	-	-	-	-	-	-
108		Internal Charges			4,286,000	4,004,000	4,204,200	4,414,410	4,635,131	4,866,887	5,110,231	5,365,743	5,634,030	5,915,732	6,211,518
109		Depreciation			-	-	-	-	-	-	-	-	-	-	-
110		Administrative Fees			2,964,000	2,702,000	2,837,100	2,978,955	3,127,903	3,284,298	3,448,513	3,620,938	3,801,985	3,992,085	4,191,689
111		Amortization			-	-	-	-	-	-	-	-	-	-	-
112		Claims and Judgments			-	-	-	-	-	-	-	-	-	-	-
113		Other Operating			2,933,000	2,312,000	2,416,640	2,527,592	2,645,330	2,736,162	2,830,235	2,903,183	2,978,135	3,055,150	3,120,813
114		Contingency			1,762,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000
115		Total Current Expenses			\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476
116		Less Administrative Fees, Depreciation, and Amortization			(2,964,000)	(2,702,000)	(2,837,100)	(2,978,955)	(3,127,903)	(3,284,298)	(3,448,513)	(3,620,938)	(3,801,985)	(3,992,085)	(4,191,689)
117		Current Expenses for Debt Service Coverage Purposes			\$83,551,103	\$84,939,684	\$86,650,184	\$88,473,098	\$90,416,669	\$92,088,401	\$93,845,155	\$95,667,143	\$97,307,695	\$99,030,141	\$100,825,787
118		Non-Operating			-	-	-	-	-	-	-	-	-	-	-
119		Check with Total (should be zero)			\$ -	\$ -	\$ -	\$ -	\$ 0	\$ (0)	\$ -	\$ 0	\$ (0)	\$ -	\$ -
[*]		Numbers may not add due to rounding.													

[*] Numbers may not add due to rounding.

Table 1-9

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projection of Wholesale Water and Sewer Charges from Miami-Dade County

Line No.	Description	Escalation Reference	Historical 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Miami-Dade County Wholesale Water Charges														
1	Water Sales (000's Gallons)		6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252
2	Percent Purchased from Miami-Dade County		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
3	Amount Purchased from Miami-Dade (000's Gallons)		6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252	6,898,252
4	Allowance for Non-Revenue Water		9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%
5	Projected Water Purchases (000's Gallons) [Line 1 / (1 - Line 4)]		7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057
6	Projected Water Treatment (MGD)		20.970	20.913	20.970	20.970	20.970	20.913	20.970	20.970	20.970	20.913	20.970	20.970
7	<u>Volumetric Charges</u>													
8	Total Flow (000's Gallons)		7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057	7,654,057
9	Rate Per 1,000 Gallons	MDBulkW	\$ 1.9273	\$ 2.3661	\$ 2.4003	\$ 2.4003	\$ 2.4003	\$ 2.4003	\$ 2.4003	\$ 2.4003	\$ 2.4003	\$ 2.4003	\$ 2.4003	\$ 2.4003
10	Total Miami-Dade County Wholesale Water Charges			\$ 18,110,264	\$ 18,372,033	\$ 18,372,033	\$ 18,372,033	\$ 18,372,033	\$ 18,372,033	\$ 18,372,033	\$ 18,372,033	\$ 18,372,033	\$ 18,372,033	\$ 18,372,033
11	Miami-Dade County Wholesale Sewer Charges			22.8%	1.4%									
12	Billed Wastewater Flow to Miami-Beach Customers (000's Gallons)		4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184	4,776,184
13	City of Miami Beach Gallons Treated By Miami-Dade County		7,694,265	7,694,265	7,694,265	7,694,265	7,694,265	7,694,265	7,694,265	7,694,265	7,694,265	7,694,265	7,694,265	7,694,265
14	Allowance for Inflow and Infiltration / Unbilled Sewer		37.93%	37.93%	37.93%	37.93%	37.93%	37.93%	37.93%	37.93%	37.93%	37.93%	37.93%	37.93%
15	Flow from Satellite Cities		840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030	840,030
16	Projected Wastewater Flow Treated (000's Gallons) [Line 13 + Line 15]		8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598
17	Projected Wastewater Treatment (MGD)		23.215	23.152	23.215	23.215	23.215	23.152	23.215	23.215	23.215	23.152	23.215	23.215
18	<u>Volumetric Charges</u>													
18	Total Flow (000's Gallons)			8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598	8,473,598
19	Average Rate Per 1,000 Gallons	MDBulkS	\$ 3.7422	\$ 3.9414	\$ 3.8094	\$ 3.8094	\$ 3.8094	\$ 3.8094	\$ 3.8094	\$ 3.8094	\$ 3.8094	\$ 3.8094	\$ 3.8094	\$ 3.8094
20	Total Miami-Dade County Wholesale Sewer Charges			\$ 33,397,839	\$ 32,279,324	\$ 32,279,324	\$ 32,279,324	\$ 32,279,324	\$ 32,279,324	\$ 32,279,324	\$ 32,279,324	\$ 32,279,324	\$ 32,279,324	\$ 32,279,324
21	Total Miami-Dade County Wholesale Charges			\$ 51,508,103	\$ 50,651,357	\$ 50,651,357	\$ 50,651,357	\$ 50,651,357	\$ 50,651,357	\$ 50,651,357	\$ 50,651,357	\$ 50,651,357	\$ 50,651,357	\$ 50,651,357

[*] Historical and projected billed wastewater flow by entity is as follows:

Historical Wastewater Flow By Entity [*]	
	Ended
Entity	2023
City of Miami Beach	7,633,568
<u>Satellite Municipalities:</u>	
Village of Bal Harbour	297,749
Town of Bay Harbor Islands	256,808
Indian Creek Village	14,588
Town of Surfside	270,885
Total Flow from Satellite Municipalities	840,030
Total Billed Wastewater Flow (kgal)	8,473,598

[*] Amounts shown are in thousands of gallons (kgal).

Table 1-10

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water and Sewer System

Water and Sewer System Debt Service Allocation to Individual Systems

Line No.	Description	Percent		Fiscal Year Ending September 30,										
		Water	Sewer	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
EXISTING DEBT SERVICE														
<u>Existing Senior Lien Debt</u>														
Water and Sewer Revenue and Revenue Refunding Bonds, Series 2017														
1	Amount Funded	41.00%	59.00%	\$ 115,180,000										
2	Start Balance			\$ 107,175,000	\$ 105,625,000	\$ 100,415,000	\$ 94,940,000	\$ 90,760,000	\$ 86,375,000	\$ 81,770,000	\$ 76,935,000	\$ 72,735,000	\$ 71,020,000	\$ 69,230,000
3	Plus: Interest			5,090,400	5,012,900	4,752,400	4,478,650	4,269,650	4,050,400	3,820,150	3,578,400	3,410,400	3,341,800	3,252,300
4	Less: Payments			6,640,400	10,222,900	10,227,400	8,658,650	8,654,650	8,655,400	8,655,150	7,778,400	5,125,400	5,131,800	5,132,300
5	Balance End of Year			\$ 105,625,000	\$ 100,415,000	\$ 94,940,000	\$ 90,760,000	\$ 86,375,000	\$ 81,770,000	\$ 76,935,000	\$ 72,735,000	\$ 71,020,000	\$ 69,230,000	\$ 67,350,000
Water and Sewer Revenue Refunding Bonds, Series 2021A														
6	Amount Funded	41.00%	59.00%	\$ 32,480,000										
7	Start Balance			\$ -	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 30,080,000	\$ 27,560,000
8	Plus: Interest			1,045,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	915,650	792,650	663,525
9	Less: Payments			4,545,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	3,315,650	3,312,650	3,308,525
10	Balance End of Year			\$ -	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 32,480,000	\$ 30,080,000	\$ 27,560,000	\$ 24,915,000
Total Existing Senior Lien Debt														
11	Amount Funded			\$ 153,440,000										
12	Start Balance			\$ 107,175,000	\$ 138,105,000	\$ 132,895,000	\$ 127,420,000	\$ 123,240,000	\$ 118,855,000	\$ 114,250,000	\$ 109,415,000	\$ 105,215,000	\$ 101,100,000	\$ 96,790,000
13	Plus: Interest			6,136,050	5,988,550	5,728,050	5,454,300	5,245,300	5,026,050	4,795,800	4,554,050	4,326,050	4,134,450	3,915,825
14	Less: Payments			11,186,050	11,198,550	11,203,050	9,634,300	9,630,300	9,631,050	9,630,800	8,754,050	8,441,050	8,444,450	8,440,825
15	Balance End of Year			\$ 105,625,000	\$ 132,895,000	\$ 127,420,000	\$ 123,240,000	\$ 118,855,000	\$ 114,250,000	\$ 109,415,000	\$ 105,215,000	\$ 101,100,000	\$ 96,790,000	\$ 92,265,000
<u>Existing State Revolving Fund (SRF) Loan Debt</u>														
DWSRF Loan for Lead and Copper Service Line														
16	Amount Funded	100.00%	0.00%	\$ 1,682,899										
17	Start Balance			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Plus: Interest			-	-	50,022	48,133	46,187	44,183	42,118	39,990	37,798	35,540	33,214
19	Less: Payments			-	-	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509
20	Balance End of Year			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Existing SRF Loan Debt														
21	Amount Funded			\$ 1,682,899										
22	Start Balance			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	Plus: Interest			-	-	50,022	48,133	46,187	44,183	42,118	39,990	37,798	35,540	33,214
24	Less: Payments			-	-	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509
25	Balance End of Year			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Existing Debt														
26	Amount Funded			\$ 155,122,899										
27	Start Balance			\$ 107,175,000	\$ 138,105,000	\$ 132,895,000	\$ 127,420,000	\$ 123,240,000	\$ 118,855,000	\$ 114,250,000	\$ 109,415,000	\$ 105,215,000	\$ 101,100,000	\$ 96,790,000
28	Plus: Interest			6,136,050	5,988,550	5,778,072	5,502,433	5,291,487	5,070,233	4,837,918	4,594,040	4,363,848	4,169,990	3,949,039
29	Less: Payments			11,186,050	11,198,550	11,315,559	9,746,809	9,742,809	9,743,559	9,743,309	8,866,559	8,553,559	8,556,959	8,553,334
30	Balance End of Year			\$ 105,625,000	\$ 132,895,000	\$ 127,420,000	\$ 123,240,000	\$ 118,855,000	\$ 114,250,000	\$ 109,415,000	\$ 105,215,000	\$ 101,100,000	\$ 96,790,000	\$ 92,265,000

Table 1-10

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water and Sewer System

Water and Sewer System Debt Service Allocation to Individual Systems

Line No.	Description	Percent		Fiscal Year Ending September 30,										
		Water	Sewer	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
PROPOSED DEBT SERVICE														
Proposed Senior Lien Debt														
Assumed Water and Sewer Revenue Bonds, Series 2025														
31	Amount Funded	42.64%	57.36%	\$ 84,890,000										
32	Start Balance			\$ -	\$ -	\$ 84,890,000	\$ 83,612,284	\$ 82,270,682	\$ 80,861,999	\$ 79,382,883	\$ 77,829,811	\$ 76,199,085	\$ 74,486,823	\$ 72,688,948
33	Plus: Interest			-	-	4,244,500	4,180,614	4,113,534	4,043,100	3,969,144	3,891,491	3,809,954	3,724,341	3,634,447
34	Less: Payments			-	-	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216
35	Balance End of Year			\$ -	\$ -	\$ 83,612,284	\$ 82,270,682	\$ 80,861,999	\$ 79,382,883	\$ 77,829,811	\$ 76,199,085	\$ 74,486,823	\$ 72,688,948	\$ 70,801,179
Assumed Water and Sewer Revenue Bonds, Series 2028														
36	Amount Funded	48.26%	51.74%	\$ 141,130,000										
37	Start Balance			\$ -	\$ -	\$ -	\$ -	\$ 141,130,000	\$ 139,005,791	\$ 136,775,371	\$ 134,433,431	\$ 131,974,394	\$ 129,392,404	\$ 126,681,315
38	Plus: Interest			-	-	-	-	7,056,500	6,950,290	6,838,769	6,721,672	6,598,720	6,469,620	6,334,066
39	Less: Payments			-	-	-	-	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709
40	Balance End of Year			\$ -	\$ -	\$ -	\$ -	\$ 139,005,791	\$ 136,775,371	\$ 134,433,431	\$ 131,974,394	\$ 129,392,404	\$ 126,681,315	\$ 123,834,672
Assumed Water and Sewer Revenue Bonds, Series 2030														
41	Amount Funded	57.57%	42.43%	\$ 70,055,000										
42	Start Balance			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,055,000	\$ 69,000,572	\$ 67,893,422	\$ 66,730,915	\$ 65,510,282
43	Plus: Interest			-	-	-	-	-	-	3,502,750	3,450,029	3,394,671	3,336,546	3,275,514
44	Less: Payments			-	-	-	-	-	-	4,557,178	4,557,178	4,557,178	4,557,178	4,557,178
45	Balance End of Year			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69,000,572	\$ 67,893,422	\$ 66,730,915	\$ 65,510,282	\$ 64,228,618
Assumed Water and Sewer Revenue Bonds, Series 2033														
46	Amount Funded	50.00%	50.00%	\$ 55,055,000										
47	Start Balance			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 55,055,000	\$ 54,294,944
48	Plus: Interest			-	-	-	-	-	-	-	-	-	3,028,025	2,986,222
49	Less: Payments			-	-	-	-	-	-	-	-	-	3,788,081	3,788,081
50	Balance End of Year			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54,294,944	\$ 53,493,085
Total Proposed Senior Lien Debt														
51	Amount Funded			\$ 351,130,000										
52	Start Balance			\$ -	\$ -	\$ 84,890,000	\$ 83,612,284	\$ 223,400,682	\$ 219,867,790	\$ 286,213,254	\$ 281,263,813	\$ 276,066,901	\$ 325,665,142	\$ 319,175,490
53	Plus: Interest			-	-	4,244,500	4,180,614	11,170,034	10,993,390	14,310,663	14,063,191	13,803,345	16,558,532	16,230,249
54	Less: Payments			-	-	5,522,216	5,522,216	14,702,925	14,702,925	19,260,104	19,260,104	19,260,104	23,048,184	23,048,184
55	Balance End of Year			\$ -	\$ -	\$ 83,612,284	\$ 82,270,682	\$ 219,867,790	\$ 216,158,254	\$ 281,263,813	\$ 276,066,901	\$ 270,610,142	\$ 319,175,490	\$ 312,357,554
Total Proposed Debt														
56	Amount Funded			\$ 351,130,000										
57	Start Balance			\$ -	\$ -	\$ 84,890,000	\$ 83,612,284	\$ 223,400,682	\$ 219,867,790	\$ 286,213,254	\$ 281,263,813	\$ 276,066,901	\$ 325,665,142	\$ 319,175,490
58	Plus: Interest			-	-	4,244,500	4,180,614	11,170,034	10,993,390	14,310,663	14,063,191	13,803,345	16,558,532	16,230,249
59	Less: Payments			-	-	5,522,216	5,522,216	14,702,925	14,702,925	19,260,104	19,260,104	19,260,104	23,048,184	23,048,184
60	Balance End of Year			\$ -	\$ -	\$ 83,612,284	\$ 82,270,682	\$ 219,867,790	\$ 216,158,254	\$ 281,263,813	\$ 276,066,901	\$ 270,610,142	\$ 319,175,490	\$ 312,357,554
TOTAL DEBT														
61	Amount Funded			\$ 506,252,899										
62	Start Balance			\$ 107,175,000	\$ 138,105,000	\$ 217,785,000	\$ 211,032,284	\$ 346,640,682	\$ 338,722,790	\$ 400,463,254	\$ 390,678,813	\$ 381,281,901	\$ 426,765,142	\$ 415,965,490
63	Plus: Interest			6,136,050	5,988,550	10,022,572	9,683,047	16,461,521	16,063,622	19,148,580	18,657,231	18,167,193	20,728,522	20,179,288
64	Less: Payments			11,186,050	11,198,550	16,837,775	15,269,025	24,445,734	24,446,484	29,003,413	28,126,663	27,813,663	31,605,143	31,601,518
65	Balance End of Year			\$ 105,625,000	\$ 132,895,000	\$ 211,032,284	\$ 205,510,682	\$ 338,722,790	\$ 330,408,254	\$ 390,678,813	\$ 381,281,901	\$ 371,710,142	\$ 415,965,490	\$ 404,622,554

Table 1-10

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water and Sewer System

Water and Sewer System Debt Service Allocation to Individual Systems

Line No.	Description	Percent		Fiscal Year Ending September 30,										
		Water	Sewer	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
66	Total Interest Payments			\$ 6,136,050	\$ 5,988,550	\$ 10,022,572	\$ 9,683,047	\$ 16,461,521	\$ 16,063,622	\$ 19,148,580	\$ 18,657,231	\$ 18,167,193	\$ 20,728,522	\$ 20,179,288
67	Total Principal Payments			5,050,000	5,210,000	6,815,203	5,585,978	7,984,213	8,382,862	9,854,832	9,469,432	9,646,469	10,876,621	11,422,230
68	Total Debt Service			\$ 11,186,050	\$ 11,198,550	\$ 16,837,775	\$ 15,269,025	\$ 24,445,734	\$ 24,446,484	\$ 29,003,413	\$ 28,126,663	\$ 27,813,663	\$ 31,605,143	\$ 31,601,518
WATER SYSTEM DEBT SERVICE														
	Water and Sewer Revenue and Revenue Refunding Bonds, Series 2017	41.00%		\$ 2,722,564	\$ 4,191,389	\$ 4,193,234	\$ 3,550,047	\$ 3,548,407	\$ 3,548,714	\$ 3,548,612	\$ 3,189,144	\$ 2,101,414	\$ 2,104,038	\$ 2,104,243
70	2021A	41.00%		1,863,717	400,017	400,017	400,017	400,017	400,017	400,017	400,017	1,359,417	1,358,187	1,356,495
71	DWSRF Loan for Lead and Copper Service Line	100.00%		-	-	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509	112,509
72	Assumed Water and Sewer Revenue Bonds, Series 2025	42.64%		-	-	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594	2,354,594
73	Assumed Water and Sewer Revenue Bonds, Series 2028	48.26%		-	-	-	-	4,430,948	4,430,948	4,430,948	4,430,948	4,430,948	4,430,948	4,430,948
74	Assumed Water and Sewer Revenue Bonds, Series 2030	57.57%		-	-	-	-	-	-	2,623,582	2,623,582	2,623,582	2,623,582	2,623,582
75	Assumed Water and Sewer Revenue Bonds, Series 2033	50.00%		-	-	-	-	-	-	-	-	-	1,894,040	1,894,040
76	Total			\$ 4,586,281	\$ 4,591,406	\$ 7,060,353	\$ 6,417,166	\$ 10,846,474	\$ 10,846,782	\$ 13,470,261	\$ 13,110,794	\$ 12,982,464	\$ 14,877,898	\$ 14,876,412
SEWER SYSTEM DEBT SERVICE														
	Water and Sewer Revenue and Revenue Refunding Bonds, Series 2017	59.00%		\$ 3,917,836	\$ 6,031,511	\$ 6,034,166	\$ 5,108,604	\$ 5,106,244	\$ 5,106,686	\$ 5,106,539	\$ 4,589,256	\$ 3,023,986	\$ 3,027,762	\$ 3,028,057
78	2021A	59.00%		2,681,934	575,634	575,634	575,634	575,634	575,634	575,634	575,634	1,956,234	1,954,464	1,952,030
79	Assumed Water and Sewer Revenue Bonds, Series 2025	57.36%		-	-	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622	3,167,622
80	Assumed Water and Sewer Revenue Bonds, Series 2028	51.74%		-	-	-	-	4,749,761	4,749,761	4,749,761	4,749,761	4,749,761	4,749,761	4,749,761
81	Assumed Water and Sewer Revenue Bonds, Series 2030	42.43%		-	-	-	-	-	-	1,933,596	1,933,596	1,933,596	1,933,596	1,933,596
82	Assumed Water and Sewer Revenue Bonds, Series 2033	50.00%		-	-	-	-	-	-	-	-	-	1,894,040	1,894,040
83	Total			\$ 6,599,770	\$ 6,607,145	\$ 9,777,422	\$ 8,851,859	\$ 13,599,260	\$ 13,599,703	\$ 15,533,151	\$ 15,015,869	\$ 14,831,199	\$ 16,727,245	\$ 16,725,107
84	Water System (%)			41.00%	41.00%	41.93%	42.03%	44.37%	44.37%	46.44%	46.61%	46.68%	47.07%	47.07%
85	Sewer System (%)			59.00%	59.00%	58.07%	57.97%	55.63%	55.63%	53.56%	53.39%	53.32%	52.93%	52.93%
86	Total			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table 1-11

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Estimated Water and Sewer System Multi-Year Capital Improvement Program and Funding Sources [a]

Line No.	Description	Project Type	Funding Source	Escalation Factor	Fiscal Year Ending September 30,												Total
					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034		
WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM																	
Departmental Capital																	
1	Vehicles and Equipment - Water		REV	None	\$ 899,000	\$ 162,000	\$ 5,800	\$ 1,030,000	\$ 105,200	\$ 61,100	\$ 377,183	\$ 377,183	\$ 377,183	\$ 377,183	\$ 377,183	\$ 4,149,017	
2	Other Departmental Capital - Water		REV	None	2,731,000	475,000	475,000	400,000	400,000	400,000	813,500	813,500	813,500	813,500	813,500	8,948,500	
3	Adjustments		REV		-	-	-	-	-	-	-	-	-	-	-	-	
4	Subtotal - Departmental Capital				\$ 3,630,000	\$ 637,000	\$ 480,800	\$ 1,430,000	\$ 505,200	\$ 461,100	\$ 1,190,683	\$ 1,190,683	\$ 1,190,683	\$ 1,190,683	\$ 1,190,683	\$ 13,097,517	
Major Capital Projects																	
5	SCADA & PROGRAMMABLE LOGIC CONTROLLERS	Critical Needs	CRF	None	\$ (106,298)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (106,298)	
STORMWATER CRITICAL NEEDS - ANCILLARY WATER AND																	
6	SEWER LINE ADJUSTMENTS	Critical Needs	CRF	None	-	-	1,078,000	856,000	1,089,000	389,000	649,000	1,336,000	824,000	1,070,000	774,000	8,065,000	
7	WATER & WASTEWATER MAINS AND REHAB	Critical Needs	CRF	None	-	-	(0)	0	4,951,108	4,404,935	1,750,000	1,750,000	-	18,500,000	18,500,000	49,856,043	
8	WATER & WASTEWATER MAINS AND REHAB		B1	None	31,509,275	-	-	-	-	-	-	-	-	-	-	31,509,275	
9	WATER & WASTEWATER MAINS AND REHAB		B2	None	-	-	18,543,947	17,826,411	-	-	-	-	-	-	-	36,370,358	
10	WATER & WASTEWATER MAINS AND REHAB		B4	None	-	-	-	-	-	-	-	-	19,250,000	-	-	19,250,000	
11	WATER PUMP STATIONS IMPROVEMENTS	Critical Needs	CRF	None	1,239,310	-	-	1,000,000	-	-	-	-	-	-	-	2,239,310	
12	WATER PUMP STATIONS IMPROVEMENTS		B2	None	-	-	13,094,801	-	-	-	-	-	-	-	-	13,094,801	
13	WATER PUMP STATIONS IMPROVEMENTS		B3	None	-	-	-	-	-	9,000,000	-	-	-	-	-	9,000,000	
14	1ST STREET-ALTON RD TO WASHINGTON		B2	None	-	-	6,494,518	-	-	-	-	-	-	-	-	6,494,518	
15	1ST STREET-ALTON RD TO WASHINGTON PH 3+4	Neighborhoods	B3	None	-	-	-	-	-	14,515,000	-	-	-	-	-	14,515,000	
16	FLAMINGO-LUMMUS C PHASE 1	Neighborhoods	CRF	None	-	-	-	-	-	-	-	-	-	-	2,421,459	2,421,459	
17	NORMANDY ISLES A PHASE 1	Neighborhoods	CRF	None	-	-	-	-	2,823,322	-	-	22,500,000	-	-	-	25,323,322	
18	NORMANDY ISLES A PHASE 1	Neighborhoods	B3	None	-	-	-	-	-	-	-	2,909,896	-	-	-	2,909,896	
19	NORMANDY ISLES A PHASE 2	Neighborhoods	CRF	None	-	-	-	-	-	-	-	-	2,823,322	-	-	2,823,322	
20	NORTH SHORE D - TOWN CENTER PHASE 1	Neighborhoods	B2	None	-	-	-	5,771,581	-	-	-	-	-	-	-	5,771,581	
21	NORTH SHORE D - TOWN CENTER PHASE 2	Neighborhoods	B3	None	-	-	-	-	-	-	2,000,000	-	-	-	-	2,000,000	
22	NORTH SHORE D - TOWN CENTER PHASE 2		B4	None	-	-	-	-	-	-	-	-	-	8,000,000	-	8,000,000	
23	WEST AVENUE PH III	Neighborhoods	CRF	None	70,500	-	7,883,302	-	-	-	-	-	-	-	-	7,953,802	
24	100 BLOCK OF LINCOLN ROAD	Other	CRF	None	300,000	-	-	-	-	-	-	-	-	-	-	300,000	
25	17TH STREET IMPROVEMENTS PHASE I	Other	CRF	None	400,000	-	-	3,500,000	-	-	-	-	-	-	-	3,900,000	
26	17TH STREET IMPROVEMENTS PHASE I		B2	None	-	-	-	5,700,000	-	-	-	-	-	-	-	5,700,000	
27	COLLINS PARK ANCILLARY IMPROVEMENTS	Other	CRF	None	-	-	473,045	-	-	-	-	-	-	-	-	473,045	
28	CONVENTION CNTR LINC RD CONNECTOR	Other	2017Bonds	None	2,711,673	-	-	-	-	-	-	-	-	-	-	2,711,673	
29	FDOT ALTON ROAD UTILITIES RELOCATION	Other	CRF	None	5,080,625	-	-	-	-	600,000	-	-	-	-	-	5,680,625	
30	FDOT ALTON ROAD UTILITIES RELOCATION		B1	None	4,324,513	-	-	-	-	-	-	-	-	-	-	4,324,513	
31	FDOT ALTON ROAD UTILITIES RELOCATION		B3	None	-	-	-	-	-	-	11,500,000	-	-	-	-	11,500,000	
32	PUBLIC WORKS OPERATIONS FACILITY	Other	CRF	None	149,500	-	-	1,345,500	-	-	-	-	-	-	-	1,495,000	
33	Adjustments		CRF		-	-	-	-	-	-	-	-	-	-	-	-	
34	Subtotal - Major Capital Projects				\$ 45,679,097	\$ -	\$ 47,567,612	\$ 35,999,492	\$ 8,863,430	\$ 28,908,935	\$ 15,899,000	\$ 28,495,896	\$ 22,897,322	\$ 27,570,000	\$ 21,695,459	\$ 283,576,241	
35	TOTAL WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM				\$ 49,309,097	\$ 637,000	\$ 48,048,412	\$ 37,429,492	\$ 9,368,630	\$ 29,370,035	\$ 17,089,683	\$ 29,686,579	\$ 24,088,005	\$ 28,760,683	\$ 22,886,142	\$ 296,673,758	
SEWER SYSTEM CAPITAL IMPROVEMENT PROGRAM																	
Departmental Capital																	
36	Vehicles and Equipment - Sewer		REV	None	\$ 3,361,000	\$ -	\$ 708,100	\$ 376,600	\$ 42,750	\$ 224,800	\$ 785,542	\$ 785,542	\$ 785,542	\$ 785,542	\$ 785,542	\$ 8,640,958	
37	Other Departmental Capital - Sewer		REV	None	6,000	-	24,000	24,000	24,000	24,000	17,000	17,000	17,000	17,000	17,000	187,000	
38	Adjustments		REV		-	-	-	-	-	-	-	-	-	-	-	-	
39	Subtotal - Departmental Capital				\$ 3,367,000	\$ -	\$ 732,100	\$ 400,600	\$ 66,750	\$ 248,800	\$ 802,542	\$ 802,542	\$ 802,542	\$ 802,542	\$ 802,542	\$ 8,827,958	
Major Capital Projects																	
40	UPGRADES	Critical Needs	CRF	None	\$ 2,100,000	\$ -	\$ -	\$ 7,002,500	\$ 7,002,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,105,000	
41	SCADA & PROGRAMMABLE LOGIC CONTROLLERS	Critical Needs	CRF	None	(425,194)	-	-	-	-	-	-	-	-	-	-	(425,194)	
42	SEWER PUMP STATION ODOR CONTROL	Critical Needs	B1	None	1,500,000	-	-	-	-	-	-	-	-	-	-	1,500,000	
43	SEWER PUMP STATION ODOR CONTROL		CRF	None	-	-	1,500,000	-	-	-	-	-	-	-	-	1,500,000	
STORMWATER CRITICAL NEEDS - ANCILLARY WATER AND																	
44	SEWER LINE ADJUSTMENTS	Critical Needs	CRF	None	-	-	1,078,000	856,000	1,089,000	389,000	649,000	1,336,000	824,000	1,070,000	774,000	8,065,000	
45	VALVE REPLACEMENT PROGRAM	Critical Needs	CRF	None	(831,493)	-	-	-	-	-	-	-	-	-	-	(831,493)	
46	WASTEWATER STATIONS REHABILITATION	Critical Needs	B1	None	22,510,501	-	(0)	-	-	-	-	-	-	-	-	22,510,501	
47	WASTEWATER STATIONS REHABILITATION		B2	None	-	-	14,557,781	1,000,000	-	-	-	-	-	-	-	15,557,781	
48	WASTEWATER STATIONS REHABILITATION		B3	None	-	-	-	-	-	10,000,000	-	-	-	-	-	10,000,000	
49	WASTEWATER MANHOLE REHABILITATION	Critical Needs	CRF	None	1,416,631	8,234	1,500,000	1,000,000	1,000,000	1,000,000	-	-	-	-	-	5,924,865	
50	WATER & WASTEWATER MAINS AND REHAB	Critical Needs	CRF	None	6,152,896	-	(0)	0	4,951,108	4,404,935	1,750,000	1,750,000	-	18,500,000	18,500,000	56,008,939	
51	WATER & WASTEWATER MAINS AND REHAB		B1	None	24,196,503	-	-	-	-	-	-	-	-	-	-	24,196,503	
52	WATER & WASTEWATER MAINS AND REHAB	2017Bonds	None	None	1,159,876	-	-	-	-	-	-	-	-	-	-	1,159,876	
53	WATER & WASTEWATER MAINS AND REHAB		B2	None	-	-	18,543,947	17,826,411	-	-	-	-	-	-	-	36,370,358	
54	WATER & WASTEWATER MAINS AND REHAB		B4	None	-	-	-	-	-	-	-	-	19,250,000	-	-	19,250,000	

Table 1-11

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Estimated Water and Sewer System Multi-Year Capital Improvement Program and Funding Sources [*]

Line No.	Description	Project Type	Funding Source	Escalation Factor	Fiscal Year Ending September 30,												Total
					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034		
55	1ST STREET-ALTON RD TO WASHINGTON	Neighborhoods	CRF	None	-	-	6,494,518	-	-	-	-	-	-	-	-	6,494,518	
56	1ST STREET-ALTON RD TO WASHINGTON PH 3+4	Neighborhoods	B3	None	-	-	-	-	-	14,515,000	-	-	-	-	-	14,515,000	
57	FLAMINGO-LUMMUS C PHASE 1	Neighborhoods	CRF	None	-	-	-	-	-	-	-	-	-	-	2,421,459	2,421,459	
58	NORMANDY ISLES A PHASE 1	Neighborhoods	CRF	None	-	-	-	-	2,823,322	-	-	22,500,000	-	-	-	25,323,322	
59	NORMANDY ISLES A PHASE 1	B3	None	-	-	-	-	-	-	-	-	2,909,896	-	-	-	2,909,896	
60	NORMANDY ISLES A PHASE 2	Neighborhoods	CRF	None	-	-	-	-	-	-	-	-	2,823,322	-	-	2,823,322	
61	NORTH SHORE D - TOWN CENTER PHASE 1	Neighborhoods	B2	None	-	-	-	5,771,581	-	-	-	-	-	-	-	5,771,581	
62	NORTH SHORE D - TOWN CENTER PHASE 2	Neighborhoods	B3	None	-	-	-	-	-	-	2,000,000	-	-	-	-	2,000,000	
63	NORTH SHORE D - TOWN CENTER PHASE 2	Neighborhoods	B4	None	-	-	-	-	-	-	-	-	-	-	8,000,000	8,000,000	
64	WEST AVENUE PH III	Neighborhoods	CRF	None	70,500	-	0	-	-	-	-	-	-	-	-	70,500	
65	WEST AVENUE PH III	Neighborhoods	B2	None	-	-	7,883,302	-	-	-	-	-	-	-	-	7,883,302	
66	100 BLOCK OF LINCOLN ROAD	Other	CRF	None	300,000	-	-	-	-	-	-	-	-	-	-	300,000	
67	17TH STREET IMPROVEMENTS PHASE I	Other	CRF	None	400,000	-	-	2,500,000	-	-	-	-	-	-	-	2,900,000	
68	17TH STREET IMPROVEMENTS PHASE I	B2	None	-	-	-	-	6,700,000	-	-	-	-	-	-	-	6,700,000	
69	COLLINS PARK ANCILLARY IMPROVEMENTS	Other	CRF	None	-	-	473,045	-	-	-	-	-	-	-	-	473,045	
70	CONVENTION CNTR LINCN RD CONNECTOR	Other	2017Bonds	None	2,711,673	-	-	-	-	-	-	-	-	-	-	2,711,673	
71	DERM & EPA CONSENT DECREE	Other	CRF	None	2,734,310	-	1,000,000	1,000,000	1,000,000	1,000,000	-	-	-	-	-	6,734,310	
72	FDOT ALTON ROAD UTILITIES RELOCATION	Other	CRF	None	9,405,138	-	-	-	-	600,000	11,500,000	-	-	-	-	21,505,138	
73	GO#36: WASHINGTON AVE. CORRIDOR	Other	CRF	None	-	-	-	-	-	-	-	-	-	-	-	-	
74	PUBLIC WORKS OPERATIONS FACILITY	Other	CRF	None	149,500	-	-	1,345,500	-	-	-	-	-	-	-	1,495,000	
75	Adjustments		CRF		-	-	-	-	-	-	-	-	-	-	-	-	
76	Subtotal - Major Capital Projects				\$ 73,550,840	\$ 8,234	\$ 53,030,592	\$ 45,001,992	\$ 17,865,930	\$ 31,908,935	\$ 15,899,000	\$ 28,495,896	\$ 22,897,322	\$ 27,570,000	\$ 21,695,459	\$ 337,924,199	
77	TOTAL SEWER SYSTEM CAPITAL IMPROVEMENT PROGRAM				\$ 76,917,840	\$ 8,234	\$ 53,762,692	\$ 45,402,592	\$ 17,932,680	\$ 32,157,735	\$ 16,701,542	\$ 29,298,438	\$ 23,699,864	\$ 28,372,542	\$ 22,498,000	\$ 346,752,157	
78	TOTAL WATER AND SEWER SYSTEM CAPITAL IMPROVEMENT PROGRAM				\$ 126,226,937	\$ 645,234	\$ 101,811,103	\$ 82,832,084	\$ 27,301,310	\$ 61,527,769	\$ 33,791,225	\$ 58,985,017	\$ 47,787,869	\$ 57,133,225	\$ 45,384,142	\$ 643,425,915	
FUNDING SOURCES																	
WATER SYSTEM																	
79	Capital Replacement Fund Deposits		CRF		\$ 7,133,636	\$ -	\$ 9,434,346	\$ 6,701,500	\$ 8,863,430	\$ 5,393,935	\$ 2,399,000	\$ 25,586,000	\$ 3,647,322	\$ 19,570,000	\$ 21,695,459	\$ 110,424,628	
80	Proceeds from Series 2017 Bonds		2017Bonds		2,711,673	-	-	-	-	-	-	-	-	-	-	2,711,673	
81	Proceeds from Assumed Series 2025 Bonds		B1		35,833,788	-	-	-	-	-	-	-	-	-	-	35,833,788	
82	Proceeds from Assumed Series 2028 Bonds		B2		-	-	38,133,265	29,297,992	-	-	-	-	-	-	-	67,431,257	
83	Proceeds from Assumed Series 2030 Bonds		B3		-	-	-	-	-	23,515,000	13,500,000	2,909,896	-	-	-	39,924,896	
84	Proceeds from Assumed Series 2033 Bonds		B4		-	-	-	-	-	-	-	-	19,250,000	8,000,000	-	27,250,000	
85	User Rate Revenue		REV		3,630,000	637,000	480,800	1,430,000	505,200	461,100	1,190,683	1,190,683	1,190,683	1,190,683	1,190,683	13,097,517	
86	TOTAL WATER SYSTEM FUNDING SOURCES				\$ 49,309,097	\$ 637,000	\$ 48,048,412	\$ 37,429,492	\$ 9,368,630	\$ 29,370,035	\$ 17,089,683	\$ 29,686,579	\$ 24,088,005	\$ 28,760,683	\$ 22,886,142	\$ 296,673,758	
SEWER SYSTEM																	
87	Capital Replacement Fund Deposits		CRF		\$ 21,472,288	\$ 8,234	\$ 12,045,562	\$ 13,704,000	\$ 17,865,930	\$ 7,393,935	\$ 13,899,000	\$ 25,586,000	\$ 3,647,322	\$ 19,570,000	\$ 21,695,459	\$ 156,887,730	
88	Proceeds from Series 2017 Bonds		2017Bonds		3,871,549	-	-	-	-	-	-	-	-	-	-	3,871,549	
89	Proceeds from Assumed Series 2025 Bonds		B1		48,207,003	-	(0)	-	-	-	-	-	-	-	-	48,207,003	
90	Proceeds from Assumed Series 2028 Bonds		B2		-	-	40,985,029	31,297,992	-	-	-	-	-	-	-	72,283,021	
91	Proceeds from Assumed Series 2030 Bonds		B3		-	-	-	-	-	24,515,000	2,000,000	2,909,896	-	-	-	29,424,896	
92	Proceeds from Assumed Series 2033 Bonds		B4		-	-	-	-	-	-	-	-	19,250,000	8,000,000	-	27,250,000	
93	User Rate Revenue		REV		3,367,000	-	732,100	400,600	66,750	248,800	802,542	802,542	802,542	802,542	802,542	8,827,958	
94	TOTAL SEWER SYSTEM FUNDING SOURCES				\$ 76,917,840	\$ 8,234	\$ 53,762,692	\$ 45,402,592	\$ 17,932,680	\$ 32,157,735	\$ 16,701,542	\$ 29,298,438	\$ 23,699,864	\$ 28,372,542	\$ 22,498,000	\$ 346,752,157	
COMBINED WATER AND SEWER SYSTEM																	
95	Capital Replacement and Improvement Fund Deposits		CRF		\$ 28,605,925	\$ 8,234	\$ 21,479,909	\$ 20,405,500	\$ 26,729,360	\$ 12,787,869	\$ 16,298,000	\$ 51,172,000	\$ 7,294,644	\$ 39,140,000	\$ 43,390,917	\$ 267,312,358	
96	Proceeds from Series 2017 Bonds		2017Bonds		6,583,221	-	-	-	-	-	-	-	-	-	-	6,583,221	
97	Proceeds from Assumed Series 2025 Bonds		B1		84,040,791	-	(0)	-	-	-	-	-	-	-	-	84,040,791	
98	Proceeds from Assumed Series 2028 Bonds		B2		-	-	79,118,294	60,595,984	-	-	-	-	-	-	-	139,714,278	
99	Proceeds from Assumed Series 2030 Bonds		B3		-	-	-	-	-	48,030,000	15,500,000	5,819,792	-	-	-	69,349,792	
100	Proceeds from Assumed Series 2033 Bonds		B4		-	-	-	-	-	-	-	-	38,500,000	16,000,000	-	54,500,000	
101	User Rate Revenue		REV		6,997,000	637,000	1,212,900	1,830,600	571,950	709,900	1,993,225	1,993,225	1,993,225	1,993,225	1,993,225	21,925,475	
102	TOTAL WATER AND SEWER SYSTEM FUNDING SOURCES				\$ 126,226,937	\$ 645,234	\$ 101,811,103	\$ 82,832,084	\$ 27,301,310	\$ 61,527,769	\$ 33,791,225	\$ 58,985,017	\$ 47,787,869	\$ 57,133,225	\$ 45,384,142	\$ 643,425,915	

[*] Numbers may not add due to rounding.

Table 1-12

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Water and Sewer System Cash Balances and Interest Earnings [*]

Line No.	Description	[1]	Fiscal Year Ending September 30,										
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
OPERATING FUND - 425													
1	Beginning Balance		\$ 90,691,528	\$ 77,013,396	\$ 92,077,050	\$ 84,956,563	\$ 88,321,274	\$ 86,706,810	\$ 103,316,536	\$ 115,183,811	\$ 97,879,918	\$ 125,491,791	\$ 118,142,727
2	Transfers In / (Out) - Surplus / (Deficiency) - Water		(1,911,396)	7,352,699	(2,330,590)	3,578,925	1,731,797	6,982,787	8,433,873	(12,500,047)	9,694,983	(8,026,290)	(10,081,543)
3	Transfers In / (Out) - Surplus / (Deficiency) - Sewer		(11,766,735)	7,710,955	(4,789,897)	(214,214)	(3,346,261)	9,626,938	3,433,402	(4,803,846)	17,916,890	677,226	(879,456)
4	Interest Rate		0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
5	Interest Income		226,729	385,067	460,385	637,174	662,410	867,068	1,033,165	1,151,838	978,799	1,254,918	1,181,427
	Recognition of Interest Earnings in Revenue Requirements		226,729	385,067	460,385	637,174	662,410	867,068	1,033,165	1,151,838	978,799	1,254,918	1,181,427
7	Ending Balance		\$ 77,013,396	\$ 92,077,050	\$ 84,956,563	\$ 88,321,274	\$ 86,706,810	\$ 103,316,536	\$ 115,183,811	\$ 97,879,918	\$ 125,491,791	\$ 118,142,727	\$ 107,181,728
CAPITAL REPLACEMENT AND IMPROVEMENT FUND - WATER													
8	Beginning Balance		\$ 4,911,103	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319
9	Transfers In		5,941,852	-	9,434,346	6,701,500	8,863,430	5,393,935	2,399,000	25,586,000	3,647,322	19,570,000	21,695,459
10	Transfers Out - Capital Improvement Program		7,133,636	-	9,434,346	6,701,500	8,863,430	5,393,935	2,399,000	25,586,000	3,647,322	19,570,000	21,695,459
	Interest Rate		0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
11	Interest Income		10,788	18,597	18,597	27,895	27,895	37,193	37,193	37,193	37,193	37,193	37,193
	Recognition of Interest Earnings in Revenue Requirements		10,788	18,597	18,597	27,895	27,895	37,193	37,193	37,193	37,193	37,193	37,193
13	Ending Balance		\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319	\$ 3,719,319
14	Percent Allocable to Water System		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
15	Interest Income Allocable to Water System	UW	\$ 10,788	\$ 18,597	\$ 18,597	\$ 27,895	\$ 27,895	\$ 37,193	\$ 37,193	\$ 37,193	\$ 37,193	\$ 37,193	\$ 37,193
16	Interest Income Allocable to Sewer System	US	0	0	0	0	0	0	0	0	0	0	0
CAPITAL REPLACEMENT AND IMPROVEMENT FUND - SEWER													
17	Beginning Balance		\$ 6,866,222	\$ 3,306,061	\$ 3,306,061	\$ 3,306,061	\$ 3,306,061	\$ 3,306,061	\$ 3,306,061	\$ 3,306,061	\$ 3,306,061	\$ 3,306,061	\$ 3,306,061
18	Transfers In		17,912,127	8,234	12,045,562	13,704,000	17,865,930	7,393,935	13,899,000	25,586,000	3,647,322	19,570,000	21,695,459
19	Transfers Out - Capital Improvement Program		21,472,288	8,234	12,045,562	13,704,000	17,865,930	7,393,935	13,899,000	25,586,000	3,647,322	19,570,000	21,695,459
	Interest Rate		0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
20	Interest Income		12,715	16,530	16,530	24,795	24,795	33,061	33,061	33,061	33,061	33,061	33,061
	Recognition of Interest Earnings in Revenue Requirements		12,715	16,530	16,530	24,795	24,795	33,061	33,061	33,061	33,061	33,061	33,061
22	Ending Balance		\$3,306,061	\$3,306,061	\$3,306,061	\$3,306,061	\$3,306,061	\$3,306,061	\$3,306,061	\$3,306,061	\$3,306,061	\$3,306,061	\$3,306,061
23	Percent Allocable to Water System		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
24	Interest Income Allocable to Water System	UW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	Interest Income Allocable to Sewer System	US	12,715	16,530	16,530	24,795	24,795	33,061	33,061	33,061	33,061	33,061	33,061
CUSTOMER DEPOSITS													
26	Beginning Balance		\$ 7,876,488	\$ 7,876,488	\$ 7,876,488	\$ 7,876,488	\$ 7,876,488	\$ 7,876,488	\$ 7,876,488	\$ 7,876,488	\$ 7,876,488	\$ 7,876,488	\$ 7,876,488
27	Ending Balance		7,876,488	7,876,488	7,876,488	7,876,488	7,876,488	7,876,488	7,876,488	7,876,488	7,876,488	7,876,488	7,876,488
28	Percent Allocable to Water System		57.86%	57.86%	57.86%	57.86%	57.86%	57.86%	57.86%	57.86%	57.86%	57.86%	57.86%
29	Interest Income Allocable to Water System	RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	Interest Income Allocable to Sewer System	RS	-	-	-	-	-	-	-	-	-	-	-
SINKING FUND													
31	Sinking Fund Deposit		\$ 11,186,050	\$ 11,198,550	\$ 16,837,775	\$ 15,269,025	\$ 24,445,734	\$ 24,446,484	\$ 29,003,413	\$ 28,126,663	\$ 27,813,663	\$ 31,605,143	\$ 31,601,518
32	Average Balance		2,796,513	2,799,638	4,209,444	3,817,256	6,111,434	6,111,621	7,250,853	7,031,666	6,953,416	7,901,286	7,900,380
	Interest Rate		0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
33	Interest Income		6,991	13,998	21,047	28,629	45,836	61,116	72,509	70,317	69,534	79,013	79,004
	Recognition of Interest Earnings												

Table 1-12

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Water and Sewer System Cash Balances and Interest Earnings [*]

Line No.	Description	[1]	Fiscal Year Ending September 30,										
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
34	in Revenue Requirements		6,991	13,998	21,047	28,629	45,836	61,116	72,509	70,317	69,534	79,013	79,004
35	Percent Allocable to Water System		41.00%	41.00%	41.93%	42.03%	44.37%	44.37%	46.44%	46.61%	46.68%	47.07%	47.07%
36	Interest Income Allocable to Water System	UW	\$ 2,866	\$ 5,739	\$ 8,825	\$ 12,032	\$ 20,337	\$ 27,117	\$ 33,676	\$ 32,777	\$ 32,456	\$ 37,195	\$ 37,191
37	Interest Income Allocable to Sewer System	US	4,125	8,259	12,222	16,597	25,499	33,999	38,833	37,540	37,078	41,818	41,813
CONSTRUCTION FUND													
38	Beginning Balance		\$ 6,583,222	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39	Transfers In		84,040,790	-	79,118,294	60,595,984	-	48,030,000	15,500,000	5,819,792	38,500,000	16,000,000	-
40	Transfers Out - Capital Improvement Program		90,624,012	-	79,118,294	60,595,984	-	48,030,000	15,500,000	5,819,792	38,500,000	16,000,000	-
41	Interest Rate		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
42	Interest Income		-	-	-	-	-	-	-	-	-	-	-
	Recognition of Interest Earnings												
43	in Revenue Requirements		-	-	-	-	-	-	-	-	-	-	-
44	Ending Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
45	Percent Allocable to Water System		49.03%	49.03%	49.03%	49.03%	49.03%	49.03%	49.03%	49.03%	49.03%	49.03%	49.03%
46	Interest Income Allocable to Water System	RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
47	Interest Income Allocable to Sewer System	RS	-	-	-	-	-	-	-	-	-	-	-
WATER IMPACT FEE ACCOUNT - 422													
48	Beginning Balance		\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702
49	Interest Rate		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
50	Interest Income		-	-	-	-	-	-	-	-	-	-	-
	Recognition of Interest Earnings												
51	in Revenue Requirements		-	-	-	-	-	-	-	-	-	-	-
52	Ending Balance		\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702
53	Percent Allocable to Water System		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
54	Interest Income Allocable to Water System	RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
55	Interest Income Allocable to Sewer System	RS	-	-	-	-	-	-	-	-	-	-	-
SEWER IMPACT FEE ACCOUNT - 422													
	Beginning Balance		\$ 160,258										
	Adjustment For Open Purchase Orders		-										
56	Beginning Balance		\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258
57	Interest Rate		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
58	Interest Income		-	-	-	-	-	-	-	-	-	-	-
	Recognition of Interest Earnings												
59	in Revenue Requirements		-	-	-	-	-	-	-	-	-	-	-
60	Ending Balance		\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258
61	Percent Allocable to Water System		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
62	Interest Income Allocable to Water System	RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63	Interest Income Allocable to Sewer System	RS	-	-	-	-	-	-	-	-	-	-	-

Table 1-12

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Water and Sewer System Cash Balances and Interest Earnings [*]

Line No.	Description	[1]	Fiscal Year Ending September 30,											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
INTEREST INCOME														
64	Water System - Subtotal	UW	\$ 108,200	\$ 189,245	\$ 224,586	\$ 312,803	\$ 331,915	\$ 435,641	\$ 513,332	\$ 563,256	\$ 488,830	\$ 611,818	\$ 580,341	
65	Adjustment for Additional Interest Allocation		\$ 2,405,800	\$ 1,921,755	\$ 775,414	\$ 687,197	\$ 668,085	\$ 564,359	\$ 486,668	\$ 436,744	\$ 511,170	\$ 388,182	\$ 419,659	
66	Water System	UW	\$ 2,514,000	\$ 2,111,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	
67	Sewer System - Subtotal	US	149,024	244,948	291,973	405,691	429,020	562,798	662,596	729,152	629,758	792,366	750,343	
68	Adjustment for Additional Interest Allocation		\$ 2,364,976	\$ 1,866,052	\$ 708,027	\$ 594,309	\$ 570,980	\$ 437,202	\$ 337,404	\$ 270,848	\$ 370,242	\$ 207,634	\$ 249,657	
69	Sewer System	US	\$ 2,514,000	\$ 2,111,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	
70	Unrestricted Interest Income		\$ 5,028,000	\$ 4,222,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	
	Restricted													
71	Water System	RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
72	Sewer System	RS	-	-	-	-	-	-	-	-	-	-	-	
73	Restricted Interest Income		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
74	Water System		\$ 2,514,000	\$ 2,111,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	
75	Sewer System		2,514,000	2,111,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	
76	TOTAL INTEREST INCOME		\$ 5,028,000	\$ 4,222,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	

[*] Amounts may not add due to rounding.

Footnotes:

- [1] UW or US = Interest earnings unrestricted and assumed to be available to meet system expenditure requirements.
RW or RS = Interest earnings restricted and assumed to not be available to meet system expenditure requirements.

Table 1-13

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water and Sewer System

Projected Other Operating Revenues - Water and Sewer System

Line No.	Revenue Code	Description	Escalation Reference	Fiscal Year Ending September 30,										
				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
WATER SYSTEM														
1	343320.0000	Firelines	Inflation	\$ 527,000	\$ 442,000	\$ 455,260	\$ 468,918	\$ 482,985	\$ 497,475	\$ 512,399	\$ 527,771	\$ 543,604	\$ 559,912	\$ 576,710
2	34340.0000	Water Tapping	Inflation	56,000	66,000	67,980	70,019	72,120	74,284	76,512	78,807	81,172	83,607	86,115
3	343341.0000	Sub-Meter Services Inspection	Constant	1,000	500	500	500	500	500	500	500	500	500	500
4	343900.0000	Utility Service Fees - Water	Constant	8,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
5	365100.0000	Sale of City Property	Eliminate	76,000	-	-	-	-	-	-	-	-	-	-
6	36994.0000	Utility Penalties - Water	Constant	286,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000
7	369997.0000	Miscellaneous Water	Constant	32,000	33,500	33,500	33,500	33,500	33,500	33,500	33,500	33,500	33,500	33,500
8	36999.0000	Miscellaneous Water	Constant	404,000	309,000	309,000	309,000	309,000	309,000	309,000	309,000	309,000	309,000	309,000
9		Total Other Water Operating Revenue		<u>\$ 1,390,000</u>	<u>\$ 1,166,000</u>	<u>\$ 1,181,240</u>	<u>\$ 1,196,937</u>	<u>\$ 1,213,105</u>	<u>\$ 1,229,758</u>	<u>\$ 1,246,911</u>	<u>\$ 1,264,579</u>	<u>\$ 1,282,776</u>	<u>\$ 1,301,519</u>	<u>\$ 1,320,825</u>
SEWER SYSTEM														
10	343550.0000	Sewer Fees - Outside	Inflation	\$ 3,697,000	\$ 3,429,000	\$ 3,531,870	\$ 3,637,826	\$ 3,746,961	\$ 3,859,370	\$ 3,975,151	\$ 4,094,405	\$ 4,217,237	\$ 4,343,755	\$ 4,474,067
11	343900.0000	Utility Service Fees - Sewer	Inflation	8,000	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
12	365100.0000	Sale of City Property	Eliminate	76,000	-	-	-	-	-	-	-	-	-	-
13	36994.0000	Utility Penalties - Sewer	Constant	286,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000
14	369998.0000	Miscellaneous Sewer	Constant	128,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000
15	36999.0000	Miscellaneous Sewer	Constant	404,000	309,000	309,000	309,000	309,000	309,000	309,000	309,000	309,000	309,000	309,000
16		Total Other Wastewater Operating Revenue		<u>\$ 4,599,000</u>	<u>\$ 4,139,000</u>	<u>\$ 4,242,020</u>	<u>\$ 4,348,131</u>	<u>\$ 4,457,425</u>	<u>\$ 4,569,997</u>	<u>\$ 4,685,947</u>	<u>\$ 4,805,376</u>	<u>\$ 4,928,387</u>	<u>\$ 5,055,088</u>	<u>\$ 5,185,591</u>
17		Total Other Operating Revenue		<u>\$ 5,989,000</u>	<u>\$ 5,305,000</u>	<u>\$ 5,423,260</u>	<u>\$ 5,545,068</u>	<u>\$ 5,670,530</u>	<u>\$ 5,799,756</u>	<u>\$ 5,932,858</u>	<u>\$ 6,069,954</u>	<u>\$ 6,211,163</u>	<u>\$ 6,356,608</u>	<u>\$ 6,506,416</u>

Table 1-14

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water and Sewer System

Projected Operating Results and Debt Service Coverage = Water and Sewer System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	System Revenue											
	User Rate Revenue											
1	Water User Rate Revenue	\$ 43,308,000	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742	\$ 44,976,742
2	Sewer User Rate Revenue	60,549,000	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380	60,045,380
	<u>Water System</u>											
3	Rate Adjustment (%)	0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%
	<u>Sewer System</u>											
4	Rate Adjustment (%)	0.00%	0.00%	9.00%	9.00%	9.00%	4.50%	4.50%	4.50%	1.55%	1.55%	1.55%
5	Cumulative Additional User Rate Adjustment Revenue - Water	\$ -	\$ -	\$ 4,047,900	\$ 8,460,100	\$ 13,269,400	\$ 15,890,500	\$ 18,629,500	\$ 21,491,800	\$ 22,522,100	\$ 23,568,300	\$ 24,630,700
6	Cumulative Additional User Rate Adjustment Revenue - Sewer	-	-	5,404,100	11,294,600	17,715,100	21,214,300	24,871,100	28,692,200	30,067,700	31,464,500	32,882,900
7	Total User Rate Revenue	\$ 103,857,001	\$ 105,022,122	\$ 114,474,122	\$ 124,776,822	\$ 136,006,622	\$ 142,126,922	\$ 148,522,722	\$ 155,206,122	\$ 157,611,922	\$ 160,054,922	\$ 162,535,722
8	Other Operating Revenue	\$ 5,989,000	\$ 5,305,000	\$ 5,423,260	\$ 5,545,068	\$ 5,670,530	\$ 5,799,756	\$ 5,932,858	\$ 6,069,954	\$ 6,211,163	\$ 6,356,608	\$ 6,506,416
9	Unrestricted Interest Income	5,028,000	4,222,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
10	Total System Revenue	\$ 114,874,001	\$ 114,549,122	\$ 121,897,382	\$ 132,321,890	\$ 143,677,152	\$ 149,926,678	\$ 156,455,580	\$ 163,276,076	\$ 165,823,085	\$ 168,411,530	\$ 171,042,138
	Current Expenses for Debt Service Coverage Purposes											
11	Personal Services	\$ 8,701,000	\$ 9,479,000	\$ 10,003,450	\$ 10,559,173	\$ 11,148,236	\$ 11,772,863	\$ 12,435,444	\$ 13,138,547	\$ 13,884,938	\$ 14,677,595	\$ 15,519,726
12	Operating Supplies	478,000	142,000	146,360	150,856	155,492	160,272	165,202	170,286	175,528	180,935	186,511
13	Contractual Services	64,138,103	63,912,684	64,744,034	65,638,338	66,600,726	67,269,571	67,968,571	68,699,076	69,187,828	69,694,399	70,219,541
14	Utilities	1,253,000	1,213,000	1,258,500	1,305,729	1,354,755	1,405,645	1,458,472	1,513,309	1,570,236	1,629,331	1,690,679
15	Internal Charges	4,286,000	4,004,000	4,204,200	4,414,410	4,635,131	4,866,887	5,110,231	5,365,743	5,634,030	5,915,732	6,211,518
16	Administrative Fees	2,964,000	2,702,000	2,837,100	2,978,955	3,127,903	3,284,298	3,448,513	3,620,938	3,801,985	3,992,085	4,191,689
17	Other Operating	2,933,000	2,312,000	2,416,640	2,527,592	2,645,330	2,736,162	2,830,235	2,903,183	2,978,135	3,055,150	3,120,813
18	Contingency	1,762,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000	3,877,000
19	Less Administrative Fees, Depreciation, and Amortization	(2,964,000)	(2,702,000)	(2,837,100)	(2,978,955)	(3,127,903)	(3,284,298)	(3,448,513)	(3,620,938)	(3,801,985)	(3,992,085)	(4,191,689)
20	Total Current Expenses for Debt Service Coverage Purposes	\$ 83,551,103	\$ 84,939,684	\$ 86,650,184	\$ 88,473,098	\$ 90,416,669	\$ 92,088,401	\$ 93,845,155	\$ 95,667,143	\$ 97,307,695	\$ 99,030,141	\$ 100,825,787
21	Operating Ratio	73%	74%	71%	67%	63%	61%	60%	59%	59%	59%	59%
22	Net Revenues Available for Debt Service	\$ 31,322,898	\$ 29,609,438	\$ 35,247,198	\$ 43,848,791	\$ 53,260,483	\$ 57,838,277	\$ 62,610,426	\$ 67,608,933	\$ 68,515,390	\$ 69,381,388	\$ 70,216,351
	Senior Lien Indebtedness											
29	Water and Sewer Revenue and Revenue Refunding Bonds, Series 2017	\$ 6,640,400	\$ 10,222,900	\$ 10,227,400	\$ 8,658,650	\$ 8,654,650	\$ 8,655,400	\$ 8,655,150	\$ 7,778,400	\$ 5,125,400	\$ 5,131,800	\$ 5,132,300
30	Water and Sewer Revenue Refunding Bonds, Series 2021A	4,545,650	975,650	975,650	975,650	975,650	975,650	975,650	975,650	3,315,650	3,312,650	3,308,525
31	Assumed Water and Sewer Revenue Bonds, Series 2025	-	-	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216	5,522,216
32	Assumed Water and Sewer Revenue Bonds, Series 2028	-	-	-	-	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709	9,180,709
33	Assumed Water and Sewer Revenue Bonds, Series 2030	-	-	-	-	-	-	4,557,178	4,557,178	4,557,178	4,557,178	4,557,178
34	Assumed Water and Sewer Revenue Bonds, Series 2033	-	-	-	-	-	-	-	-	-	3,788,081	3,788,081
35	Total Annual Debt Service on Senior Lien Indebtedness	\$ 11,186,050	\$ 11,198,550	\$ 16,725,266	\$ 15,156,516	\$ 24,333,225	\$ 24,333,975	\$ 28,890,904	\$ 28,014,154	\$ 27,701,154	\$ 31,492,634	\$ 31,489,009
	Junior Lien Indebtedness											
36	DWSRF Loan for Lead and Copper Service Line Replacement	\$ -	\$ -	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509
37	Total Annual Debt Service on Junior Lien Indebtedness	\$ -	\$ -	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509
	Required Transfers per Bond Resolution											
38	Reserve Account	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39	Repayments to Water and Sewer Connection Fee Funds	-	-	-	-	-	-	-	-	-	-	-
40	Payments on Subordinated Indebtedness	-	-	-	-	-	-	-	-	-	-	-
41	Total Required Transfers per Bond Resolution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Table 1-14

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water and Sewer System

Projected Operating Results and Debt Service Coverage = Water and Sewer System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
SENIOR LIEN BONDS DEBT SERVICE COVERAGE:												
Net Revenues Debt Service Coverage												
42	Net Revenues Available for Debt Service	\$ 31,322,898	\$ 29,609,438	\$ 35,247,198	\$ 43,848,791	\$ 53,260,483	\$ 57,838,277	\$ 62,610,426	\$ 67,608,933	\$ 68,515,390	\$ 69,381,388	\$ 70,216,351
43	Total Annual Debt Service on Senior Lien Indebtedness	\$ 11,186,050	\$ 11,198,550	\$ 16,725,266	\$ 15,156,516	\$ 24,333,225	\$ 24,333,975	\$ 28,890,904	\$ 28,014,154	\$ 27,701,154	\$ 31,492,634	\$ 31,489,009
44	Debt Service Coverage (110% Required)	280%	264%	211%	289%	219%	238%	217%	241%	247%	220%	223%
AND												
45	Net Revenues Available for Debt Service	\$ 31,322,898	\$ 29,609,438	\$ 35,247,198	\$ 43,848,791	\$ 53,260,483	\$ 57,838,277	\$ 62,610,426	\$ 67,608,933	\$ 68,515,390	\$ 69,381,388	\$ 70,216,351
46	Less Total Required Transfers per Bond Resolution	-	-	-	-	-	-	-	-	-	-	-
47	Net Revenues After Payment of Required Transfers	\$ 31,322,898	\$ 29,609,438	\$ 35,247,198	\$ 43,848,791	\$ 53,260,483	\$ 57,838,277	\$ 62,610,426	\$ 67,608,933	\$ 68,515,390	\$ 69,381,388	\$ 70,216,351
48	Total Annual Debt Service on Senior Lien Indebtedness	\$ 11,186,050	\$ 11,198,550	\$ 16,725,266	\$ 15,156,516	\$ 24,333,225	\$ 24,333,975	\$ 28,890,904	\$ 28,014,154	\$ 27,701,154	\$ 31,492,634	\$ 31,489,009
49	Debt Service Coverage (100% Required)	280%	264%	211%	289%	219%	238%	217%	241%	247%	220%	223%
OR												
TEST (B): Pledged Funds Debt Service Coverage												
50	Pledged Funds Available for Debt Service	\$ 31,322,898	\$ 29,609,438	\$ 35,247,198	\$ 43,848,791	\$ 53,260,483	\$ 57,838,277	\$ 62,610,426	\$ 67,608,933	\$ 68,515,390	\$ 69,381,388	\$ 70,216,351
51	Total Annual Debt Service on Senior Lien Indebtedness	\$ 11,186,050	\$ 11,198,550	\$ 16,725,266	\$ 15,156,516	\$ 24,333,225	\$ 24,333,975	\$ 28,890,904	\$ 28,014,154	\$ 27,701,154	\$ 31,492,634	\$ 31,489,009
52	Debt Service Coverage (115% Required)	280%	264%	211%	289%	219%	238%	217%	241%	247%	220%	223%
AND												
53	Pledged Funds Available for Debt Service	\$ 31,322,898	\$ 29,609,438	\$ 35,247,198	\$ 43,848,791	\$ 53,260,483	\$ 57,838,277	\$ 62,610,426	\$ 67,608,933	\$ 68,515,390	\$ 69,381,388	\$ 70,216,351
54	Less Total Required Transfers per Bond Resolution	-	-	-	-	-	-	-	-	-	-	-
55	Net Pledged Revenues After Payment of Required Transfers	\$ 31,322,898	\$ 29,609,438	\$ 35,247,198	\$ 43,848,791	\$ 53,260,483	\$ 57,838,277	\$ 62,610,426	\$ 67,608,933	\$ 68,515,390	\$ 69,381,388	\$ 70,216,351
56	Total Annual Debt Service on Senior Lien Indebtedness	\$ 11,186,050	\$ 11,198,550	\$ 16,725,266	\$ 15,156,516	\$ 24,333,225	\$ 24,333,975	\$ 28,890,904	\$ 28,014,154	\$ 27,701,154	\$ 31,492,634	\$ 31,489,009
57	Debt Service Coverage (105% Required)	280%	264%	211%	289%	219%	238%	217%	241%	247%	220%	223%
SRF LOAN DEBT SERVICE COVERAGE:												
SRF LOAN: Net Revenues Debt Service Coverage												
58	Net Revenues After Payment of Senior Lien Indebtedness	\$ 17,172,848	\$ 15,708,888	\$ 15,684,831	\$ 25,713,320	\$ 25,799,354	\$ 30,220,004	\$ 30,271,009	\$ 35,973,841	\$ 37,012,251	\$ 33,896,669	\$ 34,535,652
59	Less Allowance for Senior Lien Debt Service Coverage	110% (1,118,605)	(1,119,855)	(1,672,527)	(1,515,652)	(2,433,323)	(2,433,398)	(2,889,090)	(2,801,415)	(2,770,115)	(3,149,263)	(3,148,901)
60	Adjusted Net Revenues After Payment of Senior Lien Debt Service	\$ 16,054,243	\$ 14,589,033	\$ 14,012,305	\$ 24,197,668	\$ 23,366,032	\$ 27,786,606	\$ 27,381,919	\$ 33,172,426	\$ 34,242,136	\$ 30,747,406	\$ 31,386,751
61	Total Annual Debt Service on Junior Lien Indebtedness	\$ -	\$ -	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509	\$ 112,509
	Debt Service Coverage (115% Required)	N/A	N/A	12454%	21507%	20768%	24697%	24338%	29484%	30435%	27329%	27897%

Table 1-14
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Water and Sewer System

Projected Operating Results and Debt Service Coverage = Water and Sewer System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
ALL-IN / OVERALL DEBT SERVICE COVERAGE:												
Net Revenues Debt Service Coverage												
62	Gross Revenues	\$ 114,874,001	\$ 114,549,122	\$ 121,897,382	\$ 132,321,890	\$ 143,677,152	\$ 149,926,678	\$ 156,455,580	\$ 163,276,076	\$ 165,823,085	\$ 168,411,530	\$ 171,042,138
63	Less All Operating Expenses	86,515,103	87,641,684	89,487,284	91,452,053	93,544,572	95,372,699	97,293,667	99,288,081	101,109,680	103,022,226	105,017,476
64	Net Revenues	\$ 28,358,898	\$ 26,907,438	\$ 32,410,098	\$ 40,869,836	\$ 50,132,580	\$ 54,553,979	\$ 59,161,913	\$ 63,987,995	\$ 64,713,405	\$ 65,389,304	\$ 66,024,662
65	Senior and Junior Lien Indebtedness	\$ 11,186,050	\$ 11,198,550	\$ 16,837,775	\$ 15,269,025	\$ 24,445,734	\$ 24,446,484	\$ 29,003,413	\$ 28,126,663	\$ 27,813,663	\$ 31,605,143	\$ 31,601,518
66	Debt Service Coverage (200% Target)	254%	240%	192%	268%	205%	223%	204%	227%	233%	207%	209%
70	Net Revenues After Payment of Debt Service and Required Transfers - Available for Other System Purposes	\$ 17,172,848	\$ 15,708,888	\$ 15,572,322	\$ 25,600,811	\$ 25,686,846	\$ 30,107,495	\$ 30,158,500	\$ 35,861,332	\$ 36,899,742	\$ 33,784,160	\$ 34,423,143

Table 1-15

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Projected Water and Sewer System Sources and Uses of Funds

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
1	Unrestricted Cash Balances from Below	\$ 84,038,776	\$ 99,102,430	\$ 91,981,943	\$ 95,346,654	\$ 93,732,190	\$ 110,341,916	\$ 122,209,191	\$ 104,905,298	\$ 132,517,171	\$ 125,168,107	\$ 114,207,108
OPERATING FUND - 425 AND RATE STABILIZATION FUND												
Sources of Funds												
2	Water and Wastewater User Rate Revenue	\$ 103,857,001	\$ 105,022,122	\$ 114,474,122	\$ 124,776,822	\$ 136,006,622	\$ 142,126,922	\$ 148,522,722	\$ 155,206,122	\$ 157,611,922	\$ 160,054,922	\$ 162,535,722
3	Other Operating Revenue	5,989,000	5,305,000	5,423,260	5,545,068	5,670,530	5,799,756	5,932,858	6,069,954	6,211,163	6,356,608	6,506,416
4	Unrestricted Interest Income	5,028,000	4,222,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
5	Impact Fees Used to Pay City Debt Service	-	-	-	-	-	-	-	-	-	-	-
6	Available Cash Balances	90,691,528	77,013,396	92,077,050	84,956,563	88,321,274	86,706,810	103,316,536	115,183,811	97,879,918	125,491,791	118,142,727
7	Total Sources of Funds	\$ 205,565,528	\$ 191,562,518	\$ 213,974,432	\$ 217,278,453	\$ 231,998,426	\$ 236,633,488	\$ 259,772,116	\$ 278,459,887	\$ 263,703,003	\$ 293,903,321	\$ 289,184,865
Uses of Funds												
8	Operating Expenses:	\$ 86,515,103	\$ 87,641,684	\$ 89,487,284	\$ 91,452,053	\$ 93,544,572	\$ 95,372,699	\$ 97,293,667	\$ 99,288,081	\$ 101,109,680	\$ 103,022,226	\$ 105,017,476
9	City Debt Service	11,186,050	11,198,550	16,837,775	15,269,025	24,445,734	24,446,484	29,003,413	28,126,663	27,813,663	31,605,143	31,601,518
10	Capital Funded from Rates	6,997,000	637,000	1,212,900	1,830,600	571,950	709,900	1,993,225	1,993,225	1,993,225	1,993,225	1,993,225
11	Transfers to Capital Replacement Funds	23,853,979	8,234	21,479,909	20,405,500	26,729,360	12,787,869	16,298,000	51,172,000	7,294,644	39,140,000	43,390,917
12	Total Uses of Funds	\$ 128,552,132	\$ 99,485,468	\$ 129,017,868	\$ 128,957,179	\$ 145,291,616	\$ 133,316,952	\$ 144,588,305	\$ 180,579,969	\$ 138,211,212	\$ 175,760,594	\$ 182,003,136
13	Ending Cash Balances	\$ 77,013,396	\$ 92,077,050	\$ 84,956,563	\$ 88,321,274	\$ 86,706,810	\$ 103,316,536	\$ 115,183,811	\$ 97,879,918	\$ 125,491,791	\$ 118,142,727	\$ 107,181,728
14	Total Uses of Funds and Ending Cash Balances	\$ 205,565,528	\$ 191,562,518	\$ 213,974,432	\$ 217,278,453	\$ 231,998,426	\$ 236,633,488	\$ 259,772,116	\$ 278,459,887	\$ 263,703,003	\$ 293,903,321	\$ 289,184,865
CAPITAL REPLACEMENT AND IMPROVEMENT FUNDS (COMBINED WATER AND WASTEWATER)												
Sources of Funds												
15	Available Cash Balances	\$ 11,777,325	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380
16	Transfers In - Operations	23,853,979	8,234	21,479,909	20,405,500	26,729,360	12,787,869	16,298,000	51,172,000	7,294,644	39,140,000	43,390,917
17	Interest Income	23,503	35,127	35,127	52,690	52,690	70,254	70,254	70,254	70,254	70,254	70,254
18	Total Sources of Funds	\$ 35,654,808	\$ 7,068,741	\$ 28,540,415	\$ 27,483,571	\$ 33,807,430	\$ 19,883,503	\$ 23,393,634	\$ 58,267,634	\$ 14,390,278	\$ 46,235,634	\$ 50,486,551
Uses of Funds												
19	Capital Projects	\$ 28,605,925	\$ 8,234	\$ 21,479,909	\$ 20,405,500	\$ 26,729,360	\$ 12,787,869	\$ 16,298,000	\$ 51,172,000	\$ 7,294,644	\$ 39,140,000	\$ 43,390,917
20	Interest Income to Fund Operations	23,503	35,127	35,127	52,690	52,690	70,254	70,254	70,254	70,254	70,254	70,254
21	Total Uses of Funds	\$ 28,629,428	\$ 43,361	\$ 21,515,035	\$ 20,458,191	\$ 26,782,050	\$ 12,858,123	\$ 16,368,254	\$ 51,242,254	\$ 7,364,898	\$ 39,210,254	\$ 43,461,171
22	Ending Cash Balances	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380	\$ 7,025,380
23	Total Uses of Funds and Ending Cash Balances	\$ 35,654,808	\$ 7,068,741	\$ 28,540,415	\$ 27,483,571	\$ 33,807,430	\$ 19,883,503	\$ 23,393,634	\$ 58,267,634	\$ 14,390,278	\$ 46,235,634	\$ 50,486,551

Table 1-15

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Projected Water and Sewer System Sources and Uses of Funds

Line No.	Description	Fiscal Year Ending September 30,											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
WATER IMPACT FEE ACCOUNT - 422													
Sources of Funds													
24	Available Cash Balances	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	
25	Transfers In - Water Impact Fee Collections	-	-	-	-	-	-	-	-	-	-	-	
26	Interest Income	-	-	-	-	-	-	-	-	-	-	-	
27	Total Sources of Funds	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	
Uses of Funds													
28	Capital Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
29	Payment of Clty Debt Service	-	-	-	-	-	-	-	-	-	-	-	
30	Total Uses of Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
31	Ending Cash Balances	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	
32	Total Uses of Funds and Ending Cash Balances	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	\$ 105,702	
SEWER IMPACT FEE ACCOUNT - 422													
Sources of Funds													
33	Available Cash Balances	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	
34	Transfers In - Wastewater Impact Fee Collections	-	-	-	-	-	-	-	-	-	-	-	
35	Interest Income	-	-	-	-	-	-	-	-	-	-	-	
36	Total Sources of Funds	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	
Uses of Funds													
37	Capital Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
38	Payment of Debt Service	-	-	-	-	-	-	-	-	-	-	-	
39	Transfers Out - Developer Reimbursement	-	-	-	-	-	-	-	-	-	-	-	
40	Total Uses of Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
41	Ending Cash Balances	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	
42	Total Uses of Funds and Ending Cash Balances	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	\$ 160,258	

Table 1-16
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Comparison of Typical Monthly Residential Bills for Water Service

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter [1]									
		WATER USAGE									
		0 Gallons	2,000 Gallons	4,000 Gallons	5,000 Gallons [2]	7,000 Gallons	10,000 Gallons	12,000 Gallons	15,000 Gallons	20,000 Gallons	
City of Miami Beach, Florida											
1	Existing Rates - Fiscal Year 2025	\$ 10.08	\$ 17.84	\$ 25.60	\$ 29.48	\$ 37.24	\$ 52.98	\$ 64.84	\$ 82.63	\$ 118.44	
2	Proposed Rates Effective As Soon As Practical	10.99	19.21	27.43	31.54	39.76	56.61	69.36	88.47	127.13	
3	Difference - Amount	0.91	1.37	1.83	2.06	2.52	3.63	4.52	5.84	8.69	
4	Difference - Percent	9.0%	7.7%	7.1%	7.0%	6.8%	6.9%	7.0%	7.1%	7.3%	
<u>Surveyed Southeast Florida Utilities Located in Miami-Dade County</u>											
5	City of Coral Gables [3]	\$ 4.89	\$ 4.89	\$ 14.19	\$ 19.48	\$ 30.07	\$ 45.96	\$ 56.55	\$ 89.60	\$ 153.64	
6	City of Hialeah [4][5]	5.75	12.75	19.75	23.25	30.75	42.00	49.50	60.75	79.50	
7	City of Homestead [4][5]	11.57	14.01	16.92	18.61	21.99	27.71	32.39	40.22	55.97	
8	Miami-Dade County [6]	4.89	4.89	14.19	19.48	30.07	45.96	56.55	89.60	153.64	
9	City of North Miami Beach [5]	16.33	25.45	34.57	39.13	48.25	63.46	73.60	92.56	124.16	
10	City of Opa-Locka [4][6]	4.48	10.40	16.32	19.28	26.68	37.78	61.86	97.98	188.28	
<u>Surveyed Southeast Florida Utilities Located Outside Miami-Dade County</u>											
11	City of Boynton Beach [6]	\$ 13.08	\$ 17.38	\$ 21.68	\$ 26.43	\$ 35.93	\$ 50.18	\$ 67.00	\$ 92.23	\$ 134.28	
12	Broward County [6]	21.14	25.18	30.84	34.48	46.64	72.20	89.24	120.23	171.88	
13	City of Cooper City [6]	14.63	22.19	29.75	33.53	42.25	55.33	66.37	82.93	110.53	
14	City of Coral Springs [6]	17.93	22.41	26.89	30.34	37.24	51.05	61.41	84.66	123.41	
15	City of Dania Beach [6]	15.89	24.83	33.77	38.24	52.52	73.94	88.22	111.42	156.02	
16	Town of Davie [6]	26.89	35.77	44.65	49.09	62.31	82.14	99.82	126.34	170.54	
17	City of Delray Beach [6]	16.57	20.63	24.69	26.72	30.78	36.87	40.93	53.11	73.41	
18	City of Fort Lauderdale [6]	12.40	21.42	35.84	45.75	65.57	100.28	125.08	175.27	258.92	
19	City of Hallandale Beach [6]	35.37	39.17	43.27	45.32	50.66	58.67	67.03	79.57	100.47	
20	City of Hollywood [6]	9.14	16.95	25.77	33.58	49.19	72.61	94.33	141.22	219.36	
21	City of Lake Worth Beach [6]	21.14	27.96	34.78	40.03	50.53	70.00	84.22	121.54	183.74	
22	City of Margate [6]	17.53	27.65	37.77	42.83	54.21	73.17	85.81	104.77	142.77	
23	City of Miramar [6]	22.27	32.85	43.43	48.72	61.68	81.12	94.08	113.52	154.22	
24	City of Oakland Park [6]	21.01	21.01	24.16	27.31	33.61	43.06	50.92	62.71	90.26	
25	Palm Beach County [6]	13.59	18.07	22.55	27.49	37.37	52.19	69.67	95.89	139.59	
26	City of Pembroke Pines [6]	21.19	21.19	29.42	37.65	54.11	78.80	95.26	119.95	161.10	
27	City of Plantation [6]	16.96	21.32	25.68	27.86	35.49	51.84	62.74	88.90	132.50	
28	City of Riviera Beach [6]	21.76	28.02	34.28	37.41	45.97	58.81	70.09	87.01	115.21	

Table 1-16
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Comparison of Typical Monthly Residential Bills for Water Service

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter [1]								
		WATER USAGE								
		0 Gallons	2,000 Gallons	4,000 Gallons	5,000 Gallons [2]	7,000 Gallons	10,000 Gallons	12,000 Gallons	15,000 Gallons	20,000 Gallons
29	Seacoast Utility Authority	34.87	40.81	46.75	49.72	57.83	73.25	83.53	98.95	124.65
30	City of Sunrise [6]	24.44	32.08	39.72	45.00	55.56	72.88	84.92	108.98	157.16
31	City of Tamarac [6]	11.77	15.31	19.44	21.80	27.72	38.40	45.52	64.21	95.36
32	City of West Palm Beach [6]	24.14	31.63	39.11	42.86	51.28	65.28	74.64	91.16	118.70
33	City of Wilton Manors [6]	29.55	42.81	57.72	66.00	84.21	114.00	133.86	173.58	239.78
34	Average of Surveyed Southeast Florida Utilities in Miami-Dade County	\$ 7.99	\$ 12.07	\$ 19.32	\$ 23.21	\$ 31.30	\$ 43.81	\$ 55.08	\$ 78.45	\$ 125.87
35	Average of Surveyed Southeast Florida Utilities Outside Miami-Dade County	\$ 20.14	\$ 26.38	\$ 33.56	\$ 38.18	\$ 48.81	\$ 66.35	\$ 79.77	\$ 104.27	\$ 146.69
36	Other Southeast Florida Utilities Average	\$ 17.63	\$ 23.41	\$ 30.62	\$ 35.08	\$ 45.19	\$ 61.69	\$ 74.66	\$ 98.93	\$ 142.38
37	Minimum	4.48	4.89	14.19	18.61	21.99	27.71	32.39	40.22	55.97
38	Maximum	35.37	42.81	57.72	66.00	84.21	114.00	133.86	175.27	258.92

Footnotes:

- [1] Amounts reflect bills under single family residential user rates in effect January 2025 and do not include any taxes, franchise fees, or water restriction surcharges, if any. These bills also reflect rates charged to customers within the municipal borders (e.g., no outside-municipality surcharges, if applied, are included in the bill comparison).
- [2] Reflects typical usage of a 5/8-meter single family residential customer with both water and wastewater service within the State of Florida.
- [3] The Miami-Dade Water and Sewer Department currently provides water on a retail basis for the City of Coral Gables; Coral Gables provides retail sanitary sewer.
- [4] Utility purchases sanitary sewer on a wholesale basis from the Miami-Dade Water and Sewer Department.
- [5] Utility purchases potable water service on a wholesale basis from the Miami-Dade Water and Sewer Department.
- [6] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next twelve months following the comparison preparation date.

Table 1-17
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Comparison of Typical Monthly Residential Bills for Sewer Service

Line No.		Description		Residential Service for a 5/8" or 3/4" Meter [1]															
				METERED WATER USAGE															
				0 Gallons	2,000 Gallons	4,000 Gallons	5,000 Gallons [2]	7,000 Gallons	10,000 Gallons	12,000 Gallons	15,000 Gallons	20,000 Gallons							
		City of Miami Beach, Florida																	
1	Existing Rates - Fiscal Year 2024	\$	9.95	\$	33.27	\$	56.59	\$	68.25	\$	91.57	\$	126.55	\$	149.87	\$	184.85	\$	243.15
2	Proposed Rates Effective As Soon As Practical		10.85		36.47		62.09		74.90		100.52		138.95		164.57		203.00		267.05
3	Difference - Amount		0.90		3.20		5.50		6.65		8.95		12.40		14.70		18.15		23.90
4	Difference - Percent		9.0%		9.6%		9.7%		9.7%		9.8%		9.8%		9.8%		9.8%		9.8%
		Surveyed Southeast Florida Utilities Located in Miami-Dade County																	
5	City of Coral Gables [3]	\$	8.00	\$	18.24	\$	29.51	\$	38.58	\$	56.93	\$	86.44	\$	106.12	\$	135.63	\$	184.82
6	City of Hialeah [4][5]		6.25		23.25		40.25		48.75		67.25		95.00		113.50		141.25		187.50
7	City of Homestead [4][5]		23.43		34.29		45.15		50.58		61.44		77.73		88.59		104.88		132.03
8	Miami-Dade County [6]		13.05		13.05		31.58		42.12		63.22		94.87		115.97		147.62		200.37
9	City of North Miami Beach [5]		36.57		50.73		65.95		74.09		90.37		116.77		134.37		161.82		207.57
10	City of Opa-Locka [4][6]		4.48		14.14		23.80		28.63		42.41		63.08		94.16		140.78		218.48
		Surveyed Southeast Florida Utilities Located Outside Miami-Dade County																	
11	City of Boynton Beach [6]	\$	23.33	\$	28.15	\$	32.97	\$	35.38	\$	40.20	\$	47.43	\$	47.43	\$	47.43	\$	47.43
12	Broward County [6]		24.99		35.31		45.63		50.79		61.11		76.59		86.91		102.39		102.39
13	City of Cooper City [6]		32.92		39.58		46.24		49.57		56.23		66.22		66.22		66.22		66.22
14	City of Coral Springs [6]		25.93		35.81		45.69		50.63		60.51		75.33		85.21		100.03		124.73
15	City of Dania Beach [6]		19.83		33.57		47.31		54.18		67.92		88.53		102.27		122.88		157.23
16	Town of Davie [6]		43.74		59.48		75.22		83.09		98.83		122.44		138.18		161.79		161.79
17	City of Delray Beach [6]		18.04		25.48		32.92		36.64		44.08		55.24		62.68		62.68		62.68
18	City of Fort Lauderdale [6]		16.49		28.59		48.01		61.38		88.12		128.23		154.97		195.08		261.93
19	City of Hallandale Beach [6]		23.67		33.35		43.37		48.38		58.82		74.48		86.08		103.48		132.48
20	City of Hollywood [6]		9.16		31.83		54.51		65.84		88.52		122.53		136.36		136.36		136.36
21	City of Lake Worth Beach [6]		18.10		29.06		40.02		45.50		56.46		72.90		83.86		83.86		83.86
22	City of Margate [6]		43.52		43.52		43.52		43.52		43.52		43.52		43.52		43.52		43.52
23	City of Miramar [6]		26.07		40.81		55.55		62.92		77.66		99.77		114.51		136.62		173.47
24	City of Oakland Park [6]		19.95		35.41		50.87		58.60		74.06		97.25		112.71		135.90		135.90
25	Palm Beach County [6]		21.24		26.24		31.24		33.74		38.74		46.24		46.24		46.24		46.24
26	City of Pembroke Pines [6]		27.11		27.11		35.34		43.57		60.03		84.72		101.18		125.87		167.02
27	City of Plantation [6]		22.22		34.62		47.02		53.22		65.62		84.22		96.62		115.22		146.22
28	City of Riviera Beach [6]		22.28		29.44		36.60		40.18		47.34		58.08		58.08		58.08		58.08

Table 1-17
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Comparison of Typical Monthly Residential Bills for Sewer Service

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter [1]								
		METERED WATER USAGE								
		0	2,000	4,000	5,000	7,000	10,000	12,000	15,000	20,000
		Gallons	Gallons	Gallons	Gallons [2]	Gallons	Gallons	Gallons	Gallons	Gallons
29	Seacoast Utility Authority	24.42	26.40	28.38	29.37	31.35	34.32	34.32	34.32	34.32
30	City of Sunrise [6]	27.19	36.83	46.47	51.29	60.93	75.39	85.03	85.03	85.03
31	City of Tamarac [6]	18.75	28.35	37.95	42.75	52.35	66.75	76.35	76.35	76.35
32	City of West Palm Beach [6]	16.11	28.81	41.51	47.86	60.56	79.61	92.11	92.11	92.11
33	City of Wilton Manors [6]	14.51	34.89	55.27	65.46	85.84	116.41	136.79	167.36	167.36
Average of Surveyed Southeast Florida Utilities in Miami-Dade County										
34		\$ 15.30	\$ 25.62	\$ 39.37	\$ 47.13	\$ 63.60	\$ 88.98	\$ 108.79	\$ 138.66	\$ 188.46
Average of Surveyed Southeast Florida Utilities Outside Miami-Dade County										
35		\$ 23.46	\$ 33.59	\$ 44.42	\$ 50.17	\$ 61.69	\$ 78.97	\$ 89.03	\$ 99.95	\$ 111.42
36	Other Southeast Florida Utilities Average	\$ 21.77	\$ 31.94	\$ 43.37	\$ 49.54	\$ 62.08	\$ 81.04	\$ 93.12	\$ 107.96	\$ 127.36
37	Minimum	4.48	13.05	23.80	28.63	31.35	34.32	34.32	34.32	34.32
38	Maximum	43.74	59.48	75.22	83.09	98.83	128.23	154.97	195.08	261.93

Footnotes:

- [1] Amounts reflect bills under single family residential user rates in effect January 2025 and do not include any taxes, franchise fees, or water restriction surcharges, if any. These bills also reflect rates charged to customers within the municipal borders (e.g., no outside-municipality surcharges, if applied, are included in the bill comparison).
- [2] Reflects typical usage of a 5/8-meter single family residential customer with both water and wastewater service within the State of Florida.
- [3] The Miami-Dade Water and Sewer Department currently provides water on a retail basis for the City of Coral Gables; Coral Gables provides retail sanitary sewer.
- [4] Utility purchases sanitary sewer on a wholesale basis from the Miami-Dade Water and Sewer Department.
- [5] Utility purchases potable water service on a wholesale basis from the Miami-Dade Water and Sewer Department.
- [6] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next twelve months following the comparison preparation date.

Table 1-18
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Comparison of Typical Monthly Residential Bills for Combined Water and Sewer Service

		Residential Service for a 5/8" or 3/4" Meter [1]								
		COMBINED WATER AND SEWER								
Line No.	Description	0 Gallons	2,000 Gallons	4,000 Gallons	5,000 Gallons [2]	7,000 Gallons	10,000 Gallons	12,000 Gallons	15,000 Gallons	20,000 Gallons
City of Miami Beach, Florida										
1	Existing Rates - Fiscal Year 2024	\$ 20.03	\$ 51.11	\$ 82.19	\$ 97.73	\$ 128.81	\$ 179.53	\$ 214.71	\$ 267.48	\$ 361.59
2	Proposed Rates Effective As Soon As Practical	21.84	55.68	89.52	106.44	140.28	195.56	233.93	291.47	394.18
3	Difference - Amount	1.81	4.57	7.33	8.71	11.47	16.03	19.22	23.99	32.59
4	Difference - Percent	9.0%	8.9%	8.9%	8.9%	8.9%	8.9%	9.0%	9.0%	9.0%
Surveyed Southeast Florida Utilities Located in Miami-Dade County										
5	City of Coral Gables [3]	\$ 12.89	\$ 23.13	\$ 43.70	\$ 58.07	\$ 87.01	\$ 132.40	\$ 162.67	\$ 225.23	\$ 338.46
6	City of Hialeah [4][5]	12.00	36.00	60.00	72.00	98.00	137.00	163.00	202.00	267.00
7	City of Homestead [4][5]	35.00	48.30	62.07	69.19	83.43	105.44	120.98	145.10	188.00
8	Miami-Dade County [6]	17.94	17.94	45.76	61.61	93.30	140.83	172.52	237.22	354.01
9	City of North Miami Beach [5]	52.90	76.18	100.52	113.22	138.62	180.23	207.97	254.38	331.73
10	City of Opa-Locka [4][6]	8.96	24.54	40.12	47.91	69.09	100.86	156.02	238.76	406.76
Surveyed Southeast Florida Utilities Located Outside Miami-Dade County										
11	City of Boynton Beach [6]	\$ 36.41	\$ 45.53	\$ 54.65	\$ 61.81	\$ 76.13	\$ 97.61	\$ 114.43	\$ 139.66	\$ 181.71
12	Broward County [6]	46.13	60.49	76.47	85.27	107.75	148.79	176.15	222.62	274.27
13	City of Cooper City [6]	47.55	61.77	75.99	83.10	98.48	121.55	132.59	149.15	176.75
14	City of Coral Springs [6]	43.86	58.22	72.58	80.97	97.75	126.38	146.62	184.69	248.14
15	City of Dania Beach [6]	35.72	58.40	81.08	92.42	120.44	162.47	190.49	234.30	313.25
16	Town of Davie [6]	70.63	95.25	119.87	132.18	161.14	204.58	238.00	288.13	332.33
17	City of Delray Beach	34.61	46.11	57.61	63.36	74.86	92.11	103.61	115.79	136.09
18	City of Fort Lauderdale [6]	28.89	50.01	83.85	107.13	153.69	228.51	280.05	370.35	520.85
19	City of Hallandale Beach [6]	59.04	72.52	86.64	93.70	109.48	133.15	153.11	183.05	232.95
20	City of Hollywood [6]	18.30	48.78	80.28	99.42	137.71	195.14	230.69	277.58	355.72
21	City of Lake Worth Beach [6]	39.24	57.02	74.80	85.53	106.99	142.90	168.08	205.40	267.60
22	City of Margate [6]	61.05	71.17	81.29	86.35	97.73	116.69	129.33	148.29	186.29
23	City of Miramar [6]	48.34	73.66	98.98	111.64	139.34	180.89	208.59	250.14	327.69
24	City of Oakland Park [6]	40.96	56.42	75.03	85.91	107.67	140.31	163.63	198.61	226.16
25	Palm Beach County [6]	34.83	44.31	53.79	61.23	76.11	98.43	115.91	142.13	185.83
26	City of Pembroke Pines [6]	48.30	48.30	64.76	81.22	114.14	163.52	196.44	245.82	328.12
27	City of Plantation [6]	39.18	55.94	72.70	81.08	101.11	136.06	159.36	204.12	278.72
28	City of Riviera Beach [6]	44.04	57.46	70.88	77.59	93.31	116.89	128.17	145.09	173.29

Table 1-18
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

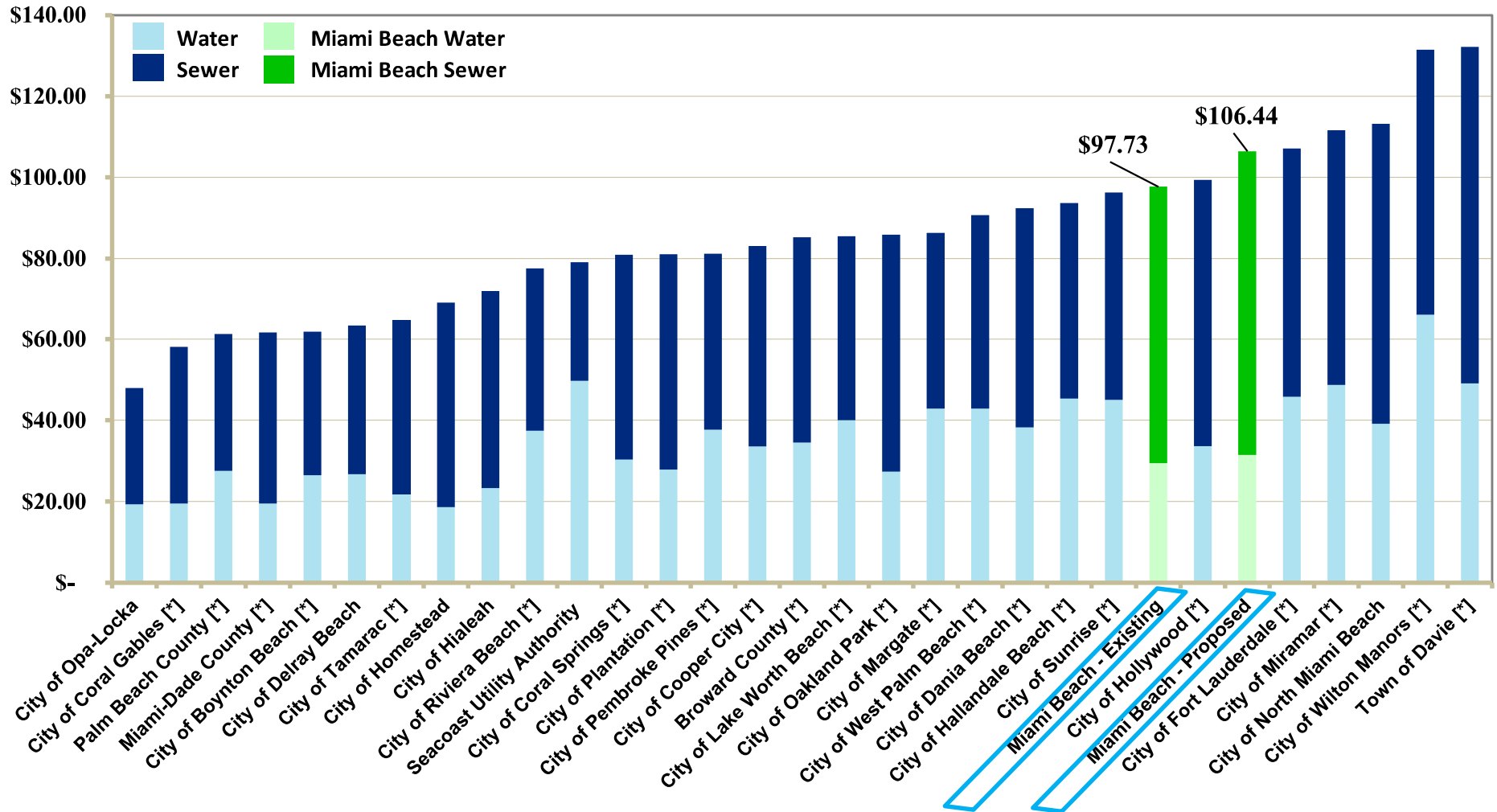
Comparison of Typical Monthly Residential Bills for Combined Water and Sewer Service

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter [1]								
		COMBINED WATER AND SEWER								
		0	2,000	4,000	5,000	7,000	10,000	12,000	15,000	20,000
		Gallons	Gallons	Gallons	Gallons [2]	Gallons	Gallons	Gallons	Gallons	Gallons
29	Seacoast Utility Authority	59.29	67.21	75.13	79.09	89.18	107.57	117.85	133.27	158.97
30	City of Sunrise [6]	51.63	68.91	86.19	96.29	116.49	148.27	169.95	194.01	242.19
31	City of Tamarac [6]	30.52	43.66	57.39	64.55	80.07	105.15	121.87	140.56	171.71
32	City of West Palm Beach [6]	40.25	60.44	80.62	90.72	111.84	144.89	166.75	183.27	210.81
33	City of Wilton Manors [6]	44.06	77.70	112.99	131.46	170.05	230.41	270.65	340.94	407.14
Average of Surveyed Southeast Florida Utilities in Miami-Dade County										
34		\$ 23.28	\$ 37.68	\$ 58.70	\$ 70.33	\$ 94.91	\$ 132.79	\$ 163.86	\$ 217.11	\$ 314.33
Average of Surveyed Southeast Florida Utilities Outside Miami-Dade County										
35		\$ 43.60	\$ 59.97	\$ 77.98	\$ 88.35	\$ 110.50	\$ 145.32	\$ 168.80	\$ 204.22	\$ 258.11
36	Other Southeast Florida Utilities Average	\$ 39.40	\$ 55.36	\$ 73.99	\$ 84.62	\$ 107.27	\$ 142.73	\$ 167.78	\$ 206.88	\$ 269.74
37	Minimum	8.96	17.94	40.12	47.91	69.09	92.11	103.61	115.79	136.09
38	Maximum	70.63	95.25	119.87	132.18	170.05	230.41	280.05	370.35	520.85

Footnotes:

- [1] Amounts reflect bills under single family residential user rates in effect January 2025 and do not include any taxes, franchise fees, or water restriction surcharges, if any. These bills also reflect rates charged to customers within the municipal borders (e.g., no outside-municipality surcharges, if applied, are included in the bill comparison).
- [2] Reflects typical usage of a 5/8-meter single family residential customer with both water and wastewater service within the State of Florida.
- [3] The Miami-Dade Water and Sewer Department currently provides water on a retail basis for the City of Coral Gables; Coral Gables provides retail sanitary sewer.
- [4] Utility purchases sanitary sewer on a wholesale basis from the Miami-Dade Water and Sewer Department.
- [5] Utility purchases potable water service on a wholesale basis from the Miami-Dade Water and Sewer Department.
- [6] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next twelve months following the comparison preparation date.

Figure 1-1
City of Miami Beach, Florida
Comparison of Monthly Charges for
Combined Water and Sewer Service for
Single Family Residential Customers Using 5,000 Gallons



[*] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next twelve months following the comparison preparation date

SECTION 2:

Water and Sewer Impact Fees

SECTION 2:

WATER AND SEWER IMPACT FEES

2-1: Background on Water and Sewer Impact Fees

The purpose of Impact Fees is to assign the proportionate share of growth-related capital costs to new customers benefiting from such additional costs. This practice has been referred to as "growth paying its own way" without existing user cost burdens.

The initial precedent for Impact Fees in Florida was set in the Florida Supreme Court decision *Contractors and Builders Association of Pinellas Authority v. The Authority of Dunedin, Florida*. In this case, the Court's ruling found that an equitable cost recovery mechanism, such as Impact Fees, could be levied for a specific purpose by a Florida municipality as a capital charge for services. On June 14, 2006, new Impact Fee legislation became effective as Chapter 2006-218, Laws of Florida, and was later incorporated in Section 163.31801 of the Florida Statutes. These new Impact Fee laws, which were labeled as the "Florida Impact Fee Act," recognize that Impact Fees are an important source of revenue for a local government to use in funding the infrastructure necessitated by growth. The Florida Impact Fee Act has subsequently been amended in May 2009 with Florida House Bill 227, in July 2019 with Florida House Bill 207, and in June 2021 with Florida House Bill 337. The act states that an Impact Fee adopted by ordinance of a county or municipality, or by resolution of a special district, must meet the following minimum requirements:

- The Impact Fee must be calculated based on the most recent and localized data.
- The local government must provide for accounting and reporting of Impact Fee collections and expenditures in a separate accounting fund.
- The local government must limit administrative charges for the collection of Impact Fees to actual costs.
- The local government must provide notice no less than 90 days before the effective date of an ordinance or resolution imposing a new or amended Impact Fee. However, a county or municipality is not required to wait 90 days to decrease, suspend, or eliminate an Impact Fee.
- The local government may not require payment of the Impact Fee before the date of issuance of the building permit.
- The Impact Fee must be reasonably connected to, or have a rational nexus with, the need for additional capital facilities and the increased impact generated by the construction.

- The Impact Fee must be reasonably connected to, or have a rational nexus with, the expenditures of the revenues generated and the benefits accruing to the new construction.
- The local government must specifically earmark revenues generated by the impact fees to acquire, construct, or improve capital facilities to benefit new users.
- The local government may not use revenues generated by the Impact Fees to pay existing debt or for previously approved projects unless the expenditures are reasonably connected to, or have a rational nexus with, the increased impact generated by the new construction.

The Florida Impact Fee Act also states:

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

Florida House Bill 337 added the following Impact Fee increase limitations:

- An increase in the Impact Fee of not more than 25% must be implemented in two equal annual increments.
- An increase in the Impact Fee greater than 25% but not more than 50% must be implemented in four equal installments.
- An Impact Fee increase may not exceed 50% of the current fee.
- An Impact Fee may not be increased more than once every 4 years.

HOWEVER, a local government can increase impact fees beyond the phase-in limitations if:

- A demonstrated needs study has been completed within the past 12 months that expressly demonstrates extraordinary circumstances necessitating the need to exceed the phase-In limitations.
- The local government holds two publicly noticed workshops dedicated to the extraordinary circumstances.
- The Impact Fee increases is approved by at least a two-thirds vote of the governing body.

Legislation added in 2024 requires that local governments must ensure that "the calculation of the impact fee is based on a study using the most recent and localized data available within 4 years of the current impact fee update. The new study must be adopted by the local government within 12 months of the initiation of the new impact fee study if the local government increases the impact fee."

However, the Florida Impact Fee Act also states that "This section does not apply to water and sewer connection fees." Based on legal opinions that we have received, many provisions of the Florida Impact Fee Act – including the increase limitations – are not applicable to water and sewer impact fees. According to the legal opinions:

Impact Fees have been defined as "scheduled charges applied to new development to generate revenue for the construction or expansion of capital facilities located outside the boundaries of the new development (off-site) that benefit the contributing development." Ronald H. Rosenberg, *The Changing Culture Of American Land Use Regulation: Paying For Growth With Impact Fees*, 59 S.M.U. L.Rev. 177, 206 (Winter 2006) (citing James C. Nicholas, Arthur C. Nelson & Julian C. Juergensmeyer, *A Practitioner's Guide to Development Impact Fees* 1–2 (1991)).

"Impact fees, which include connection fees, are the method by which a new user of a municipally-owned water or sewer system pays his or her fair share of the costs that the new use of the system involves." *See Contractors & Builders Ass'n v. City of Dunedin*, 329 So.2d 314 (Fla.1976).

"A connection fee is generally considered to be a type of impact fee charged by utility companies for initiating new service." *See, e.g., Save Our Septic Sys. Comm., Inc. v. Sarasota Cnty.*, 957 So.2d 671 (Fla. 2d DCA 2007); *City of Zephyrhills v. Wood*, 831 So.2d 223, 224 (Fla. 2d DCA 2002).

The Florida Impact Fee Act legislation was apparently written based upon a particular jurisdiction which referred to their water and sewer Impact Fees as "water and sewer connection fees" but the intent was to exempt water and sewer Impact Fees regardless of what they are called.

Based on Florida statutory and case law, certain conditions are required to develop a valid Impact Fee:

- 1. The Impact Fee must meet the "dual rational nexus" test.** First, Impact Fees are valid when a reasonable impact or rationale exists between the anticipated need for capital facilities and the growth in population. Second, Impact Fees are valid when a reasonable association, or rational nexus, exists between the expenditure of the Impact Fee proceeds and the benefits accruing to the development from use of those proceeds.
- 2. The system of Impact Fees and related charges should be set up so that there is not an intentional windfall to existing users.**
- 3. The Impact Fee should only cover the capital cost of construction and related costs (engineering, legal, financing, administrative, etc.) for capital expansions or other capital requirements to serve growth.** Expenses for rehabilitation or replacement of a facility benefiting the existing customers (e.g., replacement of a capital asset) or an increase in the level of service should be borne by all users of the facility (i.e., existing and future users to the extent that capacity is available in such facilities to serve growth). Similarly, increased expenses due to operation and maintenance of that facility should be borne by the existing users of the utility and are not a cost component of the derivation of the Impact Fees.
- 4. An Impact Fee resolution or ordinance should be maintained that explicitly restricts the use of Impact Fees collected and requires Impact Fee revenue to be set aside in a separate**

account. Separate accounting must be made for those funds to ensure that they are used only for the lawful purposes described above.

The courts, recent legislation, and industry practices have addressed three areas associated with the development of Impact Fees. These areas include i) the "fair share" concept relating to payment of the fee by the affected property owners; ii) the "rational nexus" concept, which focuses on the expenditure or purpose of the fee; and iii) the consideration of credits that recognize appropriate fee offsets (e.g., grant-funded infrastructure).

The fair share concept addresses the fact that the fee can only be used for capital expenditures attributable to new growth. The fee cannot be used to finance level of service deficiencies or the replacement of existing facilities required to provide services to the existing system users. Typical industry practices also allow for establishing different fees for different classes of customers and the ability for the payment of a reduced impact fee if applicants can demonstrate that their development will have smaller impact (or capacity need resulting in a lower allocated capital requirement) than assumed in the fee determination. Additionally, the fair share concept recognizes that the cost of facilities used by both existing customers and new growth must be apportioned between the two user groups such that the user groups are treated equally, and that one group does not intentionally subsidize the other.

The rational nexus concept requires that there be a reasonable relationship between the need for capital facilities and the benefits to be received by new development for which the fee will be expended or applied. The City's existing infrastructure and the corresponding financing and management of such infrastructure is on a system-wide basis. As such, the Impact Fees were calculated on a System-wide basis. The second nexus condition recognizes that the property must receive a benefit from the public services for which the fee is being applied. The water and sewer facilities are used by and are constructed on behalf of all the property within the City's service area and benefit both residential and commercial customers. As such, all new growth requesting capacity from the utility system is subject to the application of the Impact Fees.

Credit or fee offsets recognize that credits should be applied to an Impact Fee if an agency has received property in the form of cost-free capital or if there is a specific revenue (e.g., taxes) that will be used for the growth-driven capital expenditures for which the impact fee was designed. Examples of cost-free capital include grants, property contributions by developers, infrastructure funded from external sources (assessments), and other sources that provide funds toward the capital expenditures for which the impact fee was designed to recover. These credits allow for the recovery of costs to serve new development through impact fees net of such cost-free capital. The calculated water and sewer Impact Fees recognize the above-referenced issues.

2-2: Existing Water and Sewer Impact Fees

The City's existing water and sewer Impact Fees are based on meter size and were adopted by the City Commission on May 17, 1995 pursuant to Ordinance No. 95-2990 for water and Ordinance No. 95-2991 for sewer (the "Impact Fee Ordinances"). The Impact Fees have not been adjusted for 30 years.

The City's water and sewer impact fees recover the cost of transmission capacity. Separate impact fees are paid to Miami-Dade County for water and sewer treatment capacity. The current impact fees are summarized in the following Exhibit 2-1.

Exhibit 2-1: Existing Water and Sewer Impact Fees

Description	Water	Sewer	Combined
All Customer Classes - City Portion Only			
<u>Meter Size (Inches)</u>			
5/8"	\$155	\$235	\$390
3/4"	230	350	580
1"	385	585	970
1.5"	775	1,175	1,950
2"	1,240	1,880	3,120
3"	2,480	3,760	6,240
4"	3,875	5,875	9,750
6"	7,750	11,750	19,500
8"	12,400	18,800	31,200

2-3: Water and Sewer Level of Service Requirements

In the evaluation of the capital facility needs for providing water and sewer utility services, it is critical that a level of service ("LOS") standard be developed. Per Section 163.3164(28) of the Florida Statutes, the "level of service" means "an indicator of the extent or degrees of service provided by, or proposed to be provided by a facility, based on and related to the operational characteristics of the facility." A level of service indicates the capacity per unit of demand for each public facility or service. Essentially, the level of service standards are established in order to ensure that adequate facility capacity will be provided for future development and for purposes of issuing development orders or permits pursuant to Section 163.3202(2)(g) of the Florida Statutes.

For water and wastewater service, the level of service that is commonly used in the industry is the amount of capacity (service) allocable to an ERC expressed as the amount of usage (gallons) allocated. This allocation of capacity would generally represent the amount of capacity allocable to an ERC, whether or not such capacity is actually used (commonly referred to as "readiness to serve"). As previously mentioned, an ERC – sometimes known as an equivalent residential unit (ERU) or equivalent dwelling unit (EDU) – is representative of the capacity allocated to provide service to a typical individually-metered single family residential account. This class of users is usually the largest number of customers served by a public utility such as the City's, and such customers generally have the lowest level of usage requirements for a specifically metered account.

Since Miami-Dade County provides the City's water supply and sewer treatment, GovRates developed proposed Impact Fees for the City assuming the County's level of service standard of 210 gallons per day for units under 3,001 square feet.

2-4: Existing Water and Sewer Utility Assets in Service

In the determination of the Impact Fees associated with serving future customers, any excess capacity of the existing utility system available to serve such growth should be considered. Since this capacity is available to serve the near-term incremental growth of the utility system, it would be appropriate to evaluate the capacity availability of such facilities. In order to evaluate the availability of the existing utility assets to meet future capacity needs, the existing utility assets were reviewed and assigned to functional categories. The functionalization of the existing utility assets is necessary to identify those assets that should be included in the determination of the capacity charges.

The functional cost categories are based on the purpose of the assets and the service that such assets provide. The following Exhibit 3-2 contains a summary of the functional cost categories for the utility assets considered in a typical impact fee analysis:

Exhibit 2-2: Water and Sewer Utility Asset Categories

Water Service	Wastewater Service	Other Assets
Supply	Treatment	General Assets (equipment, vehicles, etc.)
Treatment, Transmission, and Storage	Effluent / Reclaimed Water	
Distribution	Transmission and Major Pumping Stations	
Fire Hydrants	Collection (includes local lift stations, manholes, and laterals)	
Meters and Services		

Supply, treatment, and disposal costs are not applicable to the City's impact fees since these functions are provided by Miami-Dade County. Generally, the costs of onsite facilities which serve a specific development or customer such as water distribution and wastewater collection lines, meters and services, and fire hydrants are usually i) donated by a developer as part of the City's utility extension program (a contribution of the plant); ii) recovered from the individual properties through an assessment program based on those properties which receive special benefit from such facilities or from the application of a main line extension fee to recover the specific cost of such facilities; or iii) funded from the customer directly (e.g., by a "front-foot" charge where the on-site lines were initially financed by the utility and then paid by the customer or an installation charge to recover the cost of a new service line and/or the meter).

The City provided GovRates with reported utility asset information that served as the basis of the functionalization of the existing utility assets. Table 2-1 at the end of this section provides a summary of the functionalization of the existing utility assets-in-service for the System. This information represents the most current information available relative to the assets that can serve the existing and near-term future customer base of each utility system.

2-5: Additional Water and Sewer System Capital Investment

The City's capital improvement program (CIP) through the Fiscal Year 2034, as prepared and estimated by the City staff and its Consulting Engineers, outlines a number of capital improvements for the water and sewer systems. These capital projects include i) upgrades of existing assets to accommodate new and existing customers; and ii) replacements of existing assets or projects which generally benefit current users of the System.

Tables 2-2 and 2-3 at the end of this section show the capital costs included in the impact fee calculations. No amounts associated with departmental capital outlay were included. Departmental capital outlay is the ongoing replacement of vehicles, equipment, machinery,

computers, furniture, and other assets that generally have relatively short average service lives (e.g., five years). These amounts are typically considered or classified as general plant and are funded on a "pay-as-you-go" basis through the annual user rate revenues of the System.

Based on our understanding of the fair share apportionment rule identified by case law, only backbone transmission costs were recognized in the water and sewer Impact Fee calculations. General transmission and distribution / collection project costs were not recognized because they i) generally are not system-wide costs (i.e., distribution / collection project costs tend to benefit specific customers); ii) in many instances, are funded by a specific charge applied to a customer (e.g., line extension charges, etc.); and iii) are usually contributed to the City as part of the development process (e.g., it would not be equitable for a developer who has contributed the distribution / collection assets to pay an Impact Fee which includes recovery of distribution/collection projects).

2-6: Water and Sewer System Impact Fee Calculations

The water impact fee calculations are shown in Table 2-4 at the end of this section, while Table 2-5 shows the sewer impact fee calculations. The calculated Impact Fees are shown in the following Exhibit 2-3:

**Exhibit 2-3: Existing and Proposed
Water and Sewer Impact Fees Per ERC**

System	Existing Fee	Calculated / Proposed Fee	Difference
Water	\$155	\$1,630	\$1,475
Wastewater	235	2,030	1,795
Total	\$390	\$3,660	\$3,270

ERC = Equivalent Residential Connection

As shown in the preceding table, both the water and sewer Impact Fees are proposed to increase. The City now has a higher cost per unit of capacity than what was calculated 30 years ago due to inflation, new treatment technology, increased government regulations, and changing capital needs.

2-7: Water and Sewer Impact Fee Comparisons

In order to provide additional information to the City regarding the existing and calculated Impact Fees, a comparison of the existing and calculated fees for the City with those of other Florida jurisdictions was prepared. Table 2-6 and Figure 2-1 at the end of this section provide a comparison of the City's existing and proposed Impact Fees charged to single family residential connections (i.e., one ERC) with the fees or comparable charges currently imposed by other

municipal/governmental water and sewer systems located in southeast Florida. Figure 2-1 shows a graphical representation of the comparison. For comparison purposes, the Miami-Dade County treatment component has been added to the City's existing and proposed Impact Fees, which represent a transmission component. It is important to note that the methods used in the development of the water and wastewater impact fees imposed by other jurisdictions may vary. Moreover, no analysis has been performed to determine whether 100% of the proportionate cost of new facilities is recovered from system Impact Fees, or some percentage less than 100% with the balance recovered through the user charges. Additionally, the types of capital facilities currently in service or planned for the utility may have a material effect on the impact fee charged by a local government. For example, wastewater effluent disposal utilizing a deep injection well system generally has a higher capital cost per unit of capacity than use of a surface water discharge such as an outfall to a bay or river. The capital costs associated with constructing reverse osmosis water treatment facilities, which treat brackish water, are higher than those of lime softening facilities, which treat freshwater.

Some reasons why Impact Fees differ among utilities include:

- Source and quality of raw water supply.
- Proximity to source of supply.
- Type and complexity of treatment process.
- Effluent disposal method.
- Density of service area.
- Availability of grant funding to finance capital assets / CIP.
- Age of system.
- Utility life cycle (e.g., growth-oriented vs. mature).
- Level of service standards.
- Administrative policies.
- Time of last impact fee review.

As shown in Table 2-6 and Figure 2-1, the calculated Impact Fees for the City are comparable with the fees charged by the surveyed utilities. It should be noted that many of the utilities in the comparison have not updated their fees for many years.

Table 2-1
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Existing Water and Sewer Utility Assets

Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System						Sewer System				General Plant					
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Efl./Recl.	Transmission	Collection & Direct Recl.						
Fixed Assets as of September 30, 2023 [1]																							
1	497	0410	25TH ST. PUMP STA	10/1/1930	\$ 20,527	\$ -	\$ 20,527	\$ -	\$ -	\$ -	\$ 20,527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
2	498	0410	5TH ST & ALTON RD PUMP STA	10/1/1925	3,120	-	3,120	-	-	-	3,120	-	-	-	-	-	-	-	-	-	-	-	-
3	499	0410	1ST & JEFFERSON PUMP STA	10/1/1922	4,930	-	4,930	-	-	-	4,930	-	-	-	-	-	-	-	-	-	-	-	-
4	500	0410	75TH & DICKENS PUMP STA	10/1/1935	16,176	-	16,176	-	-	-	16,176	-	-	-	-	-	-	-	-	-	-	-	-
5	501	0410	451 DADE BLVD. PUMP STA	10/1/1930	1,049	-	1,049	-	-	-	1,049	-	-	-	-	-	-	-	-	-	-	-	-
6	489	0420	NORM SHORES-13600 SQ. FT.	10/1/1937	1,088	-	1,088	-	-	-	-	-	-	-	-	-	-	-	-	1,088	-	-	-
7	490	0420	81ST. & HAWTHORNE 16500 SQ.FT	10/1/1948	5,115	-	5,115	-	-	-	-	-	-	-	-	-	-	-	-	5,115	-	-	-
8	491	0420	69 ST. & INDIAN CREEK 7100 SQ.	10/1/1935	852	-	852	-	-	-	852	-	-	-	-	-	-	-	-	852	-	-	-
9	492	0420	69 ST. & WASHINGTON 5600 SQ. F	10/1/1930	952	-	952	-	-	-	-	-	-	-	-	-	-	-	-	952	-	-	-
10	493	0420	11 ST. & JEFFERSON 12000 SQ.FT	10/1/1923	5,640	-	5,640	-	-	-	-	-	-	-	-	-	-	-	-	5,640	-	-	-
11	494	0420	63 ST. & INDIAN CREEK 26688 SF	10/1/1974	1,430,210	-	1,430,210	-	-	-	-	-	-	-	-	-	-	-	-	1,430,210	-	-	-
12	495	0420	75 ST. & DICKENS 15400 SQ. FT.	10/1/1935	1,890	-	1,890	-	-	-	-	-	-	-	-	-	-	-	-	1,890	-	-	-
13	496	0420	451 DADE BLVD. 6170 SQ. FT.	10/1/1930	1,049	-	1,049	-	-	-	-	-	-	-	-	-	-	-	-	1,049	-	-	-
14	16002	0410	GIS SEWER COLLECTION SYST	11/1/2006	214,127	-	214,127	-	-	-	-	-	-	-	-	-	-	-	-	127,806	86,321	-	-
15	17464	0410	ASPHALT & SIDEWALK - W/O 2479 & 2480	5/1/2008	205,506	-	205,506	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	205,506
16	18967	0410	ENCROACHMENT PROJ WO 2515	9/30/2008	4,867	-	4,867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,867
17	21051	0410	451 DADE BLVD. (PUB.WORKS-YARD/ROOFING)	6/9/2010	226,454	-	226,454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	226,454
18	2458	0410	STRUCT & IMPROVS 1981	1/1/1981	360,227	-	360,227	-	-	197,831	162,396	-	-	-	-	-	-	-	-	-	-	-	-
19	28602	0410	FLAMINGO NEIGHBORHOOD - WEST	5/10/2017	148,051	-	148,051	-	-	-	148,051	-	-	-	-	-	-	-	-	-	-	-	-
20	28664	0410	FLAMINGO NEIGHBORHOOD - EAST	6/12/2017	273,599	-	273,599	-	-	-	273,599	-	-	-	-	-	-	-	-	-	-	-	-
21	30141	0815	FLAMINGO NEIGHBORDOOD - SOUTH	1/31/2022	680,003	-	680,003	-	-	-	680,003	-	-	-	-	-	-	-	-	-	-	-	-
22	30425	0815	WEST AVE./BAY RD. NEIGHBORHOOD IMPROVEME	11/7/2022	1,710,140	-	1,710,140	-	-	-	1,710,140	-	-	-	-	-	-	-	-	-	-	-	-
23	517	0410	BLDG 450 DADE BLVD	10/1/1980	180,114	-	180,114	-	-	-	180,114	-	-	-	-	-	-	-	-	-	-	-	-
24	519	0410	25TH ST. STRUCTURE	10/1/1938	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	520	0410	25TH ST. STRUCTURE	10/1/1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	521	0410	25TH ST. STRUCTURE	10/1/1968	45,511	-	45,511	-	-	-	45,511	-	-	-	-	-	-	-	-	-	-	-	-
27	531	0410	ELEVATED WATER TANK-STAR ISLAN	10/1/1926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	532	0410	ELEVATED WATER TANK-25TH ST.	10/1/1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	533	0410	ELEV. WATER TANK 75 ST & DICKE	10/1/1954	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	534	0410	ELEV. WATER TANK 75 ST & DICKE	10/1/1957	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	541	0410	STRUCTURE-NORM SHORES	10/1/1950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	542	0410	STRUCTURE-41ST & ALTON RD	10/1/1963	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	543	0410	STRUCTURE-5TH ST. & ALTON RD	10/1/1935	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	544	0410	STRUCTURE-75TH ST. & ALTON RD	10/1/1953	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	545	0410	STRUCTURE-BELLE ISLAND	10/1/1935	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	546	0410	STRUCTURE	10/1/1957	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	2459	0420	STRUCT & IMPROVS 1982	10/1/1981	382,807	-	382,807	-	-	-	-	-	-	-	-	-	-	-	-	382,807	-	-	-
38	2460	0420	STRUCT & IMPROVS 1988	9/30/1988	79,098	-	79,098	-	-	-	-	-	-	-	-	-	-	-	-	79,098	-	-	-
39	2461	0420	STRUCT & IMPROVS 1989	9/30/1989	1,480	-	1,480	-	-	-	-	-	-	-	-	-	-	-	-	1,480	-	-	-
40	2462	0420	STRUCT & IMPROVS 1990	9/30/1990	44,497	-	44,497	-	-	-	-	-	-	-	-	-	-	-	-	44,497	-	-	-
41	28602	0410	FLAMINGO NEIGHBORHOOD - WEST	5/10/2017	148,051	-	148,051	-	-	-	-	-	-	-	-	-	-	-	-	-	148,051	-	-
42	28664	0410	FLAMINGO NEIGHBORHOOD - EAST	6/12/2017	273,599	-	273,599	-	-	-	-	-	-	-	-	-	-	-	-	-	273,599	-	-
43	30141	0815	FLAMINGO NEIGHBORDOOD - SOUTH	1/31/2022	680,003	-	680,003	-	-	-	680,003	-	-	-	-	-	-	-	-	-	680,003	-	-
44	30425	0815	WEST AVE./BAY RD. NEIGHBORHOOD IMPROVEME	11/7/2022	1,710,140	-	1,710,140	-	-	-	-	-	-	-	-	-	-	-	-	-	1,710,140	-	-
45	488	0420	STRUCT & IMPROVS	10/1/1983	235,420	-	235,420	-	-	-	-	-	-	-	-	-	-	-	-	235,420	-	-	-
46	504	0420	STRUCT & IMPROVS	10/1/1979	526,489	-	526,489	-	-	-	-	-	-	-	-	-	-	-	-	526,489	-	-	-
47	511	0420	IMPROVS & STRUCT	10/1/1980	4,225,877	-	4,225,877	-	-	-	-	-	-	-	-	-	-	-	-	4,225,877	-	-	-
48	518	0420	BLDG 450 DADE BLVD	10/1/1980	123,534	-	123,534	-	-	-	-	-	-	-	-	-	-	-	-	123,534	-	-	-
49	537	0420	STRUCT & IMPROVS '86	10/1/1986	426,650	-	426,650	-	-	-	-	-	-	-	-	-	-	-	-	426,650	-	-	-
50	12050	0410	FIRELINES ADDITIONS FOR FY01	3/31/2001	14,955	-	14,955	-	-	-	-	14,955	-	-	-	-	-	-	-	-	-	-	-
51	12055	0410	FIRELINES ADDITIONS - FY01	9/30/2001	62,941	-	62,941	-	-	-	62,941	-	-	-	-	-	-	-	-	-	-	-	-
52	12059	0410	FIRELINES ADDITIONS - FY02	9/30/2002	100,278	-	100,278	-	-	-	100,278	-	-	-	-	-	-	-	-	-	-	-	-
53	12103	0410	FIRELINE ADDITIONS - FY03	3/31/2003	28,004	-	28,004	-	-	-	28,004	-	-	-	-	-	-	-	-	-	-	-	-
54	16688	0410	FIRELINES - 2007	9/30/2007	30,424	-	30,424	-	-	-	30,424	-	-	-	-	-	-	-	-	-	-	-	-
55	16698	0410	FIRELINES - 2002	9/30/2007	62,043	-	62,043	-	-	-	62,043	-	-	-	-	-	-	-	-	-	-	-	-
56	16699	0410	FIRELINES - 2003	9/30/2007	34,414	-	34,414	-	-	-	34,414	-	-	-	-	-	-	-	-	-	-	-	-
57	16700	0410	FIRELINES - 2004	9/30/2007	36,818	-	36,818	-	-	-	36,818	-	-	-	-	-	-	-	-	-	-	-	-
58	16701	0410	FIRELINES - 2005	9/30/2007	31,414	-	31,414	-	-	-	31,414	-	-	-	-	-	-	-	-	-	-	-	-
59	16702	0410	FIRELINES - 2006	9/30/2007	20,757	-	20,757	-	-	-	20,757	-	-	-	-	-	-	-	-	-	-	-	-
60	17336	0410	FIRELINES - 2008	4/30/2008	29,026	-	29,026	-	-	-	-	29,026	-	-									

Table 2-1
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Existing Water and Sewer Utility Assets

Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System						Sewer System				General Plant	
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Efl./Recl.	Transmisison	Collection & Direct Recl.		
79	7989	0410	WT FIRELINES - 3/94	3/31/1994	27,646	-	27,646	-	-	-	27,646	-	-	-	-	-	-	-	-
80	7990	0410	WT FIRELINES - 9/94	9/30/1994	9,229	-	9,229	-	-	-	9,229	-	-	-	-	-	-	-	-
81	7991	0410	WT FIRELINES - 3/95	3/31/1995	4,854	-	4,854	-	-	-	4,854	-	-	-	-	-	-	-	-
82	7992	0410	WT FIRELINES - 9/95	9/30/1995	22,088	-	22,088	-	-	-	22,088	-	-	-	-	-	-	-	-
83	7993	0410	WT FIRELINES - 3/96	3/31/1996	35,209	-	35,209	-	-	-	35,209	-	-	-	-	-	-	-	-
84	7994	0410	WT FIRELINES - 9/96	9/30/1996	40,560	-	40,560	-	-	-	40,560	-	-	-	-	-	-	-	-
85	7995	0410	WT FIRELINES - 3/97	3/31/1997	25,132	-	25,132	-	-	-	25,132	-	-	-	-	-	-	-	-
86	7996	0410	WT FIRELINES - 9/97	9/30/1997	15,679	-	15,679	-	-	-	15,679	-	-	-	-	-	-	-	-
87	7997	0410	WT FIRELINES - 3/98	3/31/1998	14,465	-	14,465	-	-	-	14,465	-	-	-	-	-	-	-	-
88	7998	0410	WT FIRELINES - 09/98	9/30/1998	20,634	-	20,634	-	-	-	20,634	-	-	-	-	-	-	-	-
89	7999	0410	WT FIRELINES 03/99	3/30/1999	42,774	-	42,774	-	-	-	42,774	-	-	-	-	-	-	-	-
90	8969	0410	WT FIRELINES FY 2000	9/30/2000	63,624	-	63,624	-	-	-	63,624	-	-	-	-	-	-	-	-
91	8973	0410	WT FIRELINES FY 2000	9/30/2000	42,722	-	42,722	-	-	-	42,722	-	-	-	-	-	-	-	-
92	12054	0420	MAINS & LINES - FY01	3/31/2001	23,551	-	23,551	-	-	-	-	-	-	-	-	14,057	9,494	-	-
93	12057	0420	MAINS & LINES - FY01	9/30/2001	30,457	-	30,457	-	-	-	-	-	-	-	-	18,179	12,278	-	-
94	12062	0420	MAINS & LINES - FY02	9/30/2002	87,451	-	87,451	-	-	-	-	-	-	-	-	52,197	35,254	-	-
95	12106	0420	SANI SEWER LATERAL - FY03	3/31/2003	27,813	-	27,813	-	-	-	-	-	-	-	-	-	27,813	-	-
96	12107	0420	SEWER MANHOLE - FY03	3/31/2003	3,957	-	3,957	-	-	-	-	-	-	-	-	-	3,957	-	-
97	16691	0420	SEWER LINES/MAINS/LATERALS - 2007	9/30/2007	89,939	-	89,939	-	-	-	-	-	-	-	-	53,682	36,257	-	-
98	16711	0420	SEWER LINES/MAINS/LATERALS - 2002	9/30/2007	44,865	-	44,865	-	-	-	-	-	-	-	-	26,778	18,086	-	-
99	16712	0420	SEWER LINES/MAINS/LATERALS - 2003	9/30/2007	53,186	-	53,186	-	-	-	-	-	-	-	-	31,745	21,441	-	-
100	16713	0420	SEWER LINES/MAINS/LATERALS - 2004	9/30/2007	80,701	-	80,701	-	-	-	-	-	-	-	-	48,168	32,533	-	-
101	16714	0420	SEWER LINES/MAINS/LATERALS - 2005	9/30/2007	36,572	-	36,572	-	-	-	-	-	-	-	-	21,829	14,743	-	-
102	16715	0420	SEWER LINES/MAINS/LATERALS - 2006	9/30/2007	26,292	-	26,292	-	-	-	-	-	-	-	-	15,693	10,599	-	-
103	17338	0420	SEWER LINES/MAINS/LATERALS - 2008	4/30/2008	44,337	-	44,337	-	-	-	-	-	-	-	-	26,464	17,874	-	-
104	17478	0410	LINCOLN RD CAPITAL IMPROV	5/15/2008	1,925,543	-	1,925,543	-	-	-	-	-	-	-	-	1,925,543	-	-	-
105	19440	0420	SEWER LINES/MAINS/LATERALS - 2009	10/31/2008	28,578	-	28,578	-	-	-	-	-	-	-	-	17,057	11,520	-	-
106	20558	0420	SEWER LINES/SEWER LATERALS - 2010	10/31/2009	17,028	-	17,028	-	-	-	-	-	-	-	-	10,164	6,865	-	-
107	21672	0420	SEWER LINES/SEWER LATERALS - 2011	10/31/2010	18,524	-	18,524	-	-	-	-	-	-	-	-	11,056	7,468	-	-
108	21867	0420	FLAMINGO NEIGHB LUMMUS 16 ST. IMPROV	10/1/2010	2,502,530	-	2,502,530	-	-	-	-	-	-	-	-	1,493,690	1,008,840	-	-
109	21869	0420	20" WATER MAIN COLLINS AVE LINC RD 23RD	10/1/2010	1,894,371	-	1,894,371	-	-	1,894,371	-	-	-	-	-	-	-	-	-
110	21871	0420	MISC SEWER IMPROVS WO 2381 & 2380	10/1/2010	7,552,335	-	7,552,335	-	-	-	-	-	-	-	-	4,507,776	3,044,559	-	-
111	21876	0420	30"/42" SEWER MAIN WO 424-2396	10/1/2010	106,542	-	106,542	-	-	-	-	-	-	-	-	106,542	-	-	-
112	21914	0420	FDEP CONSENT ORDER/ CITYWIDE SANI SEWER	10/1/2010	602,724	-	602,724	-	-	-	-	-	-	-	-	359,749	242,975	-	-
113	22516	0420	SEWER LINES/SEWER LATERALS - 2012	10/31/2011	8,527	-	8,527	-	-	-	-	-	-	-	-	-	8,527	-	-
114	2399	0420	MAINS & LINES - 1925	9/30/1925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115	2400	0420	MAINS & LINES - 1926	9/30/1926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
116	2401	0420	MAINS & LINES - 1927	9/30/1927	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
117	2402	0420	MAINS & LINES - 1928	9/30/1928	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
118	2403	0420	MAINS & LINES - 1929	9/30/1929	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
119	2404	0420	MAINS & LINES - 1930	9/30/1930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120	2405	0420	MAINS & LINES - 1931	9/30/1931	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
121	2406	0420	MAINS & LINES - 1933	9/30/1933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
122	2407	0420	MAINS & LINES - 1934	9/30/1934	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
123	2408	0420	MAINS & LINES - 1935	9/30/1935	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
124	2409	0420	MAINS & LINES - 1936	9/30/1936	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
125	2410	0420	MAINS & LINES - 1937	9/30/1937	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
126	2411	0420	MAINS & LINES - 1938	9/30/1938	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
127	2412	0420	MAINS & LINES - 1939	9/30/1939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
128	2413	0420	MAINS & LINES - 1940	9/30/1940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
129	2414	0420	MAINS & LINES - 1941	9/30/1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
130	2415	0420	MAINS & LINES - 1942	9/30/1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
131	2416	0420	MAINS & LINES - 1943	9/30/1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
132	2417	0420	MAINS & LINES - 1944	9/30/1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
133	2418	0420	MAINS & LINES - 1945	9/30/1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
134	2419	0420	MAINS & LINES - 1946	9/30/1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
135	2420	0420	MAINS & LINES - 1947	9/30/1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
136	2421	0420	MAINS & LINES - 1948	9/30/1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
137	2422	0420	MAINS & LINES - 1949	9/30/1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
138	2423	0420	MAINS & LINES - 1950	9/30/1950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
139	2424	0420	MAINS & LINES - 1951	9/30/1951	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140	2425	0420	MAINS & LINES - 1952	9/30/1952	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
141	2426	0420	MAINS & LINES - 1953	9/30/1953	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
142	2427	0420	MAINS & LINES - 1954	9/30/1954	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
143	2428	0420	MAINS & LINES - 1955	9/30/1955	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
144	2429	0420	MAINS & LINES - 1956	9/30/1956	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
145	2430	0420	MAINS & LINES - 1957	9/30/1957	-	-	-	-	-</										

Table 2-1
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Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System						Sewer System				General Plant	
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Efl./Recl.	Transmission	Collection & Direct Recl.		
158	2443	0420	MAINS & LINES - 1972	9/30/1972	62,380	-	62,380	-	-	-	-	-	-	-	-	-	37,233	25,147	-
159	2444	0420	MAINS & LINES - 1973	9/30/1973	115,947	-	115,947	-	-	-	-	-	-	-	-	-	69,205	46,741	-
160	2445	0420	MAINS & LINES - 1974	9/30/1974	33,605	-	33,605	-	-	-	-	-	-	-	-	-	20,058	13,547	-
161	2446	0420	MAINS & LINES - 1975	9/30/1975	110,087	-	110,087	-	-	-	-	-	-	-	-	-	65,708	44,379	-
162	2447	0420	MAINS & LINES - 1977	9/30/1977	16,042	-	16,042	-	-	-	-	-	-	-	-	-	9,575	6,467	-
163	2448	0420	MAINS & LINES - 1980	9/30/1980	19,227	-	19,227	-	-	-	-	-	-	-	-	-	11,476	7,751	-
164	2449	0420	MAINS & LINES - 1981	9/30/1981	24,846	-	24,846	-	-	-	-	-	-	-	-	-	14,830	10,016	-
165	2450	0420	MAINS & LINES - 1982	9/30/1982	58,192	-	58,192	-	-	-	-	-	-	-	-	-	34,733	23,459	-
166	2451	0420	MAINS & LINES - 1984	9/30/1984	8,020	-	8,020	-	-	-	-	-	-	-	-	-	4,787	3,233	-
167	2452	0420	MAINS & LINES - 1985	9/30/1985	22,516	-	22,516	-	-	-	-	-	-	-	-	-	13,439	9,077	-
168	2453	0420	MAINS & LINES - 1986	9/30/1986	275,957	-	275,957	-	-	-	-	-	-	-	-	-	164,711	111,246	-
169	2454	0420	MAINS & LINES - 1987	9/30/1987	903,488	-	903,488	-	-	-	-	-	-	-	-	-	539,267	364,221	-
170	2455	0420	MAINS & LINES - 1988	9/30/1988	282,621	-	282,621	-	-	-	-	-	-	-	-	-	168,689	113,933	-
171	2456	0420	MAINS & LINES - 1989	9/30/1989	37,091	-	37,091	-	-	-	-	-	-	-	-	-	22,139	14,953	-
172	2457	0420	MAINS & LINES - 1990	9/30/1990	128,769	-	128,769	-	-	-	-	-	-	-	-	-	76,859	51,911	-
173	26053	0420	SEWER LINES/SEWER LATERALS - 2013	10/30/2012	5,705	-	5,705	-	-	-	-	-	-	-	-	-	-	5,705	-
174	26412	0420	NAUTILUS - 42ND. ST. PROJ - W/2282	10/1/2012	8,006,075	-	8,006,075	-	-	-	-	-	-	-	-	-	4,778,601	3,227,475	-
175	26413	0420	NORM SHORE NEIGHB /SUD IMPROV PRO	10/1/2012	549,836	-	549,836	-	-	-	-	-	-	-	-	-	328,181	221,654	-
176	26476	0420	INDIAN CREEK (25TH-41ST. ST.) - UPSIZING	10/1/2013	3,369,572	-	3,369,572	-	-	-	-	-	-	-	-	-	3,369,572	-	-
177	26478	0420	NORM ISLE NEIGHB /SUD IMPROV PROC	10/1/2013	9,015,109	-	9,015,109	-	-	-	-	-	-	-	-	-	5,380,864	3,634,244	-
178	26690	0420	FORCE MAIN (69TH. TO 72ND. ST. - 30-INCH	10/1/2013	1,476,870	-	1,476,870	-	-	-	-	-	-	-	-	-	1,476,870	-	-
179	27340	0420	SEWER LINES/SEWER LATERALS - 2015	11/30/2014	13,234	-	13,234	-	-	-	-	-	-	-	-	-	-	13,234	-
180	28111	0420	SEWER LINES/SEWER LATERALS - 2016	10/1/2015	25,390	-	25,390	-	-	-	-	-	-	-	-	-	-	25,390	-
181	28343	0420	SEWER LINES/SEWER LATERALS - 2017	10/1/2016	26,424	-	26,424	-	-	-	-	-	-	-	-	-	-	26,424	-
182	28523	0410	COLLINS AVE. MAINS -SP DRIVE TO 72ND.ST.	10/1/2016	420,650	-	420,650	-	-	231,014	189,636	-	-	-	-	-	-	-	-
183	28526	0410	MAINS -NDIAN CREEK DR TO 41ST. STREET	10/1/2016	1,986,809	-	1,986,809	-	-	1,091,123	895,687	-	-	-	-	-	-	-	-
184	28533	0410	SOUTH POINTE STREETScape IMPROV- PH II -	10/1/2016	11,418	-	11,418	-	-	-	6,271	5,147	-	-	-	-	-	-	-
185	28536	0410	STAR ISLANDS ENHANCEMENTS- W/O 23370	10/1/2016	235,922	-	235,922	-	-	129,565	106,358	-	-	-	-	-	-	-	-
186	28541	0410	VENETIAN ISLAND PHASE II-CAUSEWAY IMPROV	10/1/2016	18,094	-	18,094	-	-	18,094	-	-	-	-	-	-	-	-	-
187	28543	0410	2017WATER MAIN-63 ST(PINETREE-INDIAN CR)	3/9/2017	932,663	-	932,663	-	-	932,663	-	-	-	-	-	-	-	-	-
188	28607	0410	BISCAYNE POINT NEIGHBORHOOD IMPROVEMENTS	3/23/2017	4,141,388	-	4,141,388	-	-	2,274,381	1,867,007	-	-	-	-	-	-	-	-
189	28628	0420	NORMANDY SHORES NEIGHBORHOOD ROW PH II	1/31/2017	36,465	-	36,465	-	-	-	-	-	-	-	-	-	-	36,465	-
190	28659	0410	MAINS-COLLINS AVE-5TH.ST. TO LINCOLN RD.	10/1/2016	54,646	-	54,646	-	-	54,646	-	-	-	-	-	-	-	-	-
191	28670	0410	MAINS & LINES INFILTRATION & INFLOW PH I	9/30/2017	3,693,440	-	3,693,440	-	-	-	-	-	-	-	-	-	-	-	3,693,440
192	28673	0410	MAINS-ALTON RD. 5TH TO MICHIGAN AVE	10/1/2016	1,966,525	-	1,966,525	-	-	1,966,525	-	-	-	-	-	-	-	-	-
193	28711	0420	SEWER LINES/SEWER LATERALS - 2018	10/1/2017	13,759	-	13,759	-	-	-	-	-	-	-	-	-	-	13,759	-
194	28742	0410	SOUTH POINTE STREETScape IMPROV PH IV	2/15/2018	87,372	-	87,372	-	-	47,983	39,389	-	-	-	-	-	-	-	-
195	28747	0410	INFILTRATION/IN-FLOW PROGAM PH 3	2/13/2018	2,275,713	-	2,275,713	-	-	-	-	-	-	-	-	-	-	2,275,713	-
196	28749	0410	SOUTH POINTE STREETScape IMPROV- PH III	2/23/2018	12,224	-	12,224	-	-	6,713	5,511	-	-	-	-	-	-	-	-
197	28751	0410	WASTE WATER & WATER UPGRADES	2/13/2018	859,801	-	859,801	-	-	236,094	193,806	-	-	-	-	-	256,596	173,305	-
198	28847	0410	SUNSET ISLAND SUBAQUEOUS - FORCE MAINS	4/25/2016	368,682	-	368,682	-	-	-	-	-	-	-	-	-	368,682	-	-
199	29035	0410	BAYSHORE NEIGH.BID PACK B/40TH STREETSCA	5/15/2019	2,688,510	-	2,688,510	-	-	1,476,485	1,212,025	-	-	-	-	-	-	-	-
200	29039	0410	SUNSET HARBOUR NEIGHBORHOOD IMPROVEMENT	5/15/2019	53,492	-	53,492	-	-	-	53,492	-	-	-	-	-	-	-	-
201	29291	0420	54" FORCE MAIN-5TH & MICHIGAN AVE & 20"	9/25/2019	469,084	-	469,084	-	-	-	-	-	-	-	-	-	469,084	-	-
202	29462	0420	30" FORCE MAIN-PINE TREE & 28 STREET	5/7/2020	726,560	-	726,560	-	-	-	-	-	-	-	-	-	726,560	-	-
203	30096	0810	FLAMINGO NEIGHBORHOOD-11TH. STREET	1/14/2022	1,267,725	-	1,267,725	-	-	-	-	-	-	-	-	-	756,670	511,056	-
204	3036	0420	MAINS & LINES - 1991	10/1/1990	99,544	-	99,544	-	-	-	-	-	-	-	-	-	59,415	40,129	-
205	3041	0420	MAINS & LINES - 1992	10/1/1991	91,824	-	91,824	-	-	-	-	-	-	-	-	-	54,807	37,017	-
206	30431	0815	54" DIAMETER REDUNDANT SEWER FORCE	11/9/2022	3,225,190	-	3,225,190	-	-	-	-	-	-	-	-	-	3,225,190	-	-
207	30437	0815	BAYSHORE CENTRAL NEIGHB.#8 BID PACK	3/15/2023	5,818,194	-	5,818,194	-	-	-	-	-	-	-	-	-	3,472,716	2,345,478	-
208	30442	0815	BAYSHORE NEIGHBORHOOD CENTRAL-SOUTH	3/17/2023	337,577	-	337,577	-	-	-	-	-	-	-	-	-	201,490	136,087	-
209	3045	0420	MAINS & LINES - 1993	10/1/1992	15,035	-	15,035	-	-	-	-	-	-	-	-	-	8,974	6,061	-
210	30482	0815	FLAMINGO NEIGHBORHOOD BID PACK C	10/1/2022	556,566	-	556,566	-	-	-	-	-	-	-	-	-	-	556,566	-
211	3203	0420	SW MAINS & LINES - 1993	4/1/1993	89,448	-	89,448	-	-	-	-	-	-	-	-	-	53,389	36,059	-
212	3447	0420	SW MAINS & LINES - 3-94	3/31/1994	1,888	-	1,888	-	-	-	-	-	-	-	-	-	1,127	761	-
213	3727	0420	SW MAINS & LINES - 9-94	9/30/1994	8,979	-	8,979	-	-	-	-	-	-	-	-	-	5,359	3,619	-
214	3957	0420	SW MAINS & LINES - 3-95	3/31/1995	14,205	-	14,205	-	-	-	-	-	-	-	-	-	8,479	5,726	-
215	4099	0420	SW MAINS & LINES -9-95	9/30/1995	137,685	-	137,685	-	-	-	-	-	-	-	-	-	82,180	55,505	-
216	4422	0420	SW MAINS & LINES - 3-96	3/31/1996	42,418	-	42,418	-	-	-	-	-	-	-	-	-	25,318	17,100	-
217	502	0420	TRANSMISSION MAINS	10/1/1962	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
218	503	0420	SUBAQUEOUS & BRIDGE MAINS	10/1															

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								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Effil./Recl.	Transmission	Collection & Direct Recl.	
237	8972	0420	STORM SEWERS FY 2000	9/30/2000	116,982	-	116,982	-	-	-	-	-	-	-	-	69,823	47,159	-
238	8975	0420	SW MAINS & LINES	9/30/2000	20,565	-	20,565	-	-	-	-	-	-	-	-	12,275	8,290	-
239	8976	0420	STORM SEWERS FY 2000	9/30/2000	25,638	-	25,638	-	-	-	-	-	-	-	-	15,303	10,335	-
240	12053	0410	MAINS & LINES - FY01	3/31/2001	83,313	-	83,313	-	-	45,754	37,559	-	-	-	-	-	-	-
241	12061	0410	MAINS & LINES - FY02	9/30/2002	78,604	-	78,604	-	-	43,168	35,436	-	-	-	-	-	-	-
242	12105	0410	WATER MAINS & LINES - FY03	3/31/2003	9,654	-	9,654	-	-	5,302	4,352	-	-	-	-	-	-	-
243	13247	0410	MARSEILLE DR. STREETScape WO#2384	9/30/2005	294,690	-	294,690	-	-	161,839	132,851	-	-	-	-	-	-	-
244	16689	0410	WATER MAINS - 2007	9/30/2007	122,357	-	122,357	-	-	67,197	55,161	-	-	-	-	-	-	-
245	16703	0410	WATER MAINS - 2002	9/30/2007	94,923	-	94,923	-	-	52,130	42,793	-	-	-	-	-	-	-
246	16704	0410	WATER MAINS - 2003	9/30/2007	231,643	-	231,643	-	-	127,214	104,428	-	-	-	-	-	-	-
247	16705	0410	WATER MAINS - 2004	9/30/2007	438,836	-	438,836	-	-	241,001	197,834	-	-	-	-	-	-	-
248	16706	0410	WATER MAINS - 2005	9/30/2007	53,822	-	53,822	-	-	29,558	24,264	-	-	-	-	-	-	-
249	16707	0410	WATER MAINS - 2006	9/30/2007	1,012	-	1,012	-	-	556	456	-	-	-	-	-	-	-
250	17337	0410	WATER MAINS - 2008	4/30/2008	12,603	-	12,603	-	-	6,922	5,682	-	-	-	-	-	-	-
251	17479	0410	WATER & SEWER UTILITY - VENETIAN CWY	5/15/2008	3,006,422	-	3,006,422	-	-	3,006,422	-	-	-	-	-	-	-	-
252	17480	0410	WATER MAIN REPL. & EXTENSIONS	5/15/2008	4,027,225	-	4,027,225	-	-	2,211,685	1,815,540	-	-	-	-	-	-	-
253	17481	0410	WATER MAIN REPL-GALV IRON	5/15/2008	1,143,517	-	1,143,517	-	-	628,001	515,517	-	-	-	-	-	-	-
254	17482	0410	TERM ISLE BOOSTER PUMP STA	5/15/2008	845,871	-	845,871	-	-	845,871	-	-	-	-	-	-	-	-
255	17483	0410	WATER & SEWER PUMP STA UPGRADES W/O 2138	5/15/2008	41,339,640	-	41,339,640	-	-	11,351,521	9,318,299	-	-	-	-	12,337,233	8,332,587	-
256	17484	0410	PROG MGMT / IMPROVS	5/15/2008	247,133	-	247,133	-	-	-	-	-	-	-	-	-	-	247,133
257	17488	0410	GROUND STORAGE TANK REPL. (4) W/O 2136	5/15/2008	3,204,459	-	3,204,459	-	-	3,204,459	-	-	-	-	-	-	-	-
258	17542	0410	WATER EVALUATION	5/1/2008	425,452	-	425,452	-	-	-	-	-	-	-	-	-	-	425,452
259	19439	0410	WATER MAINS - 2009	10/31/2008	94,828	-	94,828	-	-	52,078	42,750	-	-	-	-	-	-	-
260	20557	0410	WATER MAINS - 2010	10/31/2009	5,057	-	5,057	-	-	2,777	2,280	-	-	-	-	-	-	-
261	21670	0410	WATER MAINS - 2011	11/30/2010	52,176	-	52,176	-	-	28,654	23,522	-	-	-	-	-	-	-
262	21796	0410	WATER MAINS WO 425-2079	10/1/2010	1,000,255	-	1,000,255	-	-	549,324	450,932	-	-	-	-	-	-	-
263	21821	0410	WASHINGTON AVENUE: STREETScape IMPROV WO#	10/1/2010	2,350,807	-	2,350,807	-	-	1,291,024	1,059,783	-	-	-	-	-	-	-
264	21872	0420	REPLACE HANG "20" WATER MACARTHUR BRIDGE	10/1/2010	384,000	-	384,000	-	-	384,000	-	-	-	-	-	-	-	-
265	21874	0420	WATER MAINS WO 424-2390	10/1/2010	990,821	-	990,821	-	-	544,142	446,679	-	-	-	-	-	-	-
266	21875	0420	5TH ST. WASTE: WATER LINES WO 424-2393	10/1/2010	2,514	-	2,514	-	-	-	-	-	-	-	-	2,514	-	-
267	21898	0420	IIP: COLLINS AVE MAIN: SP DR. 72ND ST. W	10/1/2010	55,257	-	55,257	-	-	-	-	-	-	-	-	55,257	-	-
268	21899	0420	IIP: ALTON ROAD AT 43RD ST. WO 2517	10/1/2010	1,829	-	1,829	-	-	-	-	-	-	-	-	1,829	-	-
269	21900	0420	IIP: NO. 8A CENTRAL RAYSHORF WO 2518	10/1/2010	92,323	-	92,323	-	-	-	-	-	-	-	-	92,323	-	-
270	21901	0420	IIP: COLLINS 44TH TO 47TH WO 2519	10/1/2010	2,035	-	2,035	-	-	-	-	-	-	-	-	2,035	-	-
271	21902	0420	IIP: COLLINS 48TH AND 49TH WO 2520	10/1/2010	2,006	-	2,006	-	-	-	-	-	-	-	-	2,006	-	-
272	21903	0420	IIP: PINE TREE DR. 28TH TO 29TH WO 2522	10/1/2010	4,071	-	4,071	-	-	-	-	-	-	-	-	4,071	-	-
273	21904	0420	IIP: 5TH ST. ALTON TO MICHIGAN WO 2524	10/1/2010	3,664	-	3,664	-	-	-	-	-	-	-	-	3,664	-	-
274	21905	0420	IIP: NO. 8D SUNSET ISLANDS WO 2526	10/1/2010	3,851	-	3,851	-	-	-	-	-	-	-	-	3,851	-	-
275	21952	0410	SOUTH POINTE STREETScape PH I W O 2331	10/1/2010	53,387	-	53,387	-	-	29,319	24,068	-	-	-	-	-	-	-
276	21956	0420	MAINS & LINES JO'S PRIOR YEAR FROM CIP	10/1/2010	2,007,354	-	2,007,354	-	-	1,102,406	904,949	-	-	-	-	-	-	-
277	22175	0410	WATER MAINS - 2012	10/31/2011	12,438	-	12,438	-	-	6,831	5,607	-	-	-	-	-	-	-
278	2340	0410	MAINS & LINES - 1925	9/30/1925	-	-	-	-	-	-	-	-	-	-	-	-	-	-
279	2341	0410	MAINS & LINES - 1926	9/30/1926	-	-	-	-	-	-	-	-	-	-	-	-	-	-
280	2342	0410	MAINS & LINES - 1927	9/30/1927	-	-	-	-	-	-	-	-	-	-	-	-	-	-
281	2343	0410	MAINS & LINES - 1930	9/30/1930	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282	2344	0410	MAINS & LINES - 1933	9/30/1933	-	-	-	-	-	-	-	-	-	-	-	-	-	-
283	2345	0410	MAINS & LINES - 1934	9/30/1934	-	-	-	-	-	-	-	-	-	-	-	-	-	-
284	2346	0410	MAINS & LINES - 1935	9/30/1935	-	-	-	-	-	-	-	-	-	-	-	-	-	-
285	2347	0410	MAINS & LINES - 1936	9/30/1936	-	-	-	-	-	-	-	-	-	-	-	-	-	-
286	2348	0410	MAINS & LINES - 1937	9/30/1937	-	-	-	-	-	-	-	-	-	-	-	-	-	-
287	2349	0410	MAINS & LINES - 1938	9/30/1938	-	-	-	-	-	-	-	-	-	-	-	-	-	-
288	2350	0410	MAINS & LINES - 1939	9/30/1939	-	-	-	-	-	-	-	-	-	-	-	-	-	-
289	2351	0410	MAINS & LINES - 1940	9/30/1940	-	-	-	-	-	-	-	-	-	-	-	-	-	-
290	2354	0410	MAINS & LINES - 1944	9/30/1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
291	2355	0410	MAINS & LINES - 1945	9/30/1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
292	2356	0410	MAINS & LINES - 1946	9/30/1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
293	2357	0410	MAINS & LINES - 1947	9/30/1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
294	2358	0410	MAINS & LINES - 1948	9/30/1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
295	2359	0410	MAINS & LINES - 1949	9/30/1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
296	2360	0410	MAINS & LINES - 1950	9/30/1950	-	-	-	-	-	-	-	-	-	-	-	-	-	-
297	2361	0410	MAINS & LINES - 1951	9/30/1951	-	-	-	-	-	-	-	-	-	-	-	-	-	-
298	2362	0410	MAINS & LINES - 1952	9/30/1952	-	-	-	-	-	-	-	-	-	-	-	-	-	-
299	2363	0410	MAINS & LINES - 1953	9/30/1953	-	-	-	-	-	-	-	-	-	-	-	-	-	-
300	2364	0410	MAINS & LINES - 1954	9/30/1954	-	-	-	-	-	-	-	-	-	-	-	-	-	-
301	2365	0410	MAINS & LINES - 1955	9/30/1955	-	-	-	-	-	-	-	-	-	-	-	-	-	-
302	2366	0410	MAINS & LINES - 1956	9/30/1956	-	-	-	-	-	-	-	-	-	-	-	-	-	-
303	2367	0410	MAINS & LINES - 1957	9/30/1957	-	-	-	-	-	-	-	-	-	-	-	-	-	-
304	2368	0410	MAINS & LINES - 1958	9/30/1958	-	-	-	-	-	-	-	-	-	-	-	-	-	-
305	2369	0410	MAINS & LINES - 1959	9/30/1959	-	-	-	-	-	-	-	-	-	-	-	-	-	-
306	2370	0410	MAINS & LINES - 1960	9/30/1960	-	-	-	-	-	-	-	-	-	-	-	-	-	-
307	2371	0410	MAINS & LINES - 1961	9/30/1961	-	-	-	-	-	-	-	-	-	-	-	-	-	-
308	2372	0410	MAINS & LINES - 1962	9/30/1962	-	-	-	-	-	-	-	-	-	-	-	-	-	-
309	2373	0410	MAINS & LINES - 1963	9/30/1963	-	-	-	-	-	-	-	-	-	-	-	-	-	-
310	2374	0410	MAINS & LINES - 1964	9/30/1964	94,233	-	94,233	-	-	51,751	42,482	-	-	-	-	-	-	-
311	2375	0410	MAINS & LINES - 1965	9/30/1965	8,320	-	8,320	-	-	4,520	3,710	-	-	-	-	-	-	-
312	2376	0410	MAINS & LINES - 1967	9/30/1967	25,700	-	25,700	-	-	14,114	11,586	-	-	-	-	-	-	-
313	2377	0410	MAINS & LINES - 1968	9/30/1968	411,495	-	411,495	-	-	225,986	185,509	-	-	-	-	-	-	-
314	2378	0410	MAINS & LINES - 1969	9/30/1969	73,129	-	73,129	-	-	40,161	32,968	-	-	-	-	-	-	-
315	2379	0410	MAINS & LINES - 1970	9/30/1970	62,062	-	62,062	-	-	34,084	27,979	-	-	-	-	-	-	-

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

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Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System						Sewer System				General Plant
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Efl./Recl.	Transmission	Collection & Direct Recl.	
316	2380	0410	MAINS & LINES - 1971	9/30/1971	227,982	-	227,982	-	-	125,204	102,778	-	-	-	-	-	-	-
317	2381	0410	MAINS & LINES - 1972	9/30/1972	256,527	-	256,527	-	-	140,880	115,647	-	-	-	-	-	-	-
318	2382	0410	MAINS & LINES - 1973	9/30/1973	368,790	-	368,790	-	-	202,533	166,257	-	-	-	-	-	-	-
319	2383	0410	MAINS & LINES - 1974	9/30/1974	136,911	-	136,911	-	-	75,189	61,722	-	-	-	-	-	-	-
320	2384	0410	MAINS & LINES - 1975	9/30/1975	87,859	-	87,859	-	-	48,251	39,608	-	-	-	-	-	-	-
321	2385	0410	MAINS & LINES - 1976	9/30/1976	14,536	-	14,536	-	-	7,983	6,553	-	-	-	-	-	-	-
322	2386	0410	MAINS & LINES - 1977	9/30/1977	76,690	-	76,690	-	-	42,117	34,573	-	-	-	-	-	-	-
323	2387	0410	MAINS & LINES - 1978	9/30/1978	140,386	-	140,386	-	-	77,098	63,288	-	-	-	-	-	-	-
324	2388	0410	MAINS & LINES - 1979	9/30/1979	95,208	-	95,208	-	-	52,287	42,921	-	-	-	-	-	-	-
325	2389	0410	MAINS & LINES - 1980	9/30/1980	378,240	-	378,240	-	-	207,723	170,517	-	-	-	-	-	-	-
326	2390	0410	MAINS & LINES - 1981	9/30/1981	458,873	-	458,873	-	-	252,005	206,867	-	-	-	-	-	-	-
327	2391	0410	MAINS & LINES - 1982	9/30/1982	191,464	-	191,464	-	-	105,149	86,315	-	-	-	-	-	-	-
328	2392	0410	MAINS & LINES - 1983	9/30/1983	123,967	-	123,967	-	-	68,081	55,886	-	-	-	-	-	-	-
329	2393	0410	MAINS & LINES - 1984	9/30/1984	48,145	-	48,145	-	-	26,441	21,705	-	-	-	-	-	-	-
330	2394	0410	MAINS & LINES - 1986	9/30/1986	3,682	-	3,682	-	-	2,022	1,660	-	-	-	-	-	-	-
331	2395	0410	MAINS & LINES - 1987	9/30/1987	657,105	-	657,105	-	-	360,871	296,234	-	-	-	-	-	-	-
332	2396	0410	MAINS & LINES - 1988	9/30/1988	427,289	-	427,289	-	-	234,660	192,629	-	-	-	-	-	-	-
333	2397	0410	MAINS & LINES - 1989	9/30/1989	82,779	-	82,779	-	-	45,461	37,318	-	-	-	-	-	-	-
334	2398	0410	MAINS & LINES - 1990	9/30/1990	71,614	-	71,614	-	-	39,329	32,285	-	-	-	-	-	-	-
335	25927	0410	WATER MAINS - 2013	10/30/2012	10,075	-	10,075	-	-	5,533	4,542	-	-	-	-	-	-	-
336	26028	0410	WTER/SWR MANHOLE STRUCT REHAB./RELINING	10/1/2012	473,526	-	473,526	-	-	-	-	-	-	-	-	-	473,526	-
337	26030	0410	12" DIP WATER MAIN (COLLINS AVE. FROM 41	10/1/2012	527,387	-	527,387	-	-	527,387	-	-	-	-	-	-	-	-
338	26206	0410	BAYSHORE-LAKE PANCOAST ROW BP08C - IMPRO	8/1/2013	1,830,535	-	1,830,535	-	-	1,005,299	825,235	-	-	-	-	-	-	-
339	26207	0410	BAYSHORE NEIGH-#8 SUNSET ISLAND 1 & 2 B	8/1/2013	5,071,033	-	5,071,033	-	-	2,784,927	2,286,106	-	-	-	-	-	-	-
340	26308	0410	25TH ST. BOOSTER PUMP STA	10/1/2012	2,821,547	-	2,821,547	-	-	2,821,547	-	-	-	-	-	-	-	-
341	26481	0410	OCEANFRONT NEIGHB IMPROV PROJ - W/O	10/1/2013	2,890,909	-	2,890,909	-	-	1,587,639	1,303,270	-	-	-	-	-	-	-
342	26845	0410	WATER MAINS - 2014	10/1/2013	122,333	-	122,333	-	-	67,183	55,150	-	-	-	-	-	-	-
343	26849	0410	INDIAN CREEK DR. (28TH. TO 41ST. ST.) IM	9/1/2014	514,142	-	514,142	-	-	282,358	231,784	-	-	-	-	-	-	-
344	27056	0410	WATER MAINS - 2015	11/30/2014	44,951	-	44,951	-	-	24,687	20,265	-	-	-	-	-	-	-
345	28344	0410	WATER MAINS & LINES - 2017	12/1/2016	20,658	-	20,658	-	-	11,345	9,313	-	-	-	-	-	-	-
346	28523	0410	COLLINS AVE. MAINS - SP DRIVE TO 72ND. ST.	10/1/2016	420,650	-	420,650	-	-	231,014	189,636	-	-	-	-	-	-	-
347	28526	0410	MAINS -INDIAN CREEK DR TO 41ST. STREET	10/1/2016	1,986,809	-	1,986,809	-	-	1,091,123	895,687	-	-	-	-	-	-	-
348	28533	0410	SOUTH POINTE STRFTSCAPE IMPROV- PH II -	10/1/2016	11,418	-	11,418	-	-	6,271	5,147	-	-	-	-	-	-	-
349	28536	0410	STAR ISLANDS ENHANCEMENTS- W/O 23370	10/1/2016	235,922	-	235,922	-	-	129,565	106,358	-	-	-	-	-	-	-
350	28541	0410	VENETIAN ISLAND PHASE II-CAUSEWAY IMPROV	10/1/2016	18,094	-	18,094	-	-	18,094	-	-	-	-	-	-	-	-
351	28543	0410	2017WATER MAIN-63 ST(PINETREE-INDIAN CR)	3/9/2017	932,663	-	932,663	-	-	932,663	-	-	-	-	-	-	-	-
352	28607	0410	BISCAYNE POINT NEIGHBORHOOD IMPROVEMENTS	3/23/2017	4,141,388	-	4,141,388	-	-	2,274,381	1,867,007	-	-	-	-	-	-	-
353	28628	0420	NORMANDY SHORES NEIGHBORHOOD ROW PH II	1/31/2017	36,465	-	36,465	-	-	-	-	-	-	-	-	-	36,465	-
354	28659	0410	MAINS-COLLINS AVE-5TH ST. TO LINCOLN RD.	10/1/2016	54,646	-	54,646	-	-	54,646	-	-	-	-	-	-	-	-
355	28670	0410	MAINS & LINES INFILTRATION & INFLOW PH I	9/30/2017	3,693,440	-	3,693,440	-	-	-	-	-	-	-	-	-	3,693,440	-
356	28673	0410	MAINS-ALTON RD. 5TH TO MICHIGAN AVE	10/1/2016	1,966,525	-	1,966,525	-	-	1,966,525	-	-	-	-	-	-	-	-
357	28742	0410	SOUTH POINTE STREETSCAPE IMPROV PH IV	2/15/2018	87,372	-	87,372	-	-	47,983	39,389	-	-	-	-	-	-	-
358	28747	0410	INFILTRATION-IN-FLOW PROGRAM PH 3	2/13/2018	2,275,713	-	2,275,713	-	-	-	-	-	-	-	-	-	2,275,713	-
359	28749	0410	SOUTH POINTE STREETSCAPE IMPROV- PH III	2/23/2018	12,224	-	12,224	-	-	6,713	5,511	-	-	-	-	-	-	-
360	28751	0410	WASTE WATER & WATER UPGRADES	2/13/2018	859,801	-	859,801	-	-	236,094	193,806	-	-	-	-	256,596	173,305	-
361	28847	0410	SUNSET ISLAND SUBAQUEOUS - FORCE MAINS	4/25/2016	368,682	-	368,682	-	-	-	-	-	-	-	-	368,682	-	-
362	29035	0410	BAYSHORE NEIGH.BID PACK B-40TH STREETSCA	5/15/2019	2,688,510	-	2,688,510	-	-	1,476,485	1,212,025	-	-	-	-	-	-	-
363	29039	0410	SUNSET HARBOR NEIGHBORHOOD IMPROVEMENT	5/15/2019	53,492	-	53,492	-	-	29,377	24,115	-	-	-	-	-	-	-
364	29345	0410	VENETIAN BRIDGE(BTW.SAN MARINO & SAN MAR	8/5/2019	232,850	-	232,850	-	-	232,850	-	-	-	-	-	-	-	-
365	29350	0410	20" WATER MAIN(SOUTHSIDE-MCARTHUR CWY	12/20/2019	612,000	-	612,000	-	-	612,000	-	-	-	-	-	-	-	-
366	29525	0410	VENITIAN BRIDGE(BTW.BELLE ISLAND & DADE	8/31/2020	379,546	-	379,546	-	-	379,546	-	-	-	-	-	-	-	-
367	30096	0810	FLAMINGO NEIGHBORHOOD-11TH STREET	1/14/2022	1,267,725	-	1,267,725	-	-	696,214	571,512	-	-	-	-	-	-	-
368	3034	0410	MAINS & LINES - 1991	10/1/1990	28,926	-	28,926	-	-	15,885	13,040	-	-	-	-	-	-	-
369	3039	0410	MAINS & LINES - 1992	10/1/1991	32,092	-	32,092	-	-	17,624	14,468	-	-	-	-	-	-	-
370	3043	0410	MAINS & LINES - 1993	10/1/1992	10,149	-	10,149	-	-	5,574	4,576	-	-	-	-	-	-	-
371	30431	0815	54" DIAMETER REDUNDANT SEWER FORCE	11/8/2022	3,225,190	-	3,225,190	-	-	-	-	-	-	-	-	3,225,190	-	-
372	30437	0815	BAYSHORE CENTRAL NEIGHB-#8 BID PACK	3/15/2023	5,818,194	-	5,818,194	-	-	3,195,255	2,622,939	-	-	-	-	-	-	-
373	30442	0815	BAYSHORE NEIGHBORHOOD CENTRAL-SOUTH	3/17/2023	337,577	-	337,577	-	-	-	-	-	-	-	-	-	-	-
374	30482	0815	FLAMINGO NEIGHBORHOOD BID PACK C	10/1/2022	556,566	-	556,566	-	-	-	556,566	-	-	-	-	-	-	-
375	3201	0410	WT MAINS & LINES - 1993	4/1/1993	60,450	-	60,450	-	-	33,198	27,252	-	-	-	-	-	-	-
376	3445	0410	WT MAINS & LINES - 3/94	3/31/1994	12,679	-	12,679	-	-	6,963	5,716	-	-	-	-	-	-	-
377	3725	0410	WT MAINS & LINES - 9/94	9/30/1994	22,854	-	22,854	-	-	12,551	10,303	-	-	-	-	-	-	-
378	3955	0410	WT MAINS & LINES - 3/95	3/31/1995	28,764	-	28,764	-	-	15,797	12,967	-	-	-	-	-	-	-
379	4097	0410	WT MAINS & LINES - 9/95	9/30/1995	28,682	-	28,682	-	-	15,752	12,930	-	-	-	-	-	-	-
380	4420	0410	WT MAINS & LINES - 3/96	3/31/1996	8,081	-	8,081	-	-	4,438	3,643	-	-	-	-	-	-	-
381	5234	0410	WT MAINS & LINES - 9/96	9/30/1996	265,015	-	265,015	-	-	145,542	119,473	-	-	-	-	-	-	-
382	5435	0410	WT MAINS & LINES - 3/97	3/31/1997	5,432	-	5,432	-	-	2,983	2,449	-	-	-	-	-	-	-
383	5674	0410	WT MAINS & LINES - 9/97	9/30/1997	469,140	-	469,140	-	-	257,644	211,496	-	-	-	-	-	-	-
384	5679	0410	WT MAINS & LINES - 3/98	3/31/1998	24,796	-	24,796	-	-	13,617	11,178	-	-	-	-	-	-	-
385	6854	0410	WT MAINS & LINES - 09/98	9/30/1998	191,228	-	191,228	-	-	105,019	86,209	-	-	-	-	-	-	-
386	7011	0410	WT MAINS & LINES 03/99	3/30/1999	72,739	-	72,739	-	-	39,947	32,792	-	-	-	-	-	-	-
387	8981	0410	MAINS & LINES 1941 Re 11011510	9/30/1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
388	8982	0410	MAINS & LINES 1942 Re 11011511	9/30/1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
389	535	0410	METERS, SERV-SITY WIDE	10/1/1969	-	-	-	-	-	-	-	-	-	-	-	-	-	-
390	536	0410	FIRE HYDRANTS-CITY WIDE	10/1/1955	-	-	-	-	-	-	-	-	-	-	-	-	-	-
391	2463	0410	METERS & HYDRANTS - 1984	10/1/1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-
392	2464	0410	METERS & HYDRANTS - 1985	9/30/1985	-	-	-	-	-	-	-	-	-	-	-	-	-	-
393	2465	0410	METERS & HYDRANTS - 1986	9/30/1986	-	-	-	-	-	-	-	-	-	-				

Table 2-1
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Existing Water and Sewer Utility Assets

Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System						Sewer System				General Plant
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Effil./Recl.	Transmission	Collection & Direct Recl.	
395	2467	0410	METERS & HYDRANTS - 1988	9/30/1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-
396	2468	0410	METERS & HYDRANTS - 1989	9/30/1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
397	2469	0410	METERS & HYDRANTS - 1990	9/30/1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-
398	3032	0410	WT METERS & HYDRANTS - 1991	10/1/1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-
399	3037	0410	METERS & HYDRANTS - 1992	10/1/1991	-	-	-	-	-	-	-	-	-	-	-	-	-	-
400	3042	0410	METERS & HYDRANTS - 1993	10/1/1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-
401	3200	0410	WT METERS & HYDRANTS - 1993	4/1/1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-
402	3444	0410	WT METERS & HYDRANTS - 3/94	3/31/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-
403	3724	0410	WT METERS & HYDRANTS - 9/94	9/30/1994	269,704	-	269,704	-	-	-	-	134,852	134,852	-	-	-	-	-
404	3954	0410	WT METERS & HYDRANTS - 3/95	3/31/1995	52,880	-	52,880	-	-	-	-	26,440	26,440	-	-	-	-	-
405	4096	0410	WT METERS & HYDRANTS - 9/95	9/30/1995	258,940	-	258,940	-	-	-	-	129,470	129,470	-	-	-	-	-
406	4419	0410	WT METERS & HYDRANTS - 3/96	3/31/1996	50,710	-	50,710	-	-	-	-	25,355	25,355	-	-	-	-	-
407	5232	0410	WT METERS & HYDRANTS - 9/96	9/30/1996	782,073	-	782,073	-	-	-	-	391,036	391,036	-	-	-	-	-
408	5434	0410	WT METERS & HYDRANTS - 3/97	3/31/1997	68,446	-	68,446	-	-	-	-	34,223	34,223	-	-	-	-	-
409	5672	0410	WT METERS & HYDRANTS - 9/97	9/30/1997	648,946	-	648,946	-	-	-	-	324,473	324,473	-	-	-	-	-
410	5678	0410	WT METERS & HYDRANTS - 3/98	3/31/1998	132,178	-	132,178	-	-	-	-	66,089	66,089	-	-	-	-	-
411	6852	0410	WT METERS & HYDRANTS - 09/98	9/30/1998	635,768	-	635,768	-	-	-	-	317,884	317,884	-	-	-	-	-
412	7010	0410	WT METERS & HYDRANTS 03/99	3/30/1999	136,889	-	136,889	-	-	-	-	68,444	68,444	-	-	-	-	-
413	8970	0410	WT METERS & HYDRANTS	9/30/2000	91,723	-	91,723	-	-	-	-	45,861	45,861	-	-	-	-	-
414	8974	0410	WT METERS & HYDRANTS	9/30/2000	448,633	-	448,633	-	-	-	-	224,317	224,317	-	-	-	-	-
415	12051	0410	METERS HYDRANTS - FY01	3/31/2001	70,034	-	70,034	-	-	-	-	35,017	35,017	-	-	-	-	-
416	12056	0410	METERS HYDRANTS - FY01	9/30/2001	496,542	-	496,542	-	-	-	-	248,271	248,271	-	-	-	-	-
417	12060	0410	METERS/HYDRANTS ADDS - FY02	9/30/2002	746,614	-	746,614	-	-	-	-	373,307	373,307	-	-	-	-	-
418	12104	0410	METER SVCS - FY03	3/31/2003	140,931	-	140,931	-	-	-	-	70,465	70,465	-	-	-	-	-
419	16687	0410	METERS & HYDRANTS - 2007	9/30/2007	308,754	-	308,754	-	-	-	-	154,377	154,377	-	-	-	-	-
420	16693	0410	METERS & HYDRANTS - 2002	9/30/2007	356,413	-	356,413	-	-	-	-	178,206	178,206	-	-	-	-	-
421	16694	0410	METERS & HYDRANTS - 2003	9/30/2007	347,622	-	347,622	-	-	-	-	173,811	173,811	-	-	-	-	-
422	16695	0410	METERS & HYDRANTS - 2004	9/30/2007	292,806	-	292,806	-	-	-	-	146,403	146,403	-	-	-	-	-
423	16696	0410	METERS & HYDRANTS - 2005	9/30/2007	310,779	-	310,779	-	-	-	-	155,390	155,390	-	-	-	-	-
424	16697	0410	METERS & HYDRANTS - 2006	9/30/2007	143,838	-	143,838	-	-	-	-	71,919	71,919	-	-	-	-	-
425	17335	0410	METERS & HYDRANTS - 2008	4/30/2008	213,362	-	213,362	-	-	-	-	106,681	106,681	-	-	-	-	-
426	19437	0410	METERS & HYDRANTS - 2009	10/31/2008	146,083	-	146,083	-	-	-	-	73,041	73,041	-	-	-	-	-
427	20555	0410	METERS & HYDRANTS - 2010	10/31/2009	166,415	-	166,415	-	-	-	-	83,207	83,207	-	-	-	-	-
428	21668	0410	METERS & HYDRANTS - 2011	10/31/2010	173,992	-	173,992	-	-	-	-	86,996	86,996	-	-	-	-	-
429	22173	0410	METERS & HYDRANTS - 2012	10/31/2011	115,941	-	115,941	-	-	-	-	57,971	57,971	-	-	-	-	-
430	25926	0410	METERS & HYDRANTS - 2013	10/31/2012	219,109	-	219,109	-	-	-	-	109,555	109,555	-	-	-	-	-
431	26453	0410	METERS & HYDRANTS - 2014	10/30/2013	42,599	-	42,599	-	-	-	-	21,300	21,300	-	-	-	-	-
432	27250	0410	METERS & HYDRANTS - 2015	1/21/2015	115,578	-	115,578	-	-	-	-	57,789	57,789	-	-	-	-	-
433	28107	0410	METERS & HYDRANTS - 2016	10/1/2015	65,524	-	65,524	-	-	-	-	32,762	32,762	-	-	-	-	-
434	28342	0410	METERS & HYDRANTS - 2017	10/1/2016	76,980	-	76,980	-	-	-	-	38,490	38,490	-	-	-	-	-
435	28727	0410	METERS & HYDRANTS - 2018	10/1/2017	25,414	-	25,414	-	-	-	-	12,707	12,707	-	-	-	-	-
436	29874	0410	WATER METER REPLACEMENT SYSTEM	9/30/2021	8,225,272	-	8,225,272	-	-	-	-	-	8,225,272	-	-	-	-	-
437	29281	0420	TORQUE HANDHELD P2 VITALS READY ELECTRIC	8/26/2019	8,695	-	8,695	-	-	-	-	-	-	-	-	-	-	8,695
438	29356	0420	3200 MAGNUM RETROFILL BREAKERS	11/12/2019	139,655	-	139,655	-	-	-	-	-	-	-	-	-	-	139,655
439	29501	0810	FORMAX 2006 PRESSURE SEAL MACHINE FD2006	1/10/2020	4,855	-	4,855	-	-	-	-	-	-	-	-	-	-	4,855
440	30220	0420	SAVA 96"-100" MULTI-SIZE PILLOW INFLATAB	2/15/2022	5,727	-	5,727	-	-	-	-	-	-	-	-	-	-	5,727
441	30221	0420	OPTICAM SWR CAMERA SYST 400FT	8/18/2022	7,603	-	7,603	-	-	-	-	-	-	-	-	-	-	7,603
442	30444	0810	ICE MAKING & DISPENSING MACHINE	5/4/2023	6,000	-	6,000	-	-	-	-	-	-	-	-	-	-	6,000
443	30623	0410	PERSONNEL LIFT PUSH-AROUND DRIVE	9/20/2023	15,590	-	15,590	-	-	-	-	-	-	-	-	-	-	15,590
444	30624	0410	PERSONNEL LIFT PUSH-AROUND DRIVE	9/20/2023	15,590	-	15,590	-	-	-	-	-	-	-	-	-	-	15,590
445	2075	0410	90 CHEVY CAVALIER - 4DR	7/23/1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-
446	3481	0410	94 SILVER 20 FT ALUMINUM BOAT	10/1/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-
447	4513	0410	96 YALE FORKLIFT	5/9/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-
448	7935	0410	86 CLARE FRONT END LOADER	1/9/1986	-	-	-	-	-	-	-	-	-	-	-	-	-	-
449	7944	0410	87 CASE BACKHOE/LOADER	6/25/1987	-	-	-	-	-	-	-	-	-	-	-	-	-	-
450	7951	0410	89 GMC UTILITY BED TRUCK	6/28/1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
451	7952	0410	RAWSON-KOENIG UTILITY BODY	9/30/1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
452	7953	0410	RAWSON-KOENIG UTILITY BODY	9/30/1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
453	7954	0410	RAWSON-KOENIG UTILITY BODY	9/30/1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
454	7958	0410	91 CASE BACKHOE FRONT LOADER	7/28/1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-
455	8615	0410	2000 STERLING TRUCK SEWER CLEANER	7/14/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
456	9816	0410	2001 CASE BACKHOE LOADER	7/31/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
457	10492	0410	2002 INTL 4300	2/7/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
458	14381	0410	2006 FORD F650	3/7/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
459	16863	0420	2008 FORD F550	1/11/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
460	21335	0410	2011 FREIGHTLINER	9/22/2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
461	22176	0420	2012 FREIGHTLINER M2106	10/25/2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-
462	26446	0420	2013 CATERPILLAR 430F BACKHOE LOADER 4WD	10/31/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-
463	27378	0410	2015 JOHN DEERE 410L BACKHOE LOADER	4/28/2015	116,087	-	116,087	-	-	-	-	-	-	-	-	-	-	116,087
464	27379	0410	2015 JOHN DEERE 410L BACKHOE LOADER	4/28/2015	108,002	-	108,002	-	-	-	-	-	-	-	-	-	-	108,002
465	27487	0410	2016 FORD F250 REG CAB SS SRW	7/20/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-
466	28110	0420	DOOSAN GENERATOR 240KVA/CUMMINS DIESEL	11/16/2015	103,069	-	103,069	-	-	-	-	-	-	-	-	-	-	103,069
467	28155	0420	2016 INTERNATIONAL/VAC-CON SEWER CLEANER	3/24/2016	395,178	-	395,178	-	-	-	-	-	-	-	-	-	-	395,178
468	28173	0410	2016 FORD F250 4X2 CREW CAB SS SRW	6/14/2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-
469	28243	0420	2016 JOHN DEERE 524K 4WD LOADER	6/23/2016	141,644	-	141,644	-	-	-	-	-	-	-	-	-	-	141,644
470	28244	0420	GENERATOR 240KVA/CUMMINS DIESEL ENG	8/2/2016	103,453	-	103,453	-	-	-	-	-	-	-	-	-	-	103,453
471	28296	0420	2016 FORD 148 TRANSIT 250 VAN	9/12/2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-
472	28297	0410	2017 INTERNATIONAL POTHOLE PATCHER	9/12/2016	171,928	-	171,928	-	-	-	-	-	-	-	-	-	-	171,928
473	28341	0420	2017 INTL CAB-CHASSIS' 2016 VACTOR 2103	2/6/2017	260,040	-	260,040	-	-	-	-	-	-	-	-	-	-	260,040

Table 2-1
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Existing Water and Sewer Utility Assets

Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System						Sewer System				General Plant
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Efl./Recl.	Transmission	Collection & Direct Recl.	
474	28633	0410	2017 FORD 122 F150 REG CAB 4X2 SS	9/26/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-
475	28634	0410	2017 FORD 122 F150 REG CAB 4X2 SS	9/26/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-
476	28713	0410	2018 INTL HYDRAULIC TELESCOPIC CRANE	10/31/2017	341,157	-	341,157	-	-	-	-	-	-	-	-	-	-	341,157
477	28792	0410	2018 FORD F150 SUPERCAB 4X2 SS	6/21/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-
478	28810	0420	2018 FORD F-150 REG CAB 4X2 SS	7/27/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-
479	28812	0420	2019 FORD F250 4X2 SUPERCAB SRW	8/16/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-
480	28838	0410	2018 FORD F150 REG CAB 4X2 SS	7/20/2018	24,290	-	24,290	-	-	-	-	-	-	-	-	-	-	24,290
481	28839	0420	2018 FORD F150	7/20/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-
482	28892	0420	2019 VACTOR 2115P-16" PD BLOWER	9/24/2018	418,972	-	418,972	-	-	-	-	-	-	-	-	-	-	418,972
483	28902	0420	2019 INTERNATIONAL CAB CHASSIS 7400 SBA	7/28/2018	125,970	-	125,970	-	-	-	-	-	-	-	-	-	-	125,970
484	28993	0410	2019 FORD F-550 REGULAR CAB FLATBED	4/8/2019	96,028	-	96,028	-	-	-	-	-	-	-	-	-	-	96,028
485	28994	0420	2019 FORD F-550 REG CHAS CAB DRW	3/28/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-
486	29051	0410	2019 JOHN DEERE BACKHOE LOADER	5/30/2019	123,987	-	123,987	-	-	-	-	-	-	-	-	-	-	123,987
487	29167	0410	SINGLE TURNER VALVE MAINTENANCE SKID	5/29/2019	59,375	-	59,375	-	-	-	-	-	-	-	-	-	-	59,375
488	29170	0420	2019 F-250 4X2 SUPERCAB SRW	9/20/2019	30,263	-	30,263	-	-	-	-	-	-	-	-	-	-	30,263
489	29351	0420	RODDER MODEL 866 SERIE II	11/1/2019	79,067	-	79,067	-	-	-	-	-	-	-	-	-	-	79,067
490	29726	0410	2021 INTERNATIONAL CAB & CHASSIS MV607	12/29/2020	177,273	-	177,273	-	-	-	-	-	-	-	-	-	-	177,273
491	29829	0410	2022 FORD 142 F250 4X2 REG CAB SS SRW	9/1/2021	38,192	-	38,192	-	-	-	-	-	-	-	-	-	-	38,192
492	29830	0410	2022 FORD 142 F250 4X2 REG CAB SS SRW	9/2/2021	38,192	-	38,192	-	-	-	-	-	-	-	-	-	-	38,192
493	29831	0410	2022 FORD 164 F250 4X4 SUPERCAB SRW	9/2/2021	42,810	-	42,810	-	-	-	-	-	-	-	-	-	-	42,810
494	29832	0410	2022 FORD 164 F250 4X2 SUPERCAB SRW	8/27/2021	42,058	-	42,058	-	-	-	-	-	-	-	-	-	-	42,058
495	29833	0420	2022 FORD 142 F250 4X2 REG CAB SS SRW	8/26/2021	38,192	-	38,192	-	-	-	-	-	-	-	-	-	-	38,192
496	29834	0420	2022 FORD 164 F350 4X2 SUPERCAB DRW	8/31/2021	44,616	-	44,616	-	-	-	-	-	-	-	-	-	-	44,616
497	29835	0420	2022 FORD 164 F350 4X2 SUPERCAB DRW	9/1/2021	44,616	-	44,616	-	-	-	-	-	-	-	-	-	-	44,616
498	29836	0420	2022 FORD 176 F350 4X2 CREW CAB SS DRW	9/8/2021	46,669	-	46,669	-	-	-	-	-	-	-	-	-	-	46,669
499	29837	0420	2022 FORD 148 F250 4X4 SUPERCAB SRW	9/8/2021	33,585	-	33,585	-	-	-	-	-	-	-	-	-	-	33,585
500	29870	0410	2022 FORD 164 F250 4X2 SUPERCAB SRW	9/9/2021	31,099	-	31,099	-	-	-	-	-	-	-	-	-	-	31,099
501	29871	0410	2022 FORD 142 F250 4X2 REG CAB SS SRW	9/9/2021	38,115	-	38,115	-	-	-	-	-	-	-	-	-	-	38,115
502	29872	0410	2022 FORD 142 F250 4X2 REG CAB SS SRW	9/9/2021	38,892	-	38,892	-	-	-	-	-	-	-	-	-	-	38,892
503	29873	0410	2022 FORD 142 F250 4X2 REG CAB SS SRW	9/9/2021	38,115	-	38,115	-	-	-	-	-	-	-	-	-	-	38,115
504	29897	0410	2022 FORD 142 F250 4X2 REG CAB SS SRW	9/16/2021	38,892	-	38,892	-	-	-	-	-	-	-	-	-	-	38,892
505	29898	0410	2022 FORD 176 F350 4X2 CREW CAB SS DRW	9/16/2021	51,836	-	51,836	-	-	-	-	-	-	-	-	-	-	51,836
506	29906	0420	2022 FORD 160 F250 4X4 CREW CAB SS SRW	9/23/2021	35,034	-	35,034	-	-	-	-	-	-	-	-	-	-	35,034
507	29913	0420	2022 FORD 169 F550 4X2 REG CHAS CAB DRW	8/9/2021	111,528	-	111,528	-	-	-	-	-	-	-	-	-	-	111,528
508	29962	0410	2022 FORD F550 4X4 REG CHAS CAB DRW	12/15/2021	72,551	-	72,551	-	-	-	-	-	-	-	-	-	-	72,551
509	29963	0410	2022 FORD F150 REG CAB 4X2 SS	2/11/2022	26,698	-	26,698	-	-	-	-	-	-	-	-	-	-	26,698
510	29964	0410	2022 FORD F150 REG CAB 4X2 SS	2/16/2022	27,621	-	27,621	-	-	-	-	-	-	-	-	-	-	27,621
511	29965	0410	2022 FORD F350 4X2 REG CHAS CAB DRW	1/24/2022	62,585	-	62,585	-	-	-	-	-	-	-	-	-	-	62,585
512	29966	0410	2022 FORD F150 REG CAB 4X2 SS	1/25/2022	26,293	-	26,293	-	-	-	-	-	-	-	-	-	-	26,293
513	29967	0420	2022 FORD F150 REG CAB 4X2 SS	4/12/2022	27,216	-	27,216	-	-	-	-	-	-	-	-	-	-	27,216
514	30026	0410	2022 FORD 127 RANGER SUPERCAB 4X2	5/24/2022	27,561	-	27,561	-	-	-	-	-	-	-	-	-	-	27,561
515	30085	0410	2022 FORD 127 RANGER SUPERCAB 4X2	6/7/2022	27,043	-	27,043	-	-	-	-	-	-	-	-	-	-	27,043
516	30086	0410	2022 FORD 127 RANGER SUPERCAB 4X2	6/7/2022	27,956	-	27,956	-	-	-	-	-	-	-	-	-	-	27,956
517	30240	0410	2022 FORD 145 F450 4X2 REG CHAS CAB DRW	10/7/2022	53,315	-	53,315	-	-	-	-	-	-	-	-	-	-	53,315
518	30241	0420	2022 WAKER NEUSON TRAILER LIGHT TOWER	1/30/2023	13,209	-	13,209	-	-	-	-	-	-	-	-	-	-	13,209
519	30242	0420	2022 WAKER NEUSON TRAILER LIGHT TOWER	1/30/2023	13,209	-	13,209	-	-	-	-	-	-	-	-	-	-	13,209
520	30243	0420	2022 FORD 180 F350 4X2 CREW CHAS CAB DRW	2/1/2023	48,735	-	48,735	-	-	-	-	-	-	-	-	-	-	48,735
521	30406	0420	2022 FORD 145 F350 4X2 REG CHAS CAB DRW	3/6/2023	42,776	-	42,776	-	-	-	-	-	-	-	-	-	-	42,776
522	30447	0410	2022 FORD 142 F250 4X2 REG CAB SS SRW	6/12/2023	44,728	-	44,728	-	-	-	-	-	-	-	-	-	-	44,728
523	30450	0420	SEWAGE PUMP & TRAILER-US-BA150E-SA-HA-07	6/9/2023	54,211	-	54,211	-	-	-	-	-	-	-	-	-	-	54,211
524	30562	0410	2023 WANCO ARROW BOARD	8/8/2023	5,917	-	5,917	-	-	-	-	-	-	-	-	-	-	5,917
525	30563	0410	2023 WANCO ARROW BOARD	8/8/2023	5,917	-	5,917	-	-	-	-	-	-	-	-	-	-	5,917
526	30564	0410	2023 WANCO ARROW BOARD	8/8/2023	5,917	-	5,917	-	-	-	-	-	-	-	-	-	-	5,917
527	30565	0410	2023 WANCO ARROW BOARD	8/8/2023	5,917	-	5,917	-	-	-	-	-	-	-	-	-	-	5,917
528	30575	0420	2023 ATLAS COPCO PORTABLE PUMP	8/29/2023	88,403	-	88,403	-	-	-	-	-	-	-	-	-	-	88,403
529	30619	0420	2023 TOYOTA HIGHLANDER HYBRID UT LE-4.4	9/1/2023	40,556	-	40,556	-	-	-	-	-	-	-	-	-	-	40,556
530	21128	0410	2011 FORD F250 REG CAB SS SRW	7/9/2010	23,630	-	23,630	-	-	-	-	-	-	-	-	-	-	23,630
531	27445	0410	2015 FORD F250 REG CAB SS SRW	7/6/2015	28,657	-	28,657	-	-	-	-	-	-	-	-	-	-	28,657
532	27531	0427	2015 FORD 145 F150 SUPERCAB SS	8/25/2015	28,210	-	28,210	-	-	-	-	-	-	-	-	-	-	28,210
533	28106	0410	2016 FORD 172 F350 4X2 CREW CAB SS DRW	10/14/2015	35,270	-	35,270	-	-	-	-	-	-	-	-	-	-	35,270
534	28109	0420	2016 FORD F-350 CB	10/1/2015	30,437	-	30,437	-	-	-	-	-	-	-	-	-	-	30,437
535	28153	0420	2016 VACTOR MOUNTED IN KENWORTH CHASSIS	3/10/2016	389,299	-	389,299	-	-	-	-	-	-	-	-	-	-	389,299
536	28345	0427	2017 FORD F250 SUPER DUTY	11/3/2016	27,418	-	27,418	-	-	-	-	-	-	-	-	-	-	27,418
537	30571	0810	LED LIGHT FIXTURE-PUBLIC WORK YARD WISE	7/3/2023	80,910	-	80,910	-	-	22,217	18,238	-						

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City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Existing Water and Sewer Utility Assets

Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System						Sewer System				General Plant
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Efflu./Recl.	Transmission	Collection & Direct Recl.	
553	3033	0410	WT PUMPING EQUIP. - 1991	10/1/1990	7,793	-	7,793	-	-	-	4,280	3,513	-	-	-	-	-	-
554	3038	0410	WT PUMPING EQUIP. - 1992	9/30/1991	33,197	-	33,197	-	-	-	18,231	14,966	-	-	-	-	-	-
555	522	0410	25TH ST. PUMPING EQUIP.	10/1/1938	-	-	-	-	-	-	-	-	-	-	-	-	-	-
556	5233	0410	WT PUMPING EQUIP. - 9/96	9/30/1996	28,138	-	28,138	-	-	-	15,453	12,685	-	-	-	-	-	-
557	524	0410	25TH ST. PUMPING EQUIP.	10/1/1968	-	-	-	-	-	-	-	-	-	-	-	-	-	-
558	525	0410	PUMPING EQUIP. NORM SHORES	10/1/1950	-	-	-	-	-	-	-	-	-	-	-	-	-	-
559	526	0410	PUMPING EQUIP. ALTON ROAD	10/1/1963	-	-	-	-	-	-	-	-	-	-	-	-	-	-
560	527	0410	PUMPING EQUIP. ALTON ROAD	10/1/1935	-	-	-	-	-	-	-	-	-	-	-	-	-	-
561	528	0410	PUMPING EQUIP. BELLE ISLAND	10/1/1935	-	-	-	-	-	-	-	-	-	-	-	-	-	-
562	529	0410	PUMPING EQUIP. 75TH & DICKENS	10/1/1953	-	-	-	-	-	-	-	-	-	-	-	-	-	-
563	530	0410	PUMPING EQUIP. 75TH & DICKENS	10/1/1957	-	-	-	-	-	-	-	-	-	-	-	-	-	-
564	5673	0410	WT PUMPING EQUIP. - 9/97	9/30/1997	186,380	-	186,380	-	-	-	102,357	84,023	-	-	-	-	-	-
565	6853	0410	WT PUMPING EQUIP. - 09/98	9/30/1998	9,803	-	9,803	-	-	-	5,383	4,419	-	-	-	-	-	-
566	10795	0410	ROWLAND READING UTILITY BODY	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
567	10797	0410	DIGITAL MLTPLX W/NETWROKING	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
568	10798	0410	COLOR CAMERA W/VAR ZOOM	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
569	10799	0410	COLOR CAMERA W/VAR ZOOM	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
570	10800	0410	BENCH VISE	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
571	10801	0410	BENCH VISE	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
572	10802	0410	BENCH VISE	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
573	10803	0410	MUELLER DRILLING MACHINE	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
574	10804	0410	MUELLER AIR OPERATOR	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
575	10805	0410	MUELLER AIR OPERATOR	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
576	10806	0410	DIESEL VIBRATORY HAMMER	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
577	10807	0410	18" PLATE COMPACTOR	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
578	10809	0410	HYDROSTATIC TEST PUMP	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
579	11009	0410	OPTIPLEX GX260T	11/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
580	11243	0410	DELL OPTIPLEX COMPER	4/9/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
581	12080	0410	12" GAS SAW	10/1/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
582	12081	0410	NVT TRANSMITTER/RECEIVER	10/1/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
583	12082	0410	COLOR CAMERA W/O LENS PWR SUPP	10/1/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
584	12083	0410	9 CH DIGITAL MULTIPLEXER/RCOR	10/1/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
585	12085	0410	COLORTRAC SCANNER	11/18/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
586	12086	0410	HP3000 ETHERNET	11/6/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
587	12087	0410	AP-M H/P INTERCOM/LOUDSPKR SYS	12/16/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
588	12089	0410	XC2 BACKFLOW PREVENTION SOFTWR	4/9/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
589	12090	0410	CHLORINE HOUSING SYS W/PUMP	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
590	12091	0410	AIR SANDER FOR CABINETS	7/31/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
591	12092	0410	REED LOW CLEARANCE RTRY CUTTER	7/1/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
592	12093	0410	REED 6"-8" HINGED CUTTER	7/1/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
593	12094	0410	REED 8"-12" HINGED CUTTER	7/1/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
594	12095	0410	REED 8"-12" HINGED CUTTER	7/1/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
595	12096	0410	REED 18"-20" ROTARY CUTTER	7/1/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
596	12100	0410	CABINET B-I-A 4426-7	7/8/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
597	12102	0410	WACKER 11,250# FORCE, RVSIBLE	9/17/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
598	12370	0410	TRASH PUMP WACKER-5.5HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
599	12371	0410	TRASH PUMP WACKER-8HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600	12372	0410	TRASH PUMP WACKER-16HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
601	12373	0410	MAVICA DIGITAL CAMERA-SMP	4/30/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
602	12376	0410	TRASH PUMP WACKER-5.5HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
603	12377	0410	TRASH PUMP WACKER-5.5HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
604	12378	0410	TRASH PUMP WACKER-5.5HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
605	12379	0410	TRASH PUMP WACKER-5.5HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
606	12380	0410	TRASH PUMP WACKER-5.5HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
607	12381	0410	TRASH PUMP WACKER-8HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
608	12382	0410	TRASH PUMP WACKER-8HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
609	12383	0410	TRASH PUMP WACKER-8HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
610	12384	0410	TRASH PUMP WACKER-16HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
611	12385	0410	TRASH PUMP WACKER-16HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612	12386	0410	TRASH PUMP WACKER-16HP	11/4/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
613	12387	0410	MAVICA DIGITAL CAMERA-SMP	4/30/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
614	12388	0410	MAVICA DIGITAL CAMERA-SMP	4/30/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
615	12914	0410	PAVE BREAKER W/ COMPONENTS	9/2/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
616	13053	0410	MUELLER#39305 DRILLING MACHINE D-5	9/22/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
617	13054	0410	MUELLER#39305 DRILLING MACHINE D-5	9/22/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
618	13064	0410	PAVE BREAKER W/ COMPONENTS	9/2/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
619	13065	0410	PAVE BREAKER W/ COMPONENTS	9/2/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
620	13070	0410	MUELLER#39305 DRILLING MACHINE D-5	9/22/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
621	13105	0410	REVERSIBLE PLATE COMPACTOR	9/13/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
622	13106	0410	REVERSIBLE PLATE COMPACTOR	9/13/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
623	13107	0410	REVERSIBLE PLATE COMPACTOR	9/13/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
624	13829	0410	DELL OPTIPLEX GX260	11/11/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
625	14091	0410	HP LASERJET 4200 N W/TRAY & FEEDER	1/28/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
626	14234	0410	DELL OPTIPLEX GX280	12/5/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
627	14391	0410	LICENSE I20NET FOR AUTOCAD 2004/05	6/22/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
628	14393	0410	LICENSE CITYWORKS SITE	9/14/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
629	14531	0410	HP SCANJET 8250 GOVT FB 48	4/27/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
630	14545	0410	DELL OPTIPLEX GX620	6/28/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
631	14778	0410	QLOGIC QLE2360 SERVER	11/17/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System						Sewer System				General Plant
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Effil./Recl.	Transmission	Collection & Direct Recl.	
632	14781	0410	QLOGIC QLE2360 SERVER	11/17/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
633	14784	0410	POWEREDGE 2850	11/17/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
634	14787	0410	DELL OPTIPLEX GX620	6/15/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
635	14788	0410	DELL OPTIPLEX GX620	7/23/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
636	14794	0410	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
637	14795	0410	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
638	14796	0410	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
639	14797	0410	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
640	14798	0410	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
641	14799	0410	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
642	14800	0410	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
643	14801	0410	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
644	14802	0410	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
645	15486	0410	DELL OPTIPLEX	10/26/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
646	15487	0420	DELL OPTI PLEX	10/26/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
647	15977	0410	DELL XEON	5/8/2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
648	16001	0420	KOHLER ALL POWER GENERATOR & TRAILER	3/30/2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
649	16462	0410	GIS SEWER COLLECTION SYST	6/2/2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
650	16471	0410	DELL PRECISION 690 MINI-TOWER	8/14/2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
651	16861	0410	OPTIPLEX 745 SMALL FORM FACTOR CORE 2 DU	10/17/2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
652	17302	0410	IND PRESSURE WASHER	1/25/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
653	17453	0410	ZEPHYR ANTENNA KIT/POLE BRACKET WARRANT	3/27/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
654	17454	0410	ZEPHYR ANTENNA KIT/POLE BRACKET WARRANT	3/27/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
655	17455	0410	ZEPHYR ANTENNA KIT/POLE BRACKET WARRANT	3/27/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
656	17456	0410	ARCPAD APPLICATION BUILDER	4/3/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
657	17457	0410	PANASONIC TOUGHBOOK 19 TCHSCRN PC V	3/20/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
658	17458	0410	PANASONIC TOUGHBOOK 19 TCHSCRN PC V	3/20/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
659	17465	0410	GENERATOR	5/1/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
660	17466	0410	PORTABLE WATER CONTROL VALVE	5/1/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
661	21849	0420	FY 98 BACK FLOW PREVENTERS WO 2225	10/1/2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
662	25960	0410	GPS SURVEY EQUIP.(HIPER SR NETWORK ROVER	4/18/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-
663	26217	0410	AVL MOBIL UNITS (35-WATER DEPT./25 SEWER	6/27/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-
664	26262	0420	PNFUMATIC POWERFED HANDHFLD VALVE EXFRCIS	4/26/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-
665	26617	0410	HP DESIGNJET T2500 PS 36IN EMFP - SEE AL	6/18/2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-
666	27546	0410	MBW REVERSIBLE PLATE COMPACTOR HONDA ENG	8/25/2015	6,692	-	6,692	-	-	-	-	-	-	-	-	-	-	6,692
667	27675	0410	ALLEN BRADLEY INTEGRATED DISPLAY IND COM	9/23/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-
668	27676	0420	ALLEN BRADLEY INTEGRATED DISPLAY IND COM	9/23/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-
669	28245	0420	2016 12" GODWIN DRI-PRIME PUMP/TRAILER	7/1/2016	151,025	-	151,025	-	-	-	-	-	-	-	-	-	-	151,025
670	28260	0410	BOAT ENGINE 150L FOUR STROKE 20"	1/26/2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-
671	28261	0410	BOAT TRAILER - MAGIG TILT	1/26/2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-
672	28312	0420	ROWER X TRUCK SYS-WINCAN(SEWER CAMERA)	9/30/2016	117,961	-	117,961	-	-	-	-	-	-	-	-	-	-	117,961
673	28340	0410	PANTOGRAPH REACH LIFT TRUCK-3000LB CAP	12/6/2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-
674	29141	0410	NEW STORAGE FUEL TANKS-PUMP STA.#28	3/26/2019	108,623	-	108,623	-	-	108,623	-	-	-	-	-	-	-	-
675	29142	0410	NEW STORAGE FUEL TANKS-PUMP STA.#29	5/17/2019	89,160	-	89,160	-	-	89,160	-	-	-	-	-	-	-	-
676	29878	0410	GENERATOR PETROLEUM STORAGE TANK-PS#4	6/1/2021	89,441	-	89,441	-	-	-	-	-	-	-	-	-	-	89,441
677	7859	0410	ARIEL ATLAS SET 1985	6/30/1985	-	-	-	-	-	-	-	-	-	-	-	-	-	-
678	8628	0410	PANASONIC VCR	2/22/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
679	27545	0410	MBW REVERSIBLE PLATE COMPACTOR HONDA ENG	8/25/2015	6,692	-	6,692	-	-	-	-	-	-	-	-	-	-	6,692
680	27547	0410	MBW REVERSIBLE PLATE COMPACTOR HONDA ENG	8/25/2015	6,692	-	6,692	-	-	-	-	-	-	-	-	-	-	6,692
681	28733	0410	WANCO STANDARD ICC MINI-TRAILER SIGN	10/1/2017	15,340	-	15,340	-	-	-	-	-	-	-	-	-	-	15,340
682	10808	0420	18" PLATE COMPACTOR	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
683	10810	0420	AIR DR.TORQUE GAUGE	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
684	10812	0420	POWER UNIT FOR PUMP	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
685	10813	0420	CL12 DRILLING MACHINE W/PARTS	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
686	10814	0420	MUELLER SHELL CUTTER 83314	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
687	10815	0420	MUELLER SHELL CUTTER #83140	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
688	10816	0420	MUELLER SHELL CUTTER # 83140	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
689	10817	0420	MUELLER PILOT DRILL 83634	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
690	10818	0420	BARNES SUPLEX PANEL SWITCH	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
691	10831	0420	PELSUE AIR PAC BLOWER	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
692	10832	0420	PELSUE AIR PAC BLOWER	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
693	10833	0420	PELSUE AIR PAC BLOWERE	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
694	10834	0420	PELSUE AIR PAC BLOWER	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
695	10835	0420	GAS MONITOR	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
696	10836	0420	GAS MONITOR	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
697	10837	0420	PANASONIC UF 890 FAX UNIT	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
698	10838	0420	DIESEL VIBRATORY RAMMER	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
699	12068	0420	12" GASS SAW	10/1/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
700	12072	0420	PLATE COMPACTOR	7/10/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
701	12073	0420	FLEXICAM DELUXE SYST	8/8/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
702	12074	0420	REED LOW CLEARANCE RTRY CUTTER	7/1/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
703	12075	0420	REED ROTARY CUTTER	7/1/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
704	12076	0420	REED 6"-8" HINGED CUTTER	7/1/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
705	12077	0420	REED 8"-12" HINGED CUTTER	7/1/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
706	12078	0420	REED ROTARY CUTTER	8/19/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
707	12079	0420	WACKER 11.250# FORCE, RVRSBLE	9/17/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
708	12374	0420	HURRI 2500, 3GPM	12/8/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
709	12375	0420	HURRI 2500, 3GPM	12/8/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
710	13248	0420	RIDGID 42002 K-750 W/C-75 & W/C 3/4"X75	2/2/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2-1
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Existing Water and Sewer Utility Assets

Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System					Sewer System				General Plant
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Effil./Recl.	Transmission & Direct Recl.	
711	13830	0420	DELL OPTIPLEX GX260	11/11/2002	-	-	-	-	-	-	-	-	-	-	-	-	-
712	14302	0410	LICENSE H20NET FOR AUTOCAD 2004/05	6/22/2006	-	-	-	-	-	-	-	-	-	-	-	-	-
713	14306	0420	LICENSE CITYWORKS SITE	9/14/2006	-	-	-	-	-	-	-	-	-	-	-	-	-
714	14779	0410	QLOGIC QLE2360 SERVER	11/17/2005	-	-	-	-	-	-	-	-	-	-	-	-	-
715	14780	0410	QLOGIC QLE2360 SERVER	11/17/2005	-	-	-	-	-	-	-	-	-	-	-	-	-
716	14783	0410	POWEREDGE 2850	11/17/2005	-	-	-	-	-	-	-	-	-	-	-	-	-
717	14790	0420	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-
718	14791	0420	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-
719	14792	0420	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-
720	14793	0420	DELL OPTIPLEX GX260D	3/7/2003	-	-	-	-	-	-	-	-	-	-	-	-	-
721	16084	0420	PORTABLE AIR COMPRESSOR	8/16/2007	11,160	-	11,160	-	-	-	-	-	-	-	-	-	11,160
722	16085	0420	PORTABLE AIR COMPRESSOR	8/16/2007	-	-	-	-	-	-	-	-	-	-	-	-	-
723	16464	0410	PORTABLE AIR COMPRESSOR	8/9/2007	-	-	-	-	-	-	-	-	-	-	-	-	-
724	16465	0410	PORTABLE AIR COMPRESSOR	8/14/2007	-	-	-	-	-	-	-	-	-	-	-	-	-
725	16467	0410	PORTABLE AIR COMPRESSOR	8/14/2007	11,160	-	11,160	-	-	-	-	-	-	-	-	-	11,160
726	19750	0410	WATER MAIN - MACARTHUR CAUSEWAY-W/O#2944	6/10/2009	11,394	-	11,394	-	-	11,394	-	-	-	-	-	-	-
727	21932	0420	SEWER PUMP STA ODOR CONTROL WO 2947	10/1/2010	-	-	-	-	-	-	-	-	-	-	-	-	-
728	22628	0420	LIMITORQUE ACTUATOR GEARBOX H5BC	9/28/2012	-	-	-	-	-	-	-	-	-	-	-	-	-
729	25943	0420	GRINDER FOR SEWER PUMP STA #28 (28TH. ST	11/26/2012	-	-	-	-	-	-	-	-	-	-	-	-	-
730	27677	0420	ALLEN BRADLEY INTEGRATED DISPLAY IND COM	9/23/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
731	27678	0420	ALLEN BRADLEY INTEGRATED DISPLAY IND COM	9/23/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
732	27679	0420	ALLEN BRADLEY INTEGRATED DISPLAY IND COM	9/23/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
733	27680	0420	ALLEN BRADLEY INTEGRATED DISPLAY IND COM	9/23/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
734	27681	0420	ALLEN BRADLEY INTEGRATED DISPLAY IND COM	9/23/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
735	27682	0420	ALLEN BRADLEY INTEGRATED DISPLAY IND COM	9/23/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
736	27683	0420	VARIABLE FREQUENCY DR. AT 300 28TH. ST.	9/29/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
737	27684	0420	VARIABLE FREQUENCY DR. AT 1051 JEFFERSON	9/29/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
738	27685	0420	VARIABLE FREQUENCY DR. AT 6310 INDIAN CR.	9/29/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
739	27686	0420	VARIABLE FREQUENCY DR. AT 1710 WASHINGTON	9/29/2015	-	-	-	-	-	-	-	-	-	-	-	-	-
740	28651	0420	GODWIN CD150M DRI-PRIME DIESEL PUMP	8/24/2017	56,254	-	56,254	-	-	-	-	-	-	-	-	-	56,254
741	28652	0420	GODWIN CD150M DRI-PRIME DIESEL PUMP	8/24/2017	56,254	-	56,254	-	-	-	-	-	-	-	-	-	56,254
742	28653	0420	GODWIN CD150M DRI-PRIME DIESEL PUMP	8/24/2017	56,254	-	56,254	-	-	-	-	-	-	-	-	-	56,254
743	29463	0420	DISCHARGE & INFLUENT VALVES/PUMP STA.#28	6/30/2020	449,826	-	449,826	-	-	-	-	-	-	-	-	449,826	-
744	29879	0420	GENERATOR PETROLEUM STORAGE TANK-SS#1	6/1/2021	77,842	-	77,842	-	-	-	-	-	-	-	-	-	77,842
745	30222	0420	SULZER PUMP ABS MODEL XFP100C-CB1.4-PE35	5/18/2022	6,459	-	6,459	-	-	-	-	-	-	-	-	-	6,459
746	30228	0420	(1 OF 2) PUMP (DUPLICATE) PS# 27	6/28/2022	43,693	-	43,693	-	-	-	-	-	-	-	-	43,693	-
747	30229	0420	(2 OF 2) PUMP (DUPLICATE) PS# 27	6/28/2022	43,693	-	43,693	-	-	-	-	-	-	-	-	43,693	-
748	30230	0420	(1 OF 2) PUMP (DUPLICATE) PS# 19	6/30/2022	39,902	-	39,902	-	-	-	-	-	-	-	-	39,902	-
749	30231	0420	(2 OF 2) PUMP (DUPLICATE) PS# 19	6/30/2022	39,902	-	39,902	-	-	-	-	-	-	-	-	39,902	-
750	30232	0420	(1 OF 2) PUMP (DUPLICATE) PS# 22	4/4/2022	33,507	-	33,507	-	-	-	-	-	-	-	-	33,507	-
751	30233	0420	(2 OF 2) PUMP (DUPLICATE) PS# 22	4/4/2022	33,507	-	33,507	-	-	-	-	-	-	-	-	33,507	-
752	30244	0420	(1 OF 2) FLOWERVE DUPLICATE PUMP-STA-23	10/1/2022	39,902	-	39,902	-	-	-	-	-	-	-	-	39,902	-
753	30245	0420	(2 OF 2) FLOWERVE DUPLICATE PUMP-STA-23	10/1/2022	39,902	-	39,902	-	-	-	-	-	-	-	-	39,902	-
754	510	0420	AIR RELIEF VALVES	10/1/1979	-	-	-	-	-	-	-	-	-	-	-	-	-
755	516	0420	AIR RELIEF VALVES	10/1/1980	-	-	-	-	-	-	-	-	-	-	-	-	-
756	540	0420	AIR RELIEF VALVE-1986	10/1/1986	-	-	-	-	-	-	-	-	-	-	-	-	-
757	16692	0420	PUMPING EQUIP. - 2007	9/30/2007	167,038	-	167,038	-	-	-	-	-	-	-	-	99,700	67,338
758	16716	0420	PUMPING EQUIP. - 2002	9/30/2007	9,116	-	9,116	-	-	-	-	-	-	-	-	5,441	3,675
759	16717	0420	PUMPING EQUIP. - 2003	9/30/2007	36,290	-	36,290	-	-	-	-	-	-	-	-	21,660	14,629
760	16718	0420	PUMPING EQUIP. - 2004	9/30/2007	19,667	-	19,667	-	-	-	-	-	-	-	-	11,739	7,928
761	16719	0420	PUMPING EQUIP. - 2005	9/30/2007	35,085	-	35,085	-	-	-	-	-	-	-	-	20,941	14,144
762	20559	0420	PUMPING EQUIP./ FORCE MAINS - 2010	10/31/2009	3,839	-	3,839	-	-	-	-	-	-	-	-	3,839	-
763	22085	0420	SEWER-PUMPING EQUIP./FORCE MAINS-2011	11/30/2010	122,719	-	122,719	-	-	-	-	-	-	-	-	122,719	-
764	22539	0420	SEWER-PUMPING EQUIP. / FORCE MAINS-2012	12/30/2011	15,368	-	15,368	-	-	-	-	-	-	-	-	15,368	-
765	2470	0420	PUMPING EQUIP. - 1989	9/30/1989	-	-	-	-	-	-	-	-	-	-	-	-	-
766	2471	0420	PUMPING EQUIP. - 1990	9/30/1990	-	-	-	-	-	-	-	-	-	-	-	-	-
767	26272	0420	SEWER-PUMPING EQUIP. / FORCE MAINS-2013	8/9/2013	54,131	-	54,131	-	-	-	-	-	-	-	-	54,131	-
768	26846	0420	SEWER-PUMPING EQUIP. / FORCE MAINS-2014	10/1/2013	44,259	-	44,259	-	-	-	-	-	-	-	-	44,259	-
769	2759	0420	MILLING MACHINE/DRILL PRESS	5/29/1992	-	-	-	-	-	-	-	-	-	-	-	-	-
770	30145	0420	SEWER PUMP STATION # 18 - IMPROVEMENT	4/19/2022	322,490	-	322,490	-	-	-	-	-	-	-	-	322,490	-
771	3035	0420	PUMPING EQUIP. - 1991	10/1/1990	113,638	-	113,638	-	-	-	-	-	-	-	-	67,827	45,811
772	3040	0420	PUMPING EQUIP. - 1992	10/1/1991	22,563	-	22,563	-	-	-	-	-	-	-	-	13,467	9,096
773	3044	0420	PUMPING EQUIP. - 1993	10/1/1992	31,295	-	31,295	-	-	-	-	-	-	-	-	18,679	12,616
774	3202	0420	SW PUMPING EQUIP. - 1993	4/1/1993	26,996	-	26,996	-	-	-	-	-	-	-	-	16,113	10,883
775	3446	0420	SW PUMPING EQUIP. - 3/94	3/31/1994	6,276	-	6,276	-	-	-	-	-	-	-	-	3,746	2,530
776	3726	0420	SW PUMPING EQUIP. - 9/94	9/30/1994	66,459	-	66,459	-	-	-	-	-	-	-	-	39,668	26,792
777	3956	0420	SW PUMPING EQUIP. - 3/95	3/31/1995	3,025	-	3,025	-	-	-	-	-	-	-	-	1,805	1,219
778	4098	0420	SW PUMPING EQUIP. - 9/95	9/30/1995	3,123	-	3,123	-	-	-	-	-	-	-	-	1,864	1,259
779	4421	0420	SW PUMPING EQUIP. - 3/96	3/31/1996	39,355	-	39,355	-	-	-	-	-	-	-	-	23,490	15,865
780	505	0420	ELECTRIC PUMPING EQUIP.	10/1/1979	-	-	-	-	-	-	-	-	-	-	-	-	-
781	512	0420	ELECTRIC PUMPING EQUIP.	10/1/1980	-	-	-	-	-	-	-	-	-	-	-	-	-
782	513	0420	DIESEL PUMPING EQUIP.	10/1/1980	-	-	-	-	-	-	-	-	-	-	-	-	-
783	5235	0420	SW PUMPING EQUIP. - 9/96	9/30/1996	73,533	-	73,533	-	-	-	-	-	-	-	-	43,890	29,643
784	538	0420	ELECT. PUMP EQUIP-1986	10/1/1986	-	-	-	-	-	-	-	-	-	-	-	-	-
785	5675	0420	SW PUMPING EQUIP. - 9/97	9/30/1997	548,045	-	548,045	-	-	-	-	-	-	-	-	327,112	220,932
Construction in Progress as of September 30, 2023																	
786			FDOT UTILITIES RELOCATION		\$ 112,571	\$ (112,571)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
787			WASTE WATER STATIONS REHABILITATION		1,377,586	(1,377,586)	-	-	-	-	-	-	-	-	-	-	-

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Summary of Existing Water and Sewer Utility Assets

Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System					Sewer System				General Plant	
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	E/ffl./Recl.	Transmission		Collection & Direct Recl.
788			pwmsunspu SH Pumpstation Upgrades		1,013,016	(1,013,016)	-	-	-	-	-	-	-	-	-	-	-	-
789			rwswestrow West Ave/Bay Rd Neigh.		-	-	-	-	-	-	-	-	-	-	-	-	-	-
790			pwcs4irsdm 54in Diam Red Sewer Force Mn		-	-	-	-	-	-	-	-	-	-	-	-	-	-
791			WATER PUMP STATIONS IMPROVEMENTS		527,325	(527,325)	-	-	-	-	-	-	-	-	-	-	-	-
792			WASTEWATER MANHOLE REHABILITATION		2,205	(2,205)	-	-	-	-	-	-	-	-	-	-	-	-
793			SEWER PUMP STATION ODOR CONTROL		805,000	(805,000)	-	-	-	-	-	-	-	-	-	-	-	-
794			BAYSHORE NEIGH. CENTRAL - SOUTH		1,305,941	(1,305,941)	-	-	-	-	-	-	-	-	-	-	-	-
795			FDOT UTILITES RELOCATION		677,529	(677,529)	-	-	-	-	-	-	-	-	-	-	-	-
796			WEST AVENUE PHASE II		6,374,269	(6,374,269)	-	-	-	-	-	-	-	-	-	-	-	-
797			WASTE WATER STATIONS REHABILITATION		1,098,253	(1,098,253)	-	-	-	-	-	-	-	-	-	-	-	-
798			SCADA AND PLC SYSTEMS		19,167	(19,167)	-	-	-	-	-	-	-	-	-	-	-	-
799			VENETIAN NEIGH. -ISLANDS		591,143	(591,143)	-	-	-	-	-	-	-	-	-	-	-	-
800			pwmsunspu SH Pumpstation Upgrades		539,631	(539,631)	-	-	-	-	-	-	-	-	-	-	-	-
801			La Gorce Neighborhood		289,112	(289,112)	-	-	-	-	-	-	-	-	-	-	-	-
802			rwswestrow West Ave/Bay Rd Neigh.		-	-	-	-	-	-	-	-	-	-	-	-	-	-
803			RWSISLANDS - PALM & HIBISCUS ISLAND ENHAN.		3,963,099	(3,963,099)	-	-	-	-	-	-	-	-	-	-	-	-
804			pwcs4irsdm 54in Diam Red Sewer Force Mn		(0)	0	-	-	-	-	-	-	-	-	-	-	-	-
805			WASTEWATER MANHOLE REHABILITATION		1,705	(1,705)	-	-	-	-	-	-	-	-	-	-	-	-
806			WATER & WASTEWATER MAINS AND REHAB		14,270,190	(14,270,190)	-	-	-	-	-	-	-	-	-	-	-	-
807			BAYSHORE NEIGH. CENTRAL - SOUTH		0	(0)	-	-	-	-	-	-	-	-	-	-	-	-
808			FDOT UTILITES RELOCATION		178,825	(178,825)	-	-	-	-	-	-	-	-	-	-	-	-
809			Venetian Causeway Plan Islands		3,142,935	(3,142,935)	-	-	-	-	-	-	-	-	-	-	-	-
810			FPL Underground (40th-20th. St.)		0	(0)	-	-	-	-	-	-	-	-	-	-	-	-
811			pwmsunspu SH Pumpstation Upgrades		2,610,760	(2,610,760)	-	-	-	-	-	-	-	-	-	-	-	-
812			Bayshore Neigh. Bid Pack d rwmbydsdpd		3,689,073	(3,689,073)	-	-	-	-	-	-	-	-	-	-	-	-
813			N Sh Neighborhood & park view		3,881,899	(3,881,899)	-	-	-	-	-	-	-	-	-	-	-	-
814			La Gorce Neighborhood		138,403	(138,403)	-	-	-	-	-	-	-	-	-	-	-	-
815			rwswestrow West Ave/Bay Rd Neigh.		-	-	-	-	-	-	-	-	-	-	-	-	-	-
816			Palm & Hibiscus Island Enhancement		2,662,416	(2,662,416)	-	-	-	-	-	-	-	-	-	-	-	-
817			54IN DIAMETER REDUNDANT		-	-	-	-	-	-	-	-	-	-	-	-	-	-
818			WASTEWATER MANHOLE REHABILITATION		202	(202)	-	-	-	-	-	-	-	-	-	-	-	-
819			FDOT UTILITES RELOCATION		1,215,000	(1,215,000)	-	-	-	-	-	-	-	-	-	-	-	-
820			Bayshore Neigh. Bid Pack d rwmbydsdpd		97,000	(97,000)	-	-	-	-	-	-	-	-	-	-	-	-
821			Venetian Causeway Plan-Islands		2,312,158	(2,312,158)	-	-	-	-	-	-	-	-	-	-	-	-
822			FPL Underground (40th-20th Street)		-	-	-	-	-	-	-	-	-	-	-	-	-	-
823			La Gorce Neigh		652,387	(652,387)	-	-	-	-	-	-	-	-	-	-	-	-
824			Palm & Hibiscus Island Enhancement		2,959,045	(2,959,045)	-	-	-	-	-	-	-	-	-	-	-	-
825			Rehab of Sub.Aqueous		237,646	(237,646)	-	-	-	-	-	-	-	-	-	-	-	-
826			WASTEWATER MANHOLE REHABILITATION		342	(342)	-	-	-	-	-	-	-	-	-	-	-	-
827			UTMBAYSNCB - BAYSHORE NEIGH. CENTRAL - SOUTH		-	-	-	-	-	-	-	-	-	-	-	-	-	-
828			Venetian Causeway Plan		5,226,093	(5,226,093)	-	-	-	-	-	-	-	-	-	-	-	-
829			FPL Loan		-	-	-	-	-	-	-	-	-	-	-	-	-	-
830			Flamingo Park North		(0)	0	-	-	-	-	-	-	-	-	-	-	-	-
831			Sunset Island		1,004,960	(1,004,960)	-	-	-	-	-	-	-	-	-	-	-	-
832			North Shore Neighborhood		2,692,256	(2,692,256)	-	-	-	-	-	-	-	-	-	-	-	-
833			La Gorce North		1,912,187	(1,912,187)	-	-	-	-	-	-	-	-	-	-	-	-
834			West Ave/Bay Rd Neighborhood		-	-	-	-	-	-	-	-	-	-	-	-	-	-
835			Palm & Hibiscus Island Enhancements		1,351,050	(1,351,050)	-	-	-	-	-	-	-	-	-	-	-	-
836			IIP-No.2:North Shore Neighborhood		86,366	(86,366)	-	-	-	-	-	-	-	-	-	-	-	-
837			pwcs4irsdm 54in Diam Red Sewer Force Mn		-	-	-	-	-	-	-	-	-	-	-	-	-	-
838			WASTEWATER MANHOLE REHABILITATION		163,090	(163,090)	-	-	-	-	-	-	-	-	-	-	-	-
839			UTMBAYSNCB - BAYSHORE NEIGH. CENTRAL - SOUTH		-	-	-	-	-	-	-	-	-	-	-	-	-	-
840			rwsvnebpce Venetian Neigh. Islands		1,529,777	(1,529,777)	-	-	-	-	-	-	-	-	-	-	-	-
841			rwmbydsbpa Bayshore Neigh. Bid Pack A		-	-	-	-	-	-	-	-	-	-	-	-	-	-
842			rwmbydsdpd Bayshore Neigh. Bid Pack D		296,322	(296,322)	-	-	-	-	-	-	-	-	-	-	-	-
843			West Ave/Bay Rd Neighborhood		-	-	-	-	-	-	-	-	-	-	-	-	-	-
844			rwsislands Palm & Hibiscus Isl Enhancem		503,278	(503,278)	-	-	-	-	-	-	-	-	-	-	-	-
845			UTMBAYSNCB - BAYSHORE NEIGH. CENTRAL - SOUTH		-	-	-	-	-	-	-	-	-	-	-	-	-	-
846			TOTAL SYSTEM ASSETS - CURRENTLY REPORTED		\$ 353,624,921	\$ (71,511,214)	\$ 282,113,708	\$ -	\$ -	\$ 75,437,017	\$ 46,607,174	\$ 4,076,110	\$ 12,301,382	\$ -	\$ -	\$ 88,812,584	\$ 44,239,786	\$ 10,639,655
847			ALLOCATION OF OTHER DEVELOPER CONTRIBUTIONS				-	-	-	-	-	-	-	-	-	-	-	-
848			ALLOCATION OF INDIRECT PLANT				-	-	-	-	-	-	-	-	-	-	-	-
849			TOTAL ASSETS FOR IMPACT FEE DETERMINATION		\$ 353,624,921	\$ (71,511,214)	\$ 282,113,708	\$ -	\$ -	\$ 75,437,017	\$ 46,607,174	\$ 4,076,110	\$ 12,301,382	\$ -	\$ -	\$ 88,812,584	\$ 44,239,786	\$ 10,639,655
850							100.00%	0.00%	0.00%	26.74%	16.52%	1.44%	4.36%	0.00%	0.00%	31.48%	15.68%	3.77%
851			TOTAL PLANT ASSETS CONSIDERED AS DONATIONS / CONTRIBUTIONS			\$ 3,300,000	\$ -	\$ -	\$ -	\$ 521,724	\$ 428,276	\$ -	\$ -	\$ -	\$ -	\$ 1,967,028	\$ 382,972	\$ -

Table 2-1
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Existing Water and Sewer Utility Assets

Line No.	Asset Number	Department	Description	Acquired Date	Acquisition Amount	Adjustments	Adj. Acq. Amt.	Water System						Sewer System				General Plant
								Supply	Treatment	Transmission	Distribution	Fire Hydrants	Meters	Treatment	Effl./Recl.	Transmission	Collection & Direct Recl.	
852			<u>Historical Grants:</u> #2737 - 54" Diameter Redundant Sewer Force Main		\$ 400,000	\$ -	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$ -	-
853			#2339 - Venetian Neigh - Causeway (Bid D)		1,000,000	-	1,000,000	-	-	-	-	-	-	-	-	1,000,000	-	-
854			#2127 - Venetian Neighborhood - Belle Isle (Belle Isle Right-of-Way Improvement)		400,000	-	400,000	-	-	109,837	90,163	-	-	-	-	119,374	80,626	-
855			#2330 - Flamingo Neighborhood - Bid Pack A		1,500,000	-	1,500,000	-	-	411,888	338,112	-	-	-	-	447,654	302,346	-
856					\$ 3,300,000	\$ -	\$ 3,300,000	\$ -	\$ -	\$ 521,724	\$ 428,276	\$ -	\$ -	\$ -	\$ -	\$ 1,967,028	\$ 382,972	\$ -

[1] Amounts shown are derived from the fixed asset register provided by the City; amounts reported as of September 30, 2023. Amounts are classified to plant functions based on i) fixed asset description and cost center / location; ii) relevance of fixed asset; and iii) ratemaking judgment.

Table 2-2

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Water and Sewer Capital Improvement Program By Function Through Fiscal Year 2034

Adjustments to Remove Project Costs Considered									
Line No.	Project Description	Project Type	Estimated Total Capital Cost	100% Allocable to Existing Users	Net Amount For Future Expenditures	Allocation Reference	Functional Category		
							Supply and Treatment	Storage, Pumping and Transmission	Distribution and Collection
WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM									
1	SCADA & PROGRAMMABLE LOGIC CONTROLLERS	Critical Needs	\$ (106,298)	\$ 106,298	\$ -	N/A	\$ -	\$ -	\$ -
2	STORMWATER CRITICAL NEEDS - ANCILLARY WATER AND								
3	SEWER LINE ADJUSTMENTS	Critical Needs	8,065,000	-	8,065,000	Distr/Collect	-	-	8,065,000
3	WATER & WASTEWATER MAINS AND REHAB	Critical Needs	136,985,675	-	136,985,675	Transmission	-	136,985,675	-
4	WATER PUMP STATIONS IMPROVEMENTS	Critical Needs	24,334,111	-	24,334,111	Transmission	-	24,334,111	-
5	1ST STREET-ALTON RD TO WASHINGTON	Neighborhoods	6,494,518	-	6,494,518	W-TR-DistWeight	-	3,566,681	2,927,837
6	1ST STREET-ALTON RD TO WASHINGTON PH 3+4	Neighborhoods	14,515,000	-	14,515,000	W-TR-DistWeight	-	7,971,396	6,543,604
7	FLAMINGO-LUMMUS C PHASE 1	Neighborhoods	2,421,459	-	2,421,459	Distr/Collect	-	-	2,421,459
8	NORMANDY ISLES A PHASE 1	Neighborhoods	28,233,218	-	28,233,218	Distr/Collect	-	-	28,233,218
9	NORMANDY ISLES A PHASE 2	Neighborhoods	2,823,322	-	2,823,322	Distr/Collect	-	-	2,823,322
10	NORTH SHORE D - TOWN CENTER PHASE 1	Neighborhoods	5,771,581	-	5,771,581	W-TR-DistWeight	-	3,169,656	2,601,925
11	NORTH SHORE D - TOWN CENTER PHASE 2	Neighborhoods	10,000,000	-	10,000,000	W-TR-DistWeight	-	5,491,833	4,508,167
12	WEST AVENUE PH III	Neighborhoods	7,953,802	-	7,953,802	W-TR-DistWeight	-	4,368,096	3,585,706
13	100 BLOCK OF LINCOLN ROAD	Other	300,000	-	300,000	Distr/Collect	-	-	300,000
14	17TH STREET IMPROVEMENTS PHASE I	Other	9,600,000	-	9,600,000	W-TR-DistWeight	-	5,272,160	4,327,840
15	COLLINS PARK ANCILLARY IMPROVEMENTS	Other	473,045	-	473,045	Distr/Collect	-	-	473,045
16	CONVENTION CNTR LINCEN RD CONNECTOR	Other	2,711,673	-	2,711,673	Transmission	-	2,711,673	-
17	FDOT ALTON ROAD UTILITIES RELOCATION	Other	21,505,138	-	21,505,138	W-TR-DistWeight	-	11,810,264	9,694,874
18	PUBLIC WORKS OPERATIONS FACILITY	Other	1,495,000	-	1,495,000	W-TR-DistWeight	-	821,029	673,971
TOTAL WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM			\$ 283,576,241	\$ 106,298	\$ 283,682,540		\$ -	\$ 206,502,573	\$ 77,179,966

Table 2-2

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Water and Sewer Capital Improvement Program By Function Through Fiscal Year 2034

Line No.	Project Description	Project Type	Estimated Total Capital Cost	Adjustments to Remove Project Costs Considered	Net Amount For Future Expenditures	Allocation Reference	Functional Category		
				100% Allocable to Existing Users			Supply and Treatment	Storage, Pumping and Transmission	Distribution and Collection
SEWER SYSTEM CAPITAL IMPROVEMENT PROGRAM									
20	UPGRADES	Critical Needs	\$ 16,105,000	\$ -	\$ 16,105,000	FMSGCWeight	\$ -	\$ 9,612,621	\$ 6,492,379
21	SCADA & PROGRAMMABLE LOGIC CONTROLLERS	Critical Needs	(425,194)	425,194	-	N/A	-	-	-
22	SEWER PUMP STATION ODOR CONTROL	Critical Needs	3,000,000	-	3,000,000	Transmission	-	3,000,000	-
23	SEWER LINE ADJUSTMENTS	Critical Needs	8,065,000	-	8,065,000	Distr/Collect	-	-	8,065,000
24	VALVE REPLACEMENT PROGRAM	Critical Needs	(831,493)	831,493	-	N/A	-	-	-
25	WASTEWATER STATIONS REHABILITATION	Critical Needs	48,068,282	-	48,068,282	Transmission	-	48,068,282	-
26	WASTEWATER MANHOLE REHABILITATION	Critical Needs	5,924,865	-	5,924,865	Distr/Collect	-	-	5,924,865
27	WATER & WASTEWATER MAINS AND REHAB	Critical Needs	136,985,675	-	136,985,675	Transmission	-	136,985,675	-
28	1ST STREET-ALTON RD TO WASHINGTON	Neighborhoods	6,494,518	-	6,494,518	FMSGCWeight	-	3,876,394	2,618,123
29	1ST STREET-ALTON RD TO WASHINGTON PH 3+4	Neighborhoods	14,515,000	-	14,515,000	FMSGCWeight	-	8,663,594	5,851,406
30	FLAMINGO-LUMMUS C PHASE 1	Neighborhoods	2,421,459	-	2,421,459	FMSGCWeight	-	1,445,300	976,158
31	NORMANDY ISLES A PHASE 1	Neighborhoods	28,233,218	-	28,233,218	FMSGCWeight	-	16,851,612	11,381,606
32	NORMANDY ISLES A PHASE 2	Neighborhoods	2,823,322	-	2,823,322	FMSGCWeight	-	1,685,161	1,138,161
33	NORTH SHORE D - TOWN CENTER PHASE 1	Neighborhoods	5,771,581	-	5,771,581	FMSGCWeight	-	3,444,894	2,326,687
34	NORTH SHORE D - TOWN CENTER PHASE 2	Neighborhoods	10,000,000	-	10,000,000	FMSGCWeight	-	5,968,718	4,031,282
35	WEST AVENUE PH III	Neighborhoods	7,953,802	-	7,953,802	FMSGCWeight	-	4,747,400	3,206,402
36	100 BLOCK OF LINCOLN ROAD	Other	300,000	-	300,000	Distr/Collect	-	-	300,000
37	17TH STREET IMPROVEMENTS PHASE I	Other	9,600,000	-	9,600,000	FMSGCWeight	-	5,729,969	3,870,031
38	COLLINS PARK ANCILLARY IMPROVEMENTS	Other	473,045	-	473,045	Distr/Collect	-	-	473,045
39	CONVENTION CNTR LINCN RD CONNECTOR	Other	2,711,673	-	2,711,673	Transmission	-	2,711,673	-
40	DERM & EPA CONSENT DECREE	Other	6,734,310	-	6,734,310	Distr/Collect	-	-	6,734,310
41	FDOT ALTON ROAD UTILITIES RELOCATION	Other	21,505,138	-	21,505,138	FMSGCWeight	-	12,835,811	8,669,327
42	PUBLIC WORKS OPERATIONS FACILITY	Other	1,495,000	-	1,495,000	FMSGCWeight	-	892,323	602,677
					-				
43	TOTAL SEWER SYSTEM CAPITAL IMPROVEMENT PROGRAM		\$ 337,924,199	\$ 1,256,687	\$ 339,180,885		\$ -	\$ 266,519,428	\$ 72,661,457
44	TOTAL WATER AND SEWER CAPITAL IMPROVEMENT PROGRAM		\$ 621,500,440	\$ 1,362,985	\$ 622,863,425		\$ -	\$ 473,022,001	\$ 149,841,424

Table 2-3

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Water and Sewer Capital Improvement Program Recognized in System Impact Fees – Fiscal Years 2024 Through 2034

Line No.	Project Description	Adjusted Project Cost [1]	Project Status	Assumed Original In-Service Date [2]	Estimated Original Cost [3]	Amount Recognized [4]			Percent to Recognize for Expansion	
						Existing	Expansion	Future / Direct		
WATER TREATMENT PROJECTS (Not Applicable)										
WATER TRANSMISSION PROJECTS										
1	WATER & WASTEWATER MAINS AND REHAB	\$ 136,985,675	Upgrade	1965	\$ 16,543,691	\$ 136,985,675	\$ -	\$ -	0.00%	
2	WATER PUMP STATIONS IMPROVEMENTS	24,334,111	Upgrade	1965	2,938,818	24,334,111	-	-	0.00%	
3	1ST STREET-ALTON RD TO WASHINGTON	3,566,681	Upgrade	1965	430,746	3,566,681	-	-	0.00%	
4	3+4	7,971,396	Upgrade	1965	962,702	7,971,396	-	-	0.00%	
5	NORTH SHORE D - TOWN CENTER PHASE 1	3,169,656	Upgrade	1965	382,798	3,169,656	-	-	0.00%	
6	NORTH SHORE D - TOWN CENTER PHASE 2	5,491,833	Upgrade	1965	663,246	5,491,833	-	-	0.00%	
7	WEST AVENUE PH III	4,368,096	Upgrade	1965	527,533	4,368,096	-	-	0.00%	
8	17TH STREET IMPROVEMENTS PHASE I	5,272,160	Upgrade	1965	636,716	5,272,160	-	-	0.00%	
9	CONVENTION CNTR LINCN RD CONNECTOR	2,711,673	Upgrade	1965	327,487	2,711,673	-	-	0.00%	
10	FDOT ALTON ROAD UTILITIES RELOCATION	11,810,264	Upgrade	1965	1,426,320	11,810,264	-	-	0.00%	
11	PUBLIC WORKS OPERATIONS FACILITY	821,029	Upgrade	1965	99,155	821,029	-	-	0.00%	
12	Total Water Transmission Projects	\$ 206,502,573			\$ 24,939,212	\$ 206,502,573	\$ -	\$ -	0.00%	
13	TOTAL WATER PROJECTS	\$ 206,502,573			\$ 24,939,212	\$ 206,502,573	\$ -	\$ -	0.00%	

Table 2-3

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Water and Sewer Capital Improvement Program Recognized in System Impact Fees – Fiscal Years 2024 Through 2034

Line No.	Project Description	Adjusted Project Cost [1]	Project Status	Assumed Original In-Service Date [2]	Estimated Original Cost [3]	Amount Recognized [4]			Percent to Recognize for Expansion	
						Existing	Expansion	Future / Direct		
SEWER TREATMENT PROJECTS (Not Applicable)										
SEWER TRANSMISSION PROJECTS										
14	COLLECTION UPGRADES	\$ 9,612,621	Upgrade	1965	\$ 1,160,911	\$ 9,612,621	\$ -	\$ -	0.00%	
15	SEWER PUMP STATION ODOR CONTROL	3,000,000	Upgrade	1965	362,308	3,000,000	-	-	0.00%	
16	WASTEWATER STATIONS REHABILITATION	48,068,282	Upgrade	1965	5,805,182	48,068,282	-	-	0.00%	
17	WATER & WASTEWATER MAINS AND REHAB	136,985,675	Upgrade	1965	16,543,691	136,985,675	-	-	0.00%	
18	1ST STREET-ALTON RD TO WASHINGTON	3,876,394	Upgrade	1965	468,150	3,876,394	-	-	0.00%	
19	3+4	8,663,594	Upgrade	1965	1,046,298	8,663,594	-	-	0.00%	
20	FLAMINGO-LUMMUS C PHASE 1	1,445,300	Upgrade	1965	174,548	1,445,300	-	-	0.00%	
21	NORMANDY ISLES A PHASE 1	16,851,612	Upgrade	1965	2,035,161	16,851,612	-	-	0.00%	
22	NORMANDY ISLES A PHASE 2	1,685,161	Upgrade	1965	203,516	1,685,161	-	-	0.00%	
23	NORTH SHORE D - TOWN CENTER PHASE 1	3,444,894	Upgrade	1965	416,038	3,444,894	-	-	0.00%	
24	NORTH SHORE D - TOWN CENTER PHASE 2	5,968,718	Upgrade	1965	720,839	5,968,718	-	-	0.00%	
25	WEST AVENUE PH III	4,747,400	Upgrade	1965	573,341	4,747,400	-	-	0.00%	
26	17TH STREET IMPROVEMENTS PHASE I	5,729,969	Upgrade	1965	692,006	5,729,969	-	-	0.00%	
27	CONVENTION CNTR LINCN RD CONNECTOR	2,711,673	Upgrade	1965	327,487	2,711,673	-	-	0.00%	
28	FDOT ALTON ROAD UTILITIES RELOCATION	12,835,811	Upgrade	1965	1,550,174	12,835,811	-	-	0.00%	
29	PUBLIC WORKS OPERATIONS FACILITY	892,323	Upgrade	1965	107,765	892,323	-	-	0.00%	
30	Total Wastewater Transmission Projects	\$ 266,519,428			\$ 32,187,417	\$ 266,519,428	\$ -	\$ -	0.00%	
31	TOTAL WASTEWATER PROJECTS	\$ 266,519,428			\$ 32,187,417	\$ 266,519,428	\$ -	\$ -	0.00%	
32	TOTAL SYSTEM PROJECTS	\$ 473,022,001			\$ 57,126,629	\$ 473,022,001	\$ -	\$ -	0.00%	

Table 2-3

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Summary of Water and Sewer Capital Improvement Program Recognized in System Impact Fees – Fiscal Years 2024 Through 2034

Footnotes:

- [1] Amounts shown are derived from Table 2-2 and do not include any capital expenditures classified as distribution-related or collection-related.
- [2] Estimated original in-service date based on discussions with City staff.
- [3] Amount shown was determined by discounting the projected (replacement) cost by an inflationary factor as measured by the Engineering News-Record (ENR) Construction Cost Index applied to the estimated number of years in service.
- [4] For replacement projects only, amount derived by subtracting the estimated original cost from the new project cost (net asset addition).

Note: With respect to capital projects associated with plant upgrades, the following were assumed:

New = Project designated for capacity expansion only.

Upgrade = Project designated to improve existing capacity facilities.

Replacement = Project which removes original asset from service but necessary for providing service to City customers.

Relocate = Project which removes original asset from service, and usually replaces it with an asset designated for capacity expansion.

Redundancy = Project which provides redundancy to existing capacity and not an increase in capacity to serve new growth.

Reliability = Project which provides additional reliability to existing capacity and not an increase in capacity to serve new growth.

Future = Reflects project which extends beyond the planning horizon (e.g., beyond Fiscal Year 2034) in this report.

System = Project that benefits existing, expansion and future customers.

Direct = Reflects projects which directly relate to specific customer base and not System cost.

Table 2-4

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Development of Water System Impact Fee

Line No.	Description	Amount
	Major Transmission System: [1]	
1	Existing Facilities [2]	\$ 75,437,017
2	Additional Costs Capitalized to Plant in Service [3]	206,502,573
3	Less Anticipated Retirements [4]	(24,939,212)
4	Less Grant Funds and Other Contributions [4]	(521,724)
5	Major Transmission Facility Costs	\$ 256,478,654
6	Estimated Capacity-Total Service Area (MGD) (Average Daily Flow) [5]	33.000
7	ERC Factor - GPD [6]	210
8	Estimated ERCs served by Transmission Facilities [5]	157,143
9	Base Rate per ERC of Major Transmission Facilities	\$ 1,632.14
10	Capital Financing Recovery - Transmission Component	0.00
11	Rate per ERC of Major Transmission Facilities	\$ 1,632.14
12	Rate Adjustment	-
13	Total Rate per ERC After Rate Adjustment	1,632.14
14	Rounded Rate per ERC	\$ 1,630.00
15	Cost Per Gallon	\$ 7.762

MGD = Million-Gallons-Per-Day

ERC = Equivalent Residential Connection

GPD = Gallons Per Day

Footnotes are on following page.

Table 2-4

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Development of Water System Impact Fee

Footnotes:

- [1] Amounts do not include the estimated costs of retail on-site capital expenditures such as meters, hydrants, services, and on-site (local) distribution utility plant facilities or general plant assets (vehicles, equipment, etc.) or general transmission lines; such costs are: i) generally provided by the developer or owners of property which specifically benefit from such facilities; or ii) funded by a separate and distinct fee (e.g., meter installation charge).
- [2] Amount derived from Table 2-1, Line 849; reflects cost of water transmission and storage utility plant in service.
- [3] Amount derived from Table 2-3, Line 12; reflects net recognized additions to the water transmission facilities where applicable.
- [4] Amount derived from Table 2-3, Line 12 and reflects estimated transmission fixed asset retirements due to imposition of the capital improvement plan of the City's utility system.
- [5] Reflects total estimated system capacity for the forecast period for the water service area based on capacity planning estimates. Amount calculated as follows:

	Amount
Existing Capacity (MGD-ADF)	33,000
Assumed ERC Factor (Gallons Per Day Per ERC)	210
Total Estimated ERCs Available to be Served	157,143

- [6] The level of service factor for a water ERC reflects capacity requirements expressed on an average daily flow basis; the assumed factor of 210 gallons per day per ERC is based on review of historical flow data and current Miami-Dade County level of service standards.

Table 2-5

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Development of Sewer System Impact Fee

Line No.	Description	Amount
	Major Transmission System: [1]	
1	Existing Facilities [2]	\$ 88,812,584
2	Additional Costs Capitalized to Plant in Service [3]	266,519,428
3	Less Anticipated Retirements [4]	(32,187,417)
4	Less Receipt of Grant Funds and Other Contributions [4]	(1,967,028)
5	Total Major Transmission Facility Costs	\$ 321,177,567
6	Estimated Capacity-Total Service Area (MGD) (Average Daily Flow) [5]	33.173
7	ERC Factor - GPD [6]	210
8	Estimated ERCs served by Transmission Facilities [5]	157,968
9	Base Rate per ERC of Major Transmission Facilities	\$ 2,033.18
10	Capital Financing Recovery - Transmission Component	0.00
11	Rate per ERC of Major Transmission Facilities	\$ 2,033.18
12	Rate Adjustment	-
13	Rate per ERC of Major Transmission Facilities After Rate Adjustment	2,033.18
14	Rounded Rate per ERC	\$ 2,030.00
15	Cost Per Gallon	\$ 9.667

MGD = Million-Gallons-Per-Day

ERC = Equivalent Residential Connection

GPD = Gallons Per Day

Footnotes are on following page.

Table 2-5

**City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study**

Development of Sewer System Impact Fee

Footnotes:

- [1] Amounts do not include the estimated costs of retail on-site capital expenditures such as manholes, local lift stations, service laterals, and on-site (local) collection utility plant facilities or general plant assets (vehicles, equipment, etc.) or general transmission lines; such costs are i) generally provided by the developer or owners of property which specifically benefit from such facilities; or ii) funded by a separate and distinct fee (e.g., sewer tap charge).
- [2] Amount derived from Table 2-1, Line 849; reflects cost of sewer transmission and master pumping station utility plant in service.
- [3] Amount shown derived from Table 2-3, Line 30; reflects net recognized additions to the sewer transmission facilities where applicable.
- [4] Amount derived from Table 2-3, Line 30 and reflects estimated transmission fixed asset retirements due to imposition of the capital improvement plan of the City's utility system.
- [5] Reflects total estimated capacity for the forecast period for the sewer service area based on capacity planning estimates. Amount calculated as follows:

	Amount
Existing Capacity (MGD-ADF)	33.173
Capacity to Be Added During Forecast Period: 2022- 2026 (MGD-ADF)	-
Total Projected Capacity Needs	33.173
Assumed ERC Factor (gallons per day per ERC)	210
Total Estimated ERCs Available to be Served	157,968

- [6] The level of service factor for a sewer ERC reflects capacity requirements expressed on an average daily flow basis; the assumed factor of 210 gallons per day per ERC is based on review of historical flow data and current Miami-Dade County standards.

Table 2-6
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

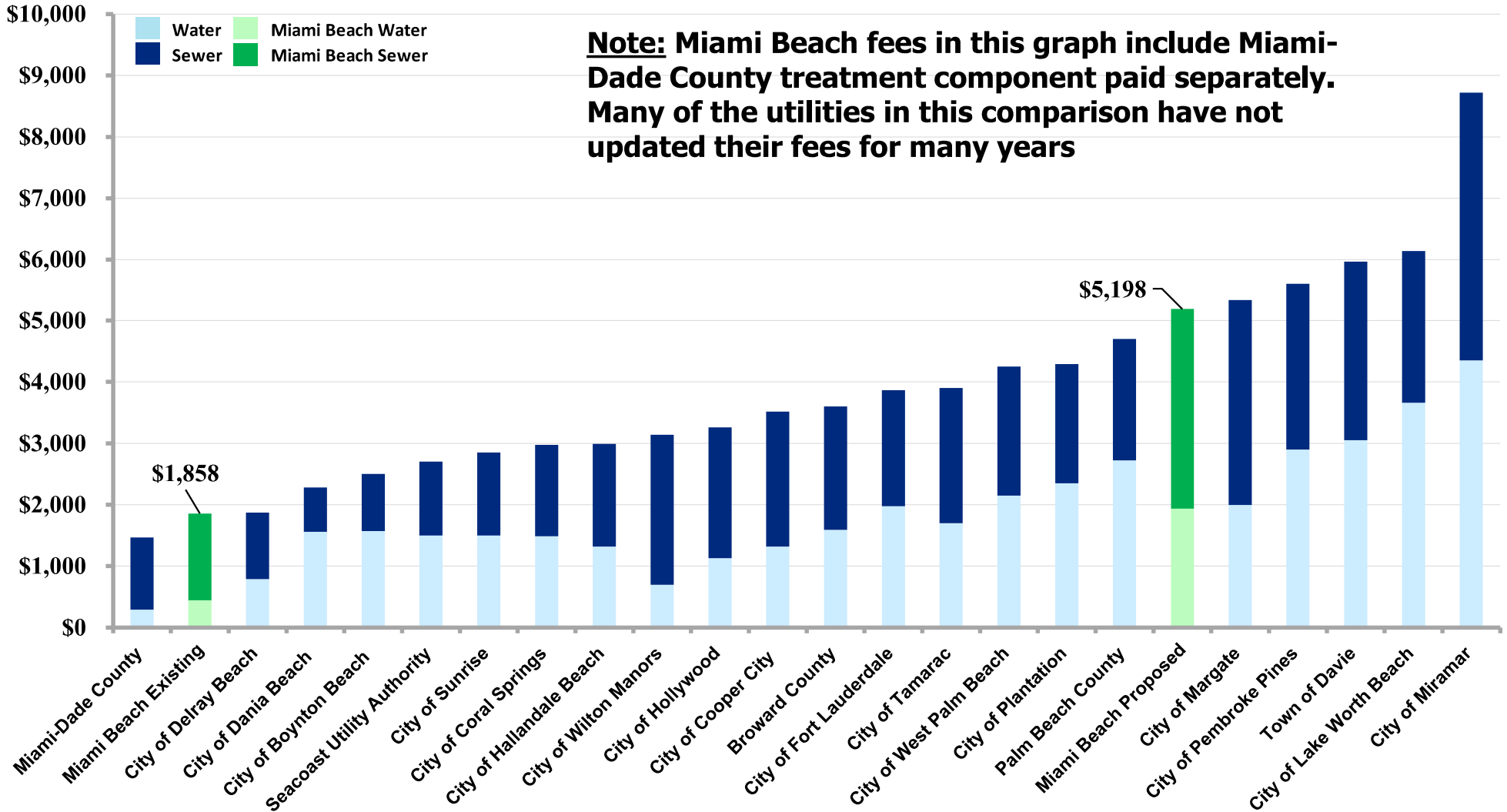
Comparison of Impact Fees Per
Equivalent Residential Connection (ERC) for Water and Sewer Service

Line No.	Description	Impact Fee Per ERC [1]		
		Water	Wastewater	Combined
City of Miami Beach, Florida				
1	Existing Impact Fees Per ERC [2]	\$ 447	\$ 1,411	\$ 1,858
2	Proposed Impact Fees Per ERC [2]	1,936	3,262	5,198
Other Florida Utilities				
3	City of Boynton Beach	\$ 1,571	\$ 931	\$ 2,502
4	Broward County	1,590	2,010	3,600
5	City of Cooper City	1,316	2,201	3,517
6	City of Coral Springs	1,487	1,487	2,974
7	City of Dania Beach	1,557	725	2,282
8	Town of Davie	3,050	2,920	5,970
9	City of Delray Beach	788	1,084	1,872
10	City of Fort Lauderdale	1,977	1,888	3,865
11	City of Hallandale Beach	1,318	1,672	2,990
12	City of Hollywood	1,130	2,130	3,260
13	City of Lake Worth Beach	3,659	2,483	6,142
14	City of Margate	1,995	3,350	5,345
15	Miami-Dade County	292	1,176	1,468
16	City of Miramar	4,350	4,370	8,720
17	Palm Beach County	2,720	1,980	4,700
18	City of Pembroke Pines	2,900	2,709	5,609
19	City of Plantation	2,349	1,942	4,291
20	Seacoast Utility Authority	1,500	1,200	2,700
21	City of Sunrise	1,500	1,350	2,850
22	City of Tamarac	1,700	2,200	3,900
23	City of West Palm Beach	2,150	2,100	4,250
24	City of Wilton Manors	696	2,441	3,137
25	Other Florida Utilities' Average	\$ 1,891	\$ 2,016	\$ 3,907
26	Minimum	292	725	1,468
27	Maximum	4,350	4,370	8,720

Footnotes:

- [1] Amounts reflect fees for a typical single family residential unit (i.e., one ERC) and are effective in January 2025.
[2] Includes current Miami-Dade County impact fees for treatment capacity.

Figure 2-1
City of Miami Beach, Florida
Comparison of Impact Fees
Per ERC for Water and Sewer Service



SECTION 3:
Stormwater System
Financial Forecast and User Rate Design

SECTION 3:

STORMWATER SYSTEM FINANCIAL FORECAST AND USER RATE DESIGN

3-1: Stormwater System Customer Statistics

During the Fiscal Year 2023, it is estimated that the City's utility service requirements included providing stormwater service to an average of 9,834 accounts and 108,245 equivalent residential units. Based on discussions with the City staff, since the stormwater system is essentially built out, no customer growth was assumed for the stormwater system during the Forecast Period. The customer statistics are summarized in Table 3-1 at the end of this section.

3-2: Revenues Under Existing Monthly Stormwater Rates

The forecast of revenues from existing stormwater rates was based on i) the projection of accounts and equivalent residential units as shown in Table 3-1; and ii) the existing rates for monthly stormwater service as currently adopted by the City. For Fiscal Year 2025, the annual stormwater revenue under existing rates is projected to be about \$40 million.

3-3: Stormwater System 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 public utilities such as the City's Systems. The sum of these costs, after adjusting for other operating and non-operating revenues available to the utility (e.g., interest income), 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
=	<u>Net Revenue Requirements (Funded from User Rates)</u>

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 stormwater rate analysis covered projections through the Fiscal Year ending September 30, 2034 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 3-2. 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 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 for the City's stormwater system have been based on the schedule of rates and charges currently in effect. Such rates were applied to the customer forecast discussed previously.
2. The adopted Fiscal Year 2025 Operating and Capital Budgets 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. The operation and maintenance expenses for the stormwater system identified for the Fiscal Year 2025 were projected for the remaining years of the Forecast Period (through Fiscal Year 2034). These projections are displayed on Table 3-3. Major cost escalation factors assumed were based on discussions with City staff and include:

• General Inflation:	3.0% per year
• Salaries and Wages:	5.0% per year
• Health Insurance:	10.0% per year
• Repair and Maintenance Expenses:	4.0% per year
• Property / General Insurance:	4.0% per year
• Electricity Commodity Cost:	4.0% per year
• Chemicals Commodity Cost:	4.0% per year
• Gas / Fuel Commodity Cost:	5.0% per year

It has been assumed that there will be some price stabilization during the Forecast Period. To the extent that cost inflation is higher than what is projected, the rate and financial plan will need to be adjusted.

4. Based on discussions with City staff, 12 additional personnel above Fiscal Year 2025 budget levels have been recognized for purposes of developing the financial forecast. These additional personnel were assumed to be hired in Fiscal Year 2026 and include one Stormwater Supervisor, one Field Inspector I, two Stormwater Operators, four Pump Shop Mechanics, two Infrastructure Support Operators, and two Electricians.
5. In the projection of the estimated expenditure requirements, a contingency allowance has been included for Fiscal Years 2025 through 2034. This annual allowance of about \$500,000 has been included as an operating expense to have additional funds to meet unknown or unplanned expenses throughout the fiscal year and to recognize potential changes in revenues. 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. For the purposes of this analysis, 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.

7. The stormwater system's outstanding and assumed debt is summarized in Table 3-4 at the end of this section. It was assumed that the City would issue three additional 30-year senior lien bond issues with level debt service during the Forecast Period for stormwater projects. The City will most likely adopt "intent to issue" resolutions in advance of the bond issues to enable the City to incur expenses associated with the projects that will later be reimbursed from bond proceeds. The assumptions for all the additional bond issues are:

Stormwater Revenue Bonds, Series 2028

Fiscal Year of issuance:	2028
Project costs financed:	\$83,403,596
Principal amount of bonds:	\$84,250,000
Bond term:	30 years
Interest rate:	5.0%
Issuance costs as a percentage of principal:	1.0%
Annual payment:	\$5,480,583

Stormwater Revenue Bonds, Series 2030

Fiscal Year of issuance:	2030
Project costs financed:	\$51,045,094
Principal amount of bonds:	\$51,565,000
Bond term:	30 years
Interest rate:	5.0%
Issuance costs as a percentage of principal:	1.0%
Annual payment:	\$3,354,377

Stormwater Revenue Bonds, Series 2032

Fiscal Year of issuance:	2032
Project costs financed:	\$28,024,740
Principal amount of bonds:	\$28,310,000
Bond term:	30 years
Interest rate:	5.0%
Issuance costs as a percentage of principal:	1.0%
Annual payment:	\$1,841,606

8. The projected capital expenditures through the Fiscal Year ending September 30, 2034 for the stormwater system were based on discussions with the City staff. Table 3-5 at the end of this section provides a detailed listing of the capital projects for the stormwater system as well as projected funding sources for such projects within the analysis period.
9. Interest income has been recognized as an available revenue source to fund the expenditure needs of the water and sewer system. The assumed interest earnings during the Forecast Period were based on discussions with the City staff. Table 3-6 at the end of this section contains the projection of fund balances and interest income.

3-4: Stormwater System Debt Service Coverage and Rate Covenants

A key financial aspect of the stormwater system is ensuring compliance with the rate covenants outlined in the Bond Resolution. Among other things, the Bond Resolution contains certain covenants which must be satisfied, the purpose of which is to provide a surety to the bondholders that the debt payments will be made during the term of such bonds. Generally, these covenants are in the form of i) certain debt service coverage ratios which are applicable to the level of rates charged and the revenue margins achieved; ii) application of funds; and iii) certain requirements associated with the provision of service.

The stormwater system's Bond Resolution contains a covenant under which the City will establish rates such that:

"Net Revenues...will be sufficient to provide an amount in each Fiscal Year at least equal to one hundred ten per centum (110%) of the Principal and Interest Requirements for such Fiscal Year on all Bonds for such Fiscal Year..."

Net Revenues do not include administration fees. For the purposes of this rate study, the primary focus is the overall or "all-in" (senior and subordinate issues added together) debt coverage ratio. As discussed in the executive summary section of this report, a 200% all-in coverage target was recognized.

Table 3-7 at the end of this section summarizes the ability of the stormwater net revenues to meet the target and required debt service coverage.

3-5: Projected Stormwater System Sources and Uses of Funds

To provide additional information to the City, a summary of the projected sources and uses of funds for each of the stormwater system's major funds is shown in Table 3-8 at the end of this section. The projected sources equal the projected uses.

3-6: Proposed Monthly Stormwater Rate Design

The proposed stormwater rates are shown in the executive summary of this report and represent uniform or across-the-board adjustments.

3-7: Stormwater Bill Comparisons – Neighboring Utilities

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 with charges for similar service by other southeast Florida utilities has been prepared. It should be noted that a bill comparison is not a "report card" on how well a utility is performing, as there are several factors that have an effect on the level of rates charged. These factors may include, but are not limited to, the following:

1. Services provided through the stormwater fees differ by utility system (e.g., not all stormwater utilities provide street sweeping).
2. Amount of lake and canal area to be maintained.
3. Size and demographics of the existing customer base and available system growth.
4. Level of capital improvement need to meet service area growth.
5. Amount of renewals and replacements of assets and the remaining service life of assets.
6. Differences in rate covenants associated with debt.
7. External assistance in funding infrastructure (e.g., grants).
8. Amount of subsidization from other funds (e.g., General Fund).
9. Amount of General Fund and administrative fee transfers.
10. Time of last rate review.

For the local governments included in the rate comparison on Table 3-9, no analysis has been made of the above-mentioned factors as they relate to the reported stormwater rates currently being charged by the other entities surveyed for the purposes of this analysis. However, the proposed stormwater rates of the City produce bills that are comparable with those of neighboring utilities.

Figure 3-1 at the end of this section shows a graphical comparison of how bills under the proposed Fiscal Year 2025 stormwater rates compare with those of other southeast Florida local governments. It is important to note that almost all of the surveyed entities are currently evaluating the sufficiency of their stormwater rates or have already scheduled future rate adjustments.

Table 3-1

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Historical and Projected Stormwater Customer Statistics

Line No.	Description	Historical 2023	2024	2025	2026	2027	Fiscal Year Ending September 30, 2028202920302031203220332034						
Residential													
1	Account Growth	12	0	0	0	0	0	0	0	0	0	0	0
2	Average Monthly Accounts	5,618	5,618	5,618	5,618	5,618	5,618	5,618	5,618	5,618	5,618	5,618	5,618
3	Average Equivalent Residential Units	6,636	6,636	6,636	6,636	6,636	6,636	6,636	6,636	6,636	6,636	6,636	6,636
4	Equivalent Residential Units Per Account	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Condominiums													
5	Account Growth	1	0	0	0	0	0	0	0	0	0	0	0
6	Average Monthly Accounts	965	965	965	965	965	965	965	965	965	965	965	965
7	Average Equivalent Residential Units	41,635	41,635	41,635	41,635	41,635	41,635	41,635	41,635	41,635	41,635	41,635	41,635
8	Equivalent Residential Units Per Account	43.15	43.15	43.15	43.15	43.15	43.15	43.15	43.15	43.15	43.15	43.15	43.15
Apartment													
9	Account Growth	3	0	0	0	0	0	0	0	0	0	0	0
10	Average Monthly Accounts	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196
11	Average Equivalent Residential Units	14,600	14,600	14,600	14,600	14,600	14,600	14,600	14,600	14,600	14,600	14,600	14,600
12	Equivalent Residential Units Per Account	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21
Duplex													
13	Account Growth	1	0	0	0	0	0	0	0	0	0	0	0
14	Average Monthly Accounts	42	42	42	42	42	42	42	42	42	42	42	42
15	Average Equivalent Residential Units	87	87	87	87	87	87	87	87	87	87	87	87
16	Equivalent Residential Units Per Account	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Commercial													
17	Account Growth	(12)	0	0	0	0	0	0	0	0	0	0	0
18	Average Monthly Accounts	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775
19	Average Equivalent Residential Units	28,870	28,870	28,870	28,870	28,870	28,870	28,870	28,870	28,870	28,870	28,870	28,870
20	Equivalent Residential Units Per Account	16.26	16.26	16.26	16.26	16.26	16.26	16.26	16.26	16.26	16.26	16.26	16.26
Hotel													
21	Account Growth	1	0	0	0	0	0	0	0	0	0	0	0
22	Average Monthly Accounts	194	194	194	194	194	194	194	194	194	194	194	194
23	Average Equivalent Residential Units	7,083	7,083	7,083	7,083	7,083	7,083	7,083	7,083	7,083	7,083	7,083	7,083
24	Equivalent Residential Units Per Account	36.54	36.54	36.54	36.54	36.54	36.54	36.54	36.54	36.54	36.54	36.54	36.54

Table 3-1

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Historical and Projected Stormwater Customer Statistics

Line No.	Description	Historical 2023	2024	2025	2026	2027	Fiscal Year Ending September 30,						
							2028	2029	2030	2031	2032	2033	2034
Entertainment Complex													
25	Account Growth	0	0	0	0	0	0	0	0	0	0	0	0
26	Average Monthly Accounts	2	2	2	2	2	2	2	2	2	2	2	2
27	Average Equivalent Residential Units	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894
28	Equivalent Residential Units Per Account	947.00	947.00	947.00	947.00	947.00	947.00	947.00	947.00	947.00	947.00	947.00	947.00
Religious													
29	Account Growth	(0)	0	0	0	0	0	0	0	0	0	0	0
30	Average Monthly Accounts	5	5	5	5	5	5	5	5	5	5	5	5
31	Average Equivalent Residential Units	118	118	118	118	118	118	118	118	118	118	118	118
32	Equivalent Residential Units Per Account	23.68	23.68	23.68	23.68	23.68	23.68	23.68	23.68	23.68	23.68	23.68	23.68
City													
33	Account Growth	0	0	0	0	0	0	0	0	0	0	0	0
34	Average Monthly Accounts	38	38	38	38	38	38	38	38	38	38	38	38
35	Average Equivalent Residential Units	7,322	7,322	7,322	7,322	7,322	7,322	7,322	7,322	7,322	7,322	7,322	7,322
36	Equivalent Residential Units Per Account	192.68	192.68	192.68	192.68	192.68	192.68	192.68	192.68	192.68	192.68	192.68	192.68
<u>Summary:</u>													
37	Account Growth	6	0	0	0	0	0	0	0	0	0	0	0
38	ERU Growth	1,272	0	0	0	0	0	0	0	0	0	0	0
39	Total Accounts	9,834	9,834	9,834	9,834	9,834	9,834	9,834	9,834	9,834	9,834	9,834	9,834
40	Total Equivalent Residential Units	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>	<u>108,245</u>

Table 3-2

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Development of Net Revenue Requirements from Rates and Projected Revenue Adjustments – Stormwater System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Operating Expenses											
1	Personnel Services	\$ 3,801,000	\$ 4,346,000	\$ 5,086,058	\$ 5,890,533	\$ 6,215,914	\$ 6,560,650	\$ 6,926,017	\$ 7,313,386	\$ 7,724,230	\$ 8,160,134	\$ 8,622,803
2	Operating Expenses	7,248,000	8,215,000	8,561,093	8,905,008	9,262,068	9,632,847	9,994,603	10,371,636	10,764,607	11,174,208	11,588,572
3	Internal Charges	632,000	814,000	854,700	897,435	942,307	989,422	1,038,893	1,090,838	1,145,380	1,202,649	1,262,781
4	Total Operating Expenses	\$ 11,681,000	\$ 13,375,000	\$ 14,501,851	\$ 15,692,975	\$ 16,420,289	\$ 17,182,920	\$ 17,959,514	\$ 18,775,860	\$ 19,634,217	\$ 20,536,991	\$ 21,474,156
	Debt Service											
5	Stormwater Revenue Bonds, Series 2015	\$ 4,384,669	\$ 4,384,169	\$ 4,388,369	\$ 4,382,119	\$ 4,385,244	\$ 4,382,406	\$ 4,383,738	\$ 7,869,038	\$ 7,871,838	\$ 7,869,738	\$ 7,872,488
6	Stormwater Revenue Bonds, Series 2017	12,350,500	12,349,500	12,345,000	12,351,500	12,347,750	12,353,500	12,352,500	8,866,900	8,864,100	8,864,900	8,863,900
7	State Revolving Fund Loan Agreement SW131300	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159
8	Assumed Stormwater Revenue Bonds, Series 2028	-	-	-	-	2,740,292	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583
9	Assumed Stormwater Revenue Bonds, Series 2030	-	-	-	-	-	-	1,677,189	3,354,377	3,354,377	3,354,377	3,354,377
10	Assumed Stormwater Revenue Bonds, Series 2032	-	-	-	-	-	-	-	920,803	1,841,606	1,841,606	1,841,606
11	Total Debt Service	\$ 17,180,328	\$ 17,178,828	\$ 17,178,528	\$ 17,178,778	\$ 19,918,445	\$ 22,661,649	\$ 24,339,169	\$ 26,016,057	\$ 26,936,860	\$ 27,856,363	\$ 27,858,113
	Other Revenue Requirements											
13	Capital Funded from Rates	\$ 25,494,813	\$ (635,969)	\$ 18,851,079	\$ 59,585,510	\$ 26,099,902	\$ 3,312,000	\$ 12,628,729	\$ 66,020,142	\$ 21,131,850	\$ 24,988,444	\$ 33,296,379
14	Transfers Out	778,000	738,000	774,900	813,645	854,327	897,044	941,896	988,991	1,038,440	1,090,362	1,144,880
15	Total Other Revenue Requirements	\$ 26,272,813	\$ 102,031	\$ 19,625,979	\$ 60,399,155	\$ 26,954,229	\$ 4,209,044	\$ 13,570,625	\$ 67,009,133	\$ 22,170,290	\$ 26,078,806	\$ 34,441,259
16	Gross Revenue Requirements	\$ 55,134,141	\$ 30,655,859	\$ 51,306,358	\$ 93,270,908	\$ 63,292,963	\$ 44,053,612	\$ 55,869,307	\$ 111,801,050	\$ 68,741,367	\$ 74,472,161	\$ 83,773,528
	Less Income and Funds from Other Sources											
17	Other Operating Revenue	\$ 545,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Unrestricted Interest Income	2,315,000	1,870,000	400,000	400,000	400,000	400,000	400,000	468,220	400,000	400,000	400,000
19	Net Revenue Requirements	\$ 52,274,141	\$ 28,785,859	\$ 50,906,358	\$ 92,870,908	\$ 62,892,963	\$ 43,653,612	\$ 55,469,307	\$ 111,332,830	\$ 68,341,367	\$ 74,072,161	\$ 83,373,528
	Revenue from Existing Rates											
20	Stormwater System Rate Revenue	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000	\$ 37,882,000
21	Prior Year Rate Adjustment	-	-	2,161,800	11,135,900	17,420,200	23,704,500	29,988,900	32,502,600	34,614,100	36,789,000	39,029,200
22	Total Applicable Rate Revenue	\$ 37,882,000	\$ 37,882,000	\$ 40,043,800	\$ 49,017,900	\$ 55,302,200	\$ 61,586,500	\$ 67,870,900	\$ 70,384,600	\$ 72,496,100	\$ 74,671,000	\$ 76,911,200
23	Rate Adjustments	0.00%	5.71%	22.41%	12.82%	11.36%	10.20%	3.70%	3.00%	3.00%	3.00%	3.00%
24	Effective Months	12	12	12	12	12	12	12	12	12	12	12
25	Percent of Current Year Effective	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
26	Revenue from Current Rate Adjustment	\$ -	\$ 2,161,800	\$ 8,974,000	\$ 6,284,300	\$ 6,284,300	\$ 6,284,300	\$ 2,513,700	\$ 2,111,500	\$ 2,174,900	\$ 2,240,100	\$ 2,307,300
27	Total Rate Revenue	\$ 37,882,000	\$ 40,043,800	\$ 49,017,800	\$ 55,302,200	\$ 61,586,500	\$ 67,870,800	\$ 70,384,600	\$ 72,496,100	\$ 74,671,000	\$ 76,911,100	\$ 79,218,500
28	Revenue Surplus/(Deficiency) Under Proposed Rates	\$ (14,392,141)	\$ 11,257,941	\$ (1,888,558)	\$ (37,568,708)	\$ (1,306,463)	\$ 24,217,188	\$ 14,915,293	\$ (38,836,730)	\$ 6,329,633	\$ 2,838,939	\$ (4,155,028)

Table 3-3

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Operating Expenses - Stormwater System

Line No.	Expense Code	Description	Escalation Reference	Fiscal Year Ending September 30,										
				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Personnel Services														
1	111	Salaries and Wages	Labor	\$ 2,086,000	\$ 2,588,000	\$ 2,717,400	\$ 2,853,270	\$ 2,995,934	\$ 3,145,730	\$ 3,303,017	\$ 3,468,168	\$ 3,641,576	\$ 3,823,655	\$ 4,014,837
2	132	Shift Differential	Labor	3,000	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
3	133	Steeplejack	Labor	7,000	3,000	3,150	3,308	3,473	3,647	3,829	4,020	4,221	4,432	4,654
4	135	Overtime	Labor	319,000	167,000	175,350	184,118	193,323	202,990	213,139	223,796	234,986	246,735	259,072
5	136	Holiday Pay - Overtime	Labor	14,000	12,000	12,600	13,230	13,892	14,586	15,315	16,081	16,885	17,729	18,616
6	139	Work Above Classification	Labor	1,000	1,000	1,050	1,103	1,158	1,216	1,276	1,340	1,407	1,477	1,551
7	153	Allowances	Labor	126,000	97,000	101,850	106,943	112,290	117,904	123,799	129,989	136,489	143,313	150,479
8	161	Retirement Contributions - Pension	Labor	566,000	649,000	681,450	715,523	751,299	788,864	828,307	869,722	913,208	958,869	1,006,812
9	162	Health and Life Insurance	HealthIns	326,000	467,000	513,700	565,070	621,577	683,735	752,108	827,319	910,051	1,001,056	1,101,162
10	163	Workmen's Compensation	Labor	1,000	1,000	1,050	1,103	1,158	1,216	1,276	1,340	1,407	1,477	1,551
11	165	Social Security and Medicare	HealthIns	38,000	43,000	47,300	52,030	57,233	62,956	69,252	76,177	83,795	92,174	101,392
12	167	OPEB Contributions	Labor	62,000	37,000	38,850	40,793	42,832	44,974	47,222	49,584	52,063	54,666	57,399
13	168	OPEB PayGo	Labor	252,000	279,000	292,950	307,598	322,977	339,126	356,083	373,887	392,581	412,210	432,821
14	AddPers	Additional Personnel	Calculated	-	-	497,258	1,044,243	1,096,455	1,151,277	1,208,841	1,269,283	1,332,748	1,399,385	1,469,354
15	Total Personnel Services			\$ 3,801,000	\$ 4,346,000	\$ 5,086,058	\$ 5,890,533	\$ 6,215,914	\$ 6,560,650	\$ 6,926,017	\$ 7,313,386	\$ 7,724,230	\$ 8,160,134	\$ 8,622,803
Operating Expenses														
16	312	Professional Services	Labor	\$ 741,000	\$ 455,000	\$ 477,750	\$ 501,638	\$ 526,719	\$ 553,055	\$ 580,708	\$ 609,744	\$ 640,231	\$ 672,242	\$ 705,854
17	313	Bank Fees	StormRevenue	212,000	220,000	269,303	303,829	338,355	372,881	384,067	395,589	407,457	419,681	419,681
18	314	Electricity	ElectricStorm	427,000	450,000	468,000	486,720	506,189	526,436	547,494	569,394	592,169	615,856	640,490
19	316	Telephone	Inflation	27,000	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,896	38,003	39,143
20	320	Revenue Consulting Fee	Constant	-	304,000	304,000	304,000	304,000	304,000	304,000	304,000	304,000	304,000	304,000
21	321	Postage and Shipping	Inflation	10,000	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
22	322	Administration Fees	Labor	1,918,000	1,759,000	1,846,950	1,939,298	2,036,262	2,138,075	2,244,979	2,357,228	2,475,090	2,598,844	2,728,786
23	323	Rent - Building and Equipment	Inflation	450,000	938,000	966,140	995,124	1,024,978	1,055,727	1,087,399	1,120,021	1,153,622	1,188,230	1,223,877
24	324	Printing - External	Inflation	4,000	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067	5,219
25	325	Contract Maintenance	Repair	2,285,000	2,867,000	2,981,680	3,100,947	3,224,985	3,353,984	3,488,144	3,627,670	3,772,776	3,923,687	4,080,635
26	326	Supplies - Other	Inflation	39,000	-	-	-	-	-	-	-	-	-	-
27	331	Supplies - Information Technology	Inflation	3,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
28	341	Supplies - Office	Inflation	2,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
29	342	Contracted Services - Repair and Maintenance	Repair	459,000	354,000	368,160	382,886	398,202	414,130	430,695	447,923	465,840	484,473	503,852
30	343	Other Operating Expenditures	Inflation	500,000	251,000	258,530	266,286	274,274	282,503	290,978	299,707	308,698	317,959	327,498
31	349	Other Contractual Services	Repair	3,000	3,000	3,120	3,245	3,375	3,510	3,650	3,796	3,948	4,106	4,270
32	351	Engine Fuel and Lubricants	Fuel	43,000	11,000	11,550	12,128	12,734	13,371	14,039	14,741	15,478	16,252	17,065
33	356	Contingencies	Constant	-	506,000	506,000	506,000	506,000	506,000	506,000	506,000	506,000	506,000	506,000
34	357	Employee Fringe Benefits	Labor	75,000	-	-	-	-	-	-	-	-	-	-
35	361	Dues and Memberships	Inflation	2,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
36	363	Travel	Inflation	5,000	-	-	-	-	-	-	-	-	-	-
37	367	Training and Awards	Inflation	28,000	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,896	38,003	39,143
38	402	Uniform Expense	Inflation	15,000	16,000	16,480	16,974	17,484	18,008	18,548	19,105	19,678	20,268	20,876
39	Total Operating Expenses			\$ 7,248,000	\$ 8,215,000	\$ 8,561,093	\$ 8,905,008	\$ 9,262,068	\$ 9,632,847	\$ 9,994,603	\$ 10,371,636	\$ 10,764,607	\$ 11,174,208	\$ 11,588,572

Table 3-3

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Operating Expenses - Stormwater System

Line No.	Expense Code	Description	Escalation Reference	Fiscal Year Ending September 30,										
				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
		Internal Charges												
40	502	Internal Services - Property Management	Labor	\$ 6,000	\$ 5,000	\$ 5,250	\$ 5,513	\$ 5,788	\$ 6,078	\$ 6,381	\$ 6,700	\$ 7,036	\$ 7,387	\$ 7,757
41	503	Internal Services - Fleet Management	Labor	142,000	247,000	259,350	272,318	285,933	300,230	315,242	331,004	347,554	364,931	383,178
42	505	Internal Services - Self-Insurance	Labor	369,000	385,000	404,250	424,463	445,686	467,970	491,368	515,937	541,734	568,820	597,261
43	506	Internal Services - Applications / Computer Hardware	Labor	70,000	126,000	132,300	138,915	145,861	153,154	160,811	168,852	177,295	186,159	195,467
44	511	OIG Funding	Labor	45,000	51,000	53,550	56,228	59,039	61,991	65,090	68,345	71,762	75,350	79,118
45		Total Internal Charges		\$ 632,000	\$ 814,000	\$ 854,700	\$ 897,435	\$ 942,307	\$ 989,422	\$ 1,038,893	\$ 1,090,838	\$ 1,145,380	\$ 1,202,649	\$ 1,262,781
46		TOTAL STORMWATER SYSTEM OPERATING EXPENSES		<u>\$ 11,681,000</u>	<u>\$ 13,375,000</u>	<u>\$ 14,501,851</u>	<u>\$ 15,692,975</u>	<u>\$ 16,420,289</u>	<u>\$ 17,182,920</u>	<u>\$ 17,959,514</u>	<u>\$ 18,775,860</u>	<u>\$ 19,634,217</u>	<u>\$ 20,536,991</u>	<u>\$ 21,474,156</u>

Table 3-4

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Stormwater Debt Service By Fiscal Year

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
EXISTING DEBT SERVICE												
<u>Existing Senior Lien Debt</u>												
Stormwater Revenue Bonds, Series 2015												
1	Amount Funded	\$ 99,590,000										
2	Start Balance	\$ 96,605,000	\$ 96,255,000	\$ 95,895,000	\$ 95,520,000	\$ 95,140,000	\$ 94,745,000	\$ 94,340,000	\$ 93,920,000	\$ 90,000,000	\$ 85,940,000	\$ 81,740,000
3	Plus: Interest	4,034,669	4,024,169	4,013,369	4,002,119	3,990,244	3,977,406	3,963,738	3,949,038	3,811,838	3,669,738	3,517,488
4	Less: Payments	4,384,669	4,384,169	4,388,369	4,382,119	4,385,244	4,382,406	4,383,738	7,869,038	7,871,838	7,869,738	7,872,488
5	Balance End of Year	\$ 96,255,000	\$ 95,895,000	\$ 95,520,000	\$ 95,140,000	\$ 94,745,000	\$ 94,340,000	\$ 93,920,000	\$ 90,000,000	\$ 85,940,000	\$ 81,740,000	\$ 77,385,000
Stormwater Revenue Bonds, Series 2017												
6	Amount Funded	\$ 156,550,000										
7	Start Balance	\$ 144,470,000	\$ 139,050,000	\$ 133,360,000	\$ 127,390,000	\$ 121,115,000	\$ 114,530,000	\$ 107,610,000	\$ 100,345,000	\$ 96,275,000	\$ 92,045,000	\$ 87,645,000
8	Plus: Interest	6,930,500	6,659,500	6,375,000	6,076,500	5,762,750	5,433,500	5,087,500	4,796,900	4,634,100	4,464,900	4,288,900
9	Less: Payments	12,350,500	12,349,500	12,345,000	12,351,500	12,347,750	12,353,500	12,352,500	8,866,900	8,864,100	8,864,900	8,863,900
10	Balance End of Year	\$ 139,050,000	\$ 133,360,000	\$ 127,390,000	\$ 121,115,000	\$ 114,530,000	\$ 107,610,000	\$ 100,345,000	\$ 96,275,000	\$ 92,045,000	\$ 87,645,000	\$ 83,070,000
Total Existing Senior Lien Debt												
11	Amount Funded	\$ 256,140,000										
12	Start Balance	\$ 241,075,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Plus: Interest	10,965,169	10,683,669	10,388,369	10,078,619	9,752,994	9,410,906	9,051,238	8,745,938	8,445,938	8,134,638	7,806,388
14	Less: Payments	16,735,169	16,733,669	16,733,369	16,733,619	16,732,994	16,735,906	16,736,238	16,735,938	16,735,938	16,734,638	16,736,388
15	Balance End of Year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>Existing State Revolving Fund (SRF) Loan Debt</u>												
State Revolving Fund Loan Agreement SW131300												
16	Amount Funded	\$ 7,547,200										
17	Start Balance	\$ 5,556,005	\$ 5,199,414	\$ 4,837,024	\$ 4,468,739	\$ 4,094,464	\$ 3,714,101	\$ 3,327,551	\$ 2,934,714	\$ 2,535,487	\$ 2,129,766	\$ 1,717,446
18	Plus: Interest	88,569	82,769	76,874	70,884	64,796	58,609	52,322	45,932	39,438	32,839	26,132
19	Less: Payments	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159
20	Balance End of Year	\$ 5,199,414	\$ 4,837,024	\$ 4,468,739	\$ 4,094,464	\$ 3,714,101	\$ 3,327,551	\$ 2,934,714	\$ 2,535,487	\$ 2,129,766	\$ 1,717,446	\$ 1,298,419
Total Existing SRF Loan Debt												
21	Amount Funded	\$ 7,547,200										
22	Start Balance	\$ 5,556,005	\$ 5,199,414	\$ 4,837,024	\$ 4,468,739	\$ 4,094,464	\$ 3,714,101	\$ 3,327,551	\$ 2,934,714	\$ 2,535,487	\$ 2,129,766	\$ 1,717,446
23	Plus: Interest	88,569	82,769	76,874	70,884	64,796	58,609	52,322	45,932	39,438	32,839	26,132
24	Less: Payments	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159
25	Balance End of Year	\$ 5,199,414	\$ 4,837,024	\$ 4,468,739	\$ 4,094,464	\$ 3,714,101	\$ 3,327,551	\$ 2,934,714	\$ 2,535,487	\$ 2,129,766	\$ 1,717,446	\$ 1,298,419

Table 3-4

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Stormwater Debt Service By Fiscal Year

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Total Existing Debt											
26	Amount Funded	\$ 263,687,200										
27	Start Balance	\$ 246,631,005	\$ 5,199,414	\$ 4,837,024	\$ 4,468,739	\$ 4,094,464	\$ 3,714,101	\$ 3,327,551	\$ 2,934,714	\$ 2,535,487	\$ 2,129,766	\$ 1,717,446
28	Plus: Interest	11,053,738	10,766,438	10,465,243	10,149,503	9,817,790	9,469,515	9,103,559	8,791,870	8,485,376	8,167,477	7,832,520
29	Less: Payments	17,180,328	17,178,828	17,178,528	17,178,778	17,178,153	17,181,065	17,181,397	17,181,097	17,181,097	17,179,797	17,181,547
30	Balance End of Year	\$ 5,199,414	\$ 4,837,024	\$ 4,468,739	\$ 4,094,464	\$ 3,714,101	\$ 3,327,551	\$ 2,934,714	\$ 2,535,487	\$ 2,129,766	\$ 1,717,446	\$ 1,298,419
	PROPOSED DEBT SERVICE											
	<u>Proposed Senior Lien Debt</u>											
	Assumed Stormwater Revenue Bonds, Series 2028											
31	Amount Funded	\$ 84,250,000										
32	Start Balance	\$ -	\$ -	\$ -	\$ -	\$ 84,675,000	\$ 84,040,958	\$ 82,741,173	\$ 81,376,398	\$ 79,943,385	\$ 78,438,720	\$ 76,858,823
33	Plus: Interest	-	-	-	-	2,106,250	4,180,798	4,115,809	4,047,570	3,975,919	3,900,686	3,821,691
34	Less: Payments	-	-	-	-	2,740,292	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583
35	Balance End of Year	\$ -	\$ -	\$ -	\$ -	\$ 84,040,958	\$ 82,741,173	\$ 81,376,398	\$ 79,943,385	\$ 78,438,720	\$ 76,858,823	\$ 75,199,931
	Assumed Stormwater Revenue Bonds, Series 2030											
36	Amount Funded	\$ 51,565,000										
37	Start Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51,825,000	\$ 51,436,936	\$ 50,641,406	\$ 49,806,099	\$ 48,929,027
38	Plus: Interest	-	-	-	-	-	-	1,289,125	2,558,847	2,519,070	2,477,305	2,433,451
39	Less: Payments	-	-	-	-	-	-	1,677,189	3,354,377	3,354,377	3,354,377	3,354,377
40	Balance End of Year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51,436,936	\$ 50,641,406	\$ 49,806,099	\$ 48,929,027	\$ 48,008,101
	Assumed Stormwater Revenue Bonds, Series 2032											
41	Amount Funded	\$ 28,310,000										
42	Start Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,310,000	\$ 28,096,947	\$ 27,660,188
43	Plus: Interest	-	-	-	-	-	-	-	-	707,750	1,404,847	1,383,009
44	Less: Payments	-	-	-	-	-	-	-	-	920,803	1,841,606	1,841,606
45	Balance End of Year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,096,947	\$ 27,660,188	\$ 27,201,591
	Total Proposed Senior Lien Debt											
46	Amount Funded	\$ 164,125,000										
47	Start Balance	\$ -	\$ -	\$ -	\$ -	\$ 84,675,000	\$ 84,040,958	\$ 134,566,173	\$ 132,813,334	\$ 158,894,790	\$ 156,341,766	\$ 153,448,038
48	Plus: Interest	-	-	-	-	2,106,250	4,180,798	5,404,934	6,606,417	7,202,740	7,782,838	7,638,152
49	Less: Payments	-	-	-	-	2,740,292	5,480,583	7,157,772	8,834,961	9,755,764	10,676,567	10,676,567
50	Balance End of Year	\$ -	\$ -	\$ -	\$ -	\$ 84,040,958	\$ 82,741,173	\$ 132,813,334	\$ 130,584,790	\$ 156,341,766	\$ 153,448,038	\$ 150,409,623
	Total Proposed Debt											
51	Amount Funded	\$ 164,125,000										
52	Start Balance	\$ -	\$ -	\$ -	\$ -	\$ 84,675,000	\$ 84,040,958	\$ 134,566,173	\$ 132,813,334	\$ 158,894,790	\$ 156,341,766	\$ 153,448,038
53	Plus: Interest	-	-	-	-	2,106,250	4,180,798	5,404,934	6,606,417	7,202,740	7,782,838	7,638,152
54	Less: Payments	-	-	-	-	2,740,292	5,480,583	7,157,772	8,834,961	9,755,764	10,676,567	10,676,567
55	Balance End of Year	\$ -	\$ -	\$ -	\$ -	\$ 84,040,958	\$ 82,741,173	\$ 132,813,334	\$ 130,584,790	\$ 156,341,766	\$ 153,448,038	\$ 150,409,623

Table 3-4

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Stormwater Debt Service By Fiscal Year

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
TOTAL DEBT												
56	Amount Funded	\$ 427,812,200										
57	Start Balance	\$ 246,631,005	\$ 5,199,414	\$ 4,837,024	\$ 4,468,739	\$ 88,769,464	\$ 87,755,059	\$ 137,893,724	\$ 135,748,048	\$ 161,430,277	\$ 158,471,532	\$ 155,165,484
58	Plus: Interest	11,053,738	10,766,438	10,465,243	10,149,503	11,924,040	13,650,313	14,508,493	15,398,286	15,688,115	15,950,315	15,470,672
59	Less: Payments	17,180,328	17,178,828	17,178,528	17,178,778	19,918,445	22,661,649	24,339,169	26,016,057	26,936,860	27,856,363	27,858,113
60	Balance End of Year	\$ 5,199,414	\$ 4,837,024	\$ 4,468,739	\$ 4,094,464	\$ 87,755,059	\$ 86,068,724	\$ 135,748,048	\$ 133,120,277	\$ 158,471,532	\$ 155,165,484	\$ 151,708,042
61	Total Interest Payments	\$ 11,053,738	\$ 10,766,438	\$ 10,465,243	\$ 10,149,503	\$ 11,924,040	\$ 13,650,313	\$ 14,508,493	\$ 15,398,286	\$ 15,688,115	\$ 15,950,315	\$ 15,470,672
62	Total Principal Payments	6,126,590	6,412,390	6,713,285	7,029,275	7,994,405	9,011,335	9,830,676	10,617,771	11,248,745	11,906,049	12,387,442
63	Total Debt Service	\$ 17,180,328	\$ 17,178,828	\$ 17,178,528	\$ 17,178,778	\$ 19,918,445	\$ 22,661,649	\$ 24,339,169	\$ 26,016,057	\$ 26,936,860	\$ 27,856,363	\$ 27,858,113
STORMWATER SYSTEM DEBT SERVICE SUMMARY												
64	Stormwater Revenue Bonds, Series 2015	\$ 4,384,669	\$ 4,384,169	\$ 4,388,369	\$ 4,382,119	\$ 4,385,244	\$ 4,382,406	\$ 4,383,738	\$ 7,869,038	\$ 7,871,838	\$ 7,869,738	\$ 7,872,488
65	Stormwater Revenue Bonds, Series 2017	12,350,500	12,349,500	12,345,000	12,351,500	12,347,750	12,353,500	12,352,500	8,866,900	8,864,100	8,864,900	8,863,900
66	State Revolving Fund Loan Agreement SW131300	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159	445,159
67	Assumed Stormwater Revenue Bonds, Series 2028	-	-	-	-	2,740,292	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583
68	Assumed Stormwater Revenue Bonds, Series 2030	-	-	-	-	-	-	1,677,189	3,354,377	3,354,377	3,354,377	3,354,377
69	Assumed Stormwater Revenue Bonds, Series 2032	-	-	-	-	-	-	-	-	920,803	1,841,606	1,841,606
70	Total Debt Service	\$ 17,180,328	\$ 17,178,828	\$ 17,178,528	\$ 17,178,778	\$ 19,918,445	\$ 22,661,649	\$ 24,339,169	\$ 26,016,057	\$ 26,936,860	\$ 27,856,363	\$ 27,858,113

Table 3-5

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Estimated Stormwater System Multi-Year Capital Improvement Program and Funding Sources

				Fiscal Year Ending September 30,												
Line No.	Description	Funding Source	Escalation Factor	Adjusted 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total	
CAPITAL IMPROVEMENT PROGRAM																
Departmental Capital																
1	Furniture and Fixtures	REV	None	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,000	\$ -	\$ -	\$ -	\$ 70,000	
2	Motor Vehicles	REV	None	616,000	112,000	1,362,797	205,440	524,041	-	1,140,000	937,300	880,547	819,545	844,132	7,441,802	
3	Machinery and Equipment	REV	None	2,429,000	450,000	-	-	-	-	680,000	494,400	715,232	524,509	752,424	6,045,565	
4	Renovations	REV	None	-	-	-	-	-	-	-	100,000	-	-	-	100,000	
5	Software Purchase	REV	None	-	-	-	-	-	-	-	70,000	-	-	-	70,000	
6	Adjustments	REV		-	-	-	-	-	-	-	-	-	-	-	-	
7	Subtotal - Departmental Capital			\$ 3,045,000	\$ 562,000	\$ 1,362,797	\$ 205,440	\$ 524,041	\$ -	\$ 1,820,000	\$ 1,671,700	\$ 1,595,779	\$ 1,344,054	\$ 1,596,556	\$ 13,727,367	
Capital Projects																
8	SCADA & PLC	REV	None	\$ -	\$ (1,766,667)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,766,667)	
9	STORMWATER CRITICAL NEEDS	REV	None	3,000,000	(1,869,743)	8,624,000	6,848,000	8,712,000	3,112,000	5,192,000	10,688,000	6,592,000	8,560,000	6,192,000	65,650,257	
10	WEST AVENUE PH III	REV	None	13,940,615	-	1,666,982	-	-	-	-	-	-	-	-	15,607,597	
11	WEST AVENUE PH III	PID	None	4,276,907	-	-	-	-	-	-	-	-	-	-	4,276,907	
12	NORMANDY ISLES A - PHASE 1	B3	None	-	-	-	-	(0)	-	-	28,024,740	-	-	-	28,024,740	
13	NORMANDY ISLES A - PHASE 1	B1	None	-	-	-	-	7,058,304	-	-	-	-	-	-	7,058,304	
14	NORMANDY ISLES A - PHASE 1	REV	None	-	-	-	-	-	-	-	35,500,000	-	-	-	35,500,000	
15	NORMANDY ISLES A - PHASE 2	REV	None	-	-	-	-	-	-	-	-	7,058,304	-	-	7,058,304	
16	NORTH SHORE D - TOWN CENTER - PHASE 1	REV	None	-	-	-	16,000,000	-	-	-	-	-	-	-	16,000,000	
17	NORTH SHORE D - TOWN CENTER - PHASE 1	B1	None	-	-	-	76,345,291	-	-	-	-	-	-	-	76,345,291	
18	NORTH SHORE D - TOWN CENTER - PHASE 2	REV	None	-	-	-	-	-	-	500,000	-	-	2,000,000	-	2,500,000	
19	1ST STREET-ALTON RD TO WASHINGTON PHASES 1 AND	REV	None	1,530,000	-	-	-	-	-	-	-	-	-	-	1,530,000	
20	1ST STREET-ALTON RD TO WASHINGTON PHASES 3 and 4	B2	None	-	-	-	-	-	34,670,000	-	-	-	-	-	34,670,000	
21	FLAMINGO / LUMMUS C PHASE 1	REV	None	-	-	-	-	-	-	-	-	-	-	6,053,646	6,053,646	
22	100 BLOCK OF LINCOLN ROAD	REV	None	400,000	-	-	-	-	-	-	-	-	-	-	400,000	
23	17TH STREET IMPROVEMENTS PHASE I	REV	None	1,200,000	-	-	22,800,000	-	-	-	-	-	-	-	24,000,000	
24	CONVENTION CNTR LINCEN RD CONNECTOR	REV	None	929,198	-	-	-	-	-	-	-	-	-	-	929,198	
25	COLLINS PARK ANCILLARY IMPROVEMENTS	REV	None	-	8,441	1,097,300	-	-	-	-	-	-	-	-	1,105,741	
26	PUBLIC WORKS OPERATIONS FACILITY	REV	None	-	230,000	-	2,070,000	-	-	-	-	-	-	-	2,300,000	
27	FDOT ALTON ROAD UTILITIES RELOCATION	REV	None	-	-	-	-	-	-	-	11,200,000	-	-	14,300,000	25,500,000	
28	NUISANCE FLOODING MITIGATION	REV	None	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,200,000	
29	STORMWATER PUMP STATION CULVERT	REV	None	1,250,000	-	-	-	-	-	-	-	-	-	-	1,250,000	
30	PARKVIEW ISLAND WATER QUALITY IMPR.	REV	None	-	2,000,000	-	-	-	-	-	-	-	-	-	2,000,000	
31	CITYWIDE SEAWALL REHAB	REV	None	-	-	5,900,000	11,462,070	16,663,861	-	4,916,729	6,760,442	5,685,767	12,884,390	4,954,177	69,227,436	
32	CITYWIDE SEAWALL REHAB	B1	None	-	-	-	-	-	-	-	-	-	-	-	-	
33	CITYWIDE SEAWALL REHAB	B2	None	-	-	-	-	-	16,375,094	-	-	-	-	-	16,375,094	
34	Adjustments	REV		-	-	-	-	-	-	-	-	-	-	-	-	
35	Subtotal - Capital Projects			\$ 26,726,720	\$ (1,197,969)	\$ 17,488,282	\$ 135,725,361	\$ 32,634,165	\$ 54,357,094	\$ 10,808,729	\$ 92,373,182	\$ 19,536,071	\$ 23,644,390	\$ 31,699,823	\$ 443,795,848	
36	TOTAL STORMWATER SYSTEM CAPITAL IMPROVEMENT PROGRAM			\$ 29,771,720	\$ (635,969)	\$ 18,851,079	\$ 135,930,801	\$ 33,158,206	\$ 54,357,094	\$ 12,628,729	\$ 94,044,882	\$ 21,131,850	\$ 24,988,444	\$ 33,296,379	\$ 457,523,215	
FUNDING SOURCES																
STORMWATER SYSTEM																
37	Series 2017 Bonds	PID		\$ 4,276,907	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,276,907	
38	Assumed Stormwater Revenue Bonds, Series 2028	B1		-	-	-	76,345,291	7,058,304	-	-	-	-	-	-	83,403,596	
39	Assumed Stormwater Revenue Bonds, Series 2030	B2		-	-	-	-	-	51,045,094	-	-	-	-	-	51,045,094	
40	Assumed Stormwater Revenue Bonds, Series 2032	B3		-	-	-	-	(0)	-	-	28,024,740	-	-	-	28,024,740	
41	User Rate Revenue	REV		25,494,813	(635,969)	18,851,079	59,585,510	26,099,902	3,312,000	12,628,729	66,020,142	21,131,850	24,988,444	33,296,379	290,772,879	
42	TOTAL STORMWATER SYSTEM FUNDING SOURCES			\$ 29,771,720	\$ (635,969)	\$ 18,851,079	\$ 135,930,801	\$ 33,158,206	\$ 54,357,094	\$ 12,628,729	\$ 94,044,882	\$ 21,131,850	\$ 24,988,444	\$ 33,296,379	\$ 457,523,215	

Table 3-6

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Stormwater System Cash Balances and Interest Income

		Fiscal Year Ending September 30,											
Line No.	Description	[1]	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
OPERATION AND MAINTENANCE FUND													
1	Adjusted Beginning Balance		\$ 55,836,672	\$ 41,444,531	\$ 52,702,473	\$ 50,813,914	\$ 13,245,207	\$ 11,938,744	\$ 36,155,932	\$ 51,071,225	\$ 12,234,495	\$ 18,564,128	\$ 21,403,067
2	Transfers In / (Out) - Surplus / (Deficiency)		(14,392,141)	11,257,941	(1,888,558)	(37,568,708)	(1,306,463)	24,217,188	14,915,293	(38,836,730)	6,329,633	2,838,939	(4,155,028)
3	Interest Rate		0.25%	0.25%	0.25%	0.50%	0.50%	0.50%	0.75%	0.75%	0.75%	1.00%	1.00%
4	Interest Income	US	139,592	103,611	131,756	254,070	66,226	59,694	271,169	383,034	91,759	185,641	214,031
	Recognition of Interest Earnings												
5	in Revenue Requirements		139,592	103,611	131,756	254,070	66,226	59,694	271,169	383,034	91,759	185,641	214,031
6	Ending Balance	\$	41,444,531	\$ 52,702,473	\$ 50,813,914	\$ 13,245,207	\$ 11,938,744	\$ 36,155,932	\$ 51,071,225	\$ 12,234,495	\$ 18,564,128	\$ 21,403,067	\$ 17,248,039
RENEWAL AND REPLACEMENT FUND													
7	Beginning Balance	\$	4,854,059										
8	Adjustment For Open Purchase Orders		-										
9	Adjusted Beginning Balance	\$	4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059
10	Transfers In		-	-	-	-	-	-	-	-	-	-	-
11	Transfers Out - Capital Improvement Program		-	-	-	-	-	-	-	-	-	-	-
12	Interest Rate		0.25%	0.25%	0.25%	0.50%	0.50%	0.50%	0.75%	0.75%	0.75%	1.00%	1.00%
13	Interest Income	US	12,135	12,135	12,135	24,270	24,270	24,270	36,405	36,405	36,405	48,541	48,541
	Recognition of Interest Earnings												
14	in Revenue Requirements		12,135	12,135	12,135	24,270	24,270	24,270	36,405	36,405	36,405	48,541	48,541
15	Ending Balance	\$	4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059
SINKING FUND													
16	Sinking Fund Deposit	\$	17,180,328	\$ 17,178,828	\$ 17,178,528	\$ 17,178,778	\$ 19,918,445	\$ 22,661,649	\$ 24,339,169	\$ 26,016,057	\$ 26,936,860	\$ 27,856,363	\$ 27,858,113
17	Average Balance		4,295,082	4,294,707	4,294,632	4,294,694	4,979,611	5,665,412	6,084,792	6,504,014	6,734,215	6,964,091	6,964,528
18	Interest Rate		0.25%	0.25%	0.25%	0.50%	0.50%	0.50%	0.75%	0.75%	0.75%	1.00%	1.00%
19	Interest Income	US	10,738	10,737	10,737	21,473	24,898	28,327	45,636	48,780	50,507	69,641	69,645
	Recognition of Interest Earnings												
20	in Revenue Requirements		10,738	10,737	10,737	21,473	24,898	28,327	45,636	48,780	50,507	69,641	69,645
CONSTRUCTION FUND													
21	Beginning Balance	\$	4,276,907										
22	Adjustment For Open Purchase Orders		-										
23	Adjusted Beginning Balance	\$	4,276,907	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	Transfers In		-	-	-	76,345,291	7,058,304	51,045,094	-	28,024,740	-	-	-
25	Transfers Out - Capital Improvement Program		4,276,907	-	-	76,345,291	7,058,304	51,045,094	-	28,024,740	-	-	-
26	Interest Rate		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
27	Interest Income	RS	-	-	-	-	-	-	-	-	-	-	-
	Recognition of Interest Earnings												
28	in Revenue Requirements		-	-	-	-	-	-	-	-	-	-	-
29	Ending Balance	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Table 3-6

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Projected Stormwater System Cash Balances and Interest Income

Line No.	Description	[1]	Fiscal Year Ending September 30,											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
INTEREST INCOME														
30	Unrestricted - Subtotal	US	\$ 162,465	\$ 126,483	\$ 154,628	\$ 299,813	\$ 115,394	\$ 112,291	\$ 353,211	\$ 468,220	\$ 178,671	\$ 303,823	\$ 332,217	
31	Adjustment for Additional Interest Allocation		2,152,535	1,743,517	245,372	100,187	284,606	287,709	46,789	-	221,329	96,177	67,783	
32	Unrestricted	US	2,315,000	1,870,000	400,000	400,000	400,000	400,000	400,000	468,220	400,000	400,000	400,000	
33	Restricted	RS	-	-	-	-	-	-	-	-	-	-	-	
34	Total		<u>\$ 2,315,000</u>	<u>\$ 1,870,000</u>	<u>\$ 400,000</u>	<u>\$ 400,000</u>	<u>\$ 400,000</u>	<u>\$ 400,000</u>	<u>\$ 400,000</u>	<u>\$ 468,220</u>	<u>\$ 400,000</u>	<u>\$ 400,000</u>	<u>\$ 400,000</u>	

Footnotes:

- [1] US = Interest earnings unrestricted and assumed to be available to meet system expenditure requirements.
RS = Interest earnings restricted and assumed to not be available to meet system expenditure requirements.

Table 3-7

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Stormwater System

Projected Operating Results and Debt Service Coverage - Stormwater System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	System Revenue											
	User Rate Revenue											
1	Stormwater Rate Revenue	\$37,882,000	\$37,882,000	\$37,882,000	\$37,882,000	\$37,882,000	\$37,882,000	\$37,882,000	\$37,882,000	\$37,882,000	\$37,882,000	\$37,882,000
	<u>Stormwater System</u>											
2	Rate Adjustment (%)	0.00%	5.71%	22.41%	12.82%	11.36%	10.20%	3.70%	3.00%	3.00%	3.00%	3.00%
3	Cumulative Additional User Rate Adjustment Revenue - Water	\$ -	\$ 2,161,800	\$11,135,800	\$17,420,200	\$23,704,500	\$29,988,800	\$32,502,600	\$34,614,100	\$36,789,000	\$39,029,100	\$41,336,500
4	Total User Rate Revenue	\$37,882,000	\$40,043,800	\$49,017,800	\$55,302,200	\$61,586,500	\$67,870,800	\$70,384,600	\$72,496,100	\$74,671,000	\$76,911,100	\$79,218,500
5	Other Operating Revenue	\$ 545,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Unrestricted Interest Income	2,315,000	1,870,000	400,000	400,000	400,000	400,000	400,000	468,220	400,000	400,000	400,000
7	Transfers (To) / From Rate Stabilization Fund	-	-	-	-	-	-	-	-	-	-	-
8	Total System Revenue	\$40,742,000	\$41,913,800	\$49,417,800	\$55,702,200	\$61,986,500	\$68,270,800	\$70,784,600	\$72,964,320	\$75,071,000	\$77,311,100	\$79,618,500
	Operating Expenses											
9	Personnel Services	\$ 3,801,000	\$ 4,346,000	\$ 5,086,058	\$ 5,890,533	\$ 6,215,914	\$ 6,560,650	\$ 6,926,017	\$ 7,313,386	\$ 7,724,230	\$ 8,160,134	\$ 8,622,803
10	Operating Expenses	7,248,000	8,215,000	8,561,093	8,905,008	9,262,068	9,632,847	9,994,603	10,371,636	10,764,607	11,174,208	11,588,572
11	Less Administration Fees	(1,918,000)	(1,759,000)	(1,846,950)	(1,939,298)	(2,036,262)	(2,138,075)	(2,244,979)	(2,357,228)	(2,475,090)	(2,598,844)	(2,728,786)
12	Internal Charges	632,000	814,000	854,700	897,435	942,307	989,422	1,038,893	1,090,838	1,145,380	1,202,649	1,262,781
13	Capital Expenditures	-	-	-	-	-	-	-	-	-	-	-
14	Contingency and Bad Debt Expense	-	-	-	-	-	-	-	-	-	-	-
15	Total Operating Expenses	\$ 9,763,000	\$11,616,000	\$12,654,901	\$13,753,678	\$14,384,027	\$15,044,844	\$15,714,534	\$16,418,632	\$17,159,127	\$17,938,147	\$18,745,370
16	Operating Ratio	24%	28%	26%	25%	23%	22%	22%	23%	23%	23%	24%
17	Net Revenues Available for Debt Service	\$30,979,000	\$30,297,800	\$36,762,899	\$41,948,522	\$47,602,473	\$53,225,956	\$55,070,066	\$56,545,688	\$57,911,873	\$59,372,953	\$60,873,130
18	Pledged Funds Available for Debt Service	\$30,979,000	\$30,297,800	\$36,762,899	\$41,948,522	\$47,602,473	\$53,225,956	\$55,070,066	\$56,545,688	\$57,911,873	\$59,372,953	\$60,873,130
	Senior Lien Indebtedness											
19	Stormwater Revenue Bonds, Series 2015	\$ 4,384,669	\$ 4,384,169	\$ 4,388,369	\$ 4,382,119	\$ 4,385,244	\$ 4,382,406	\$ 4,383,738	\$ 7,869,038	\$ 7,871,838	\$ 7,869,738	\$ 7,872,488
20	Stormwater Revenue Bonds, Series 2017	12,350,500	12,349,500	12,345,000	12,351,500	12,347,750	12,353,500	12,352,500	8,866,900	8,864,100	8,864,900	8,863,900
21	Assumed Stormwater Revenue Bonds, Series 2028	-	-	-	-	2,740,292	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583	5,480,583
22	Assumed Stormwater Revenue Bonds, Series 2030	-	-	-	-	-	-	1,677,189	3,354,377	3,354,377	3,354,377	3,354,377
23	Assumed Stormwater Revenue Bonds, Series 2032	-	-	-	-	-	-	-	-	920,803	1,841,606	1,841,606
24	Total Annual Debt Service on Senior Lien Indebtedness	\$16,735,169	\$16,733,669	\$16,733,369	\$16,733,619	\$19,473,285	\$22,216,490	\$23,894,010	\$25,570,898	\$26,491,701	\$27,411,204	\$27,412,954
	Junior Lien Indebtedness											
25	State Revolving Fund Loan Agreement SW131300	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159
26	Total Annual Debt Service on Junior Lien Indebtedness	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159
27	Total Annual Debt Service with Water and Wastewater Debt Service	\$17,180,328	\$17,178,828	\$17,178,528	\$17,178,778	\$19,918,445	\$22,661,649	\$24,339,169	\$26,016,057	\$26,936,860	\$27,856,363	\$27,858,113

Table 3-7

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Stormwater System

Projected Operating Results and Debt Service Coverage - Stormwater System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
SENIOR LIEN BONDS DEBT SERVICE COVERAGE:												
Net Revenues Debt Service Coverage												
28	Net Revenues Available for Debt Service	\$30,979,000	\$30,297,800	\$36,762,899	\$41,948,522	\$47,602,473	\$53,225,956	\$55,070,066	\$56,545,688	\$57,911,873	\$59,372,953	\$60,873,130
29	Total Annual Debt Service on Senior Lien Indebtedness	\$16,735,169	\$16,733,669	\$16,733,369	\$16,733,619	\$19,473,285	\$22,216,490	\$23,894,010	\$25,570,898	\$26,491,701	\$27,411,204	\$27,412,954
30	Debt Service Coverage (110% Required)	185%	181%	220%	251%	244%	240%	230%	221%	219%	217%	222%
SRF LOAN DEBT SERVICE COVERAGE:												
SRF LOAN: Net Revenues Debt Service Coverage												
31	Net Revenues After Payment of Senior Lien Indebtedness	\$14,243,831	\$13,564,131	\$20,029,530	\$25,214,904	\$28,129,188	\$31,009,466	\$31,176,056	\$30,974,790	\$31,420,172	\$31,961,748	\$33,460,176
32	Less Allowance for Senior Lien Debt Service Coverage	110% (1,673,517)	(1,673,367)	(1,673,337)	(1,673,362)	(1,947,329)	(2,221,649)	(2,389,401)	(2,557,090)	(2,649,170)	(2,741,120)	(2,741,295)
33	Adjusted Net Revenues After Payment of Senior Lien Debt Service	\$12,570,314	\$11,890,764	\$18,356,193	\$23,541,542	\$26,181,859	\$28,787,817	\$28,786,655	\$28,417,700	\$28,771,002	\$29,220,628	\$30,718,881
34	Total Annual Debt Service on Junior Lien Indebtedness	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159	\$ 445,159
35	Debt Service Coverage (115% Required)	2824%	2671%	4124%	5288%	5881%	6467%	6467%	6384%	6463%	6564%	6901%
ALL-IN / OVERALL DEBT SERVICE COVERAGE:												
Net Revenues Debt Service Coverage												
36	Net Revenues Available for Debt Service With Administration Fees	\$29,061,000	\$28,538,800	\$34,915,949	\$40,009,225	\$45,566,211	\$51,087,880	\$52,825,086	\$54,188,460	\$55,436,783	\$56,774,109	\$58,144,344
37	Senior and Junior Lien Indebtedness	\$17,180,328	\$17,178,828	\$17,178,528	\$17,178,778	\$19,918,445	\$22,661,649	\$24,339,169	\$26,016,057	\$26,936,860	\$27,856,363	\$27,858,113
38	Debt Service Coverage (200% Target; 115% Minimum; 120% Required)	169%	166%	203%	233%	229%	225%	217%	208%	206%	204%	209%
Net Revenues After Payment of Debt Service and Required Transfers -												
39	Available for Other System Purposes	\$11,880,672	\$11,359,972	\$17,737,421	\$22,830,447	\$25,647,766	\$28,426,232	\$28,485,918	\$28,172,403	\$28,499,923	\$28,917,745	\$30,286,231

Table 3-8

City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

Summary of Sources and Uses of Funds - Stormwater System

Line No.	Description	Fiscal Year Ending September 30,										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
1	Unrestricted Cash Balances from Below	\$ 46,298,590	\$ 57,556,532	\$ 55,667,973	\$ 18,099,266	\$ 16,792,803	\$ 41,009,991	\$ 55,925,284	\$ 17,088,554	\$ 23,418,187	\$ 26,257,126	\$ 22,102,098
	OPERATION AND MAINTENANCE FUND											
	<u>Sources of Funds</u>											
2	Stormwater Rate Revenue	\$ 37,882,000	\$ 40,043,800	\$ 49,017,800	\$ 55,302,200	\$ 61,586,500	\$ 67,870,800	\$ 70,384,600	\$ 72,496,100	\$ 74,671,000	\$ 76,911,100	\$ 79,218,500
3	Other Operating Revenue	545,000	-	-	-	-	-	-	-	-	-	-
4	Unrestricted Interest Income	2,315,000	1,870,000	400,000	400,000	400,000	400,000	400,000	468,220	400,000	400,000	400,000
5	Available Cash Balances	55,836,672	41,444,531	52,702,473	50,813,914	13,245,207	11,938,744	36,155,932	51,071,225	12,234,495	18,564,128	21,403,067
6	Total Sources of Funds	\$ 96,578,672	\$ 83,358,331	\$ 102,120,273	\$ 106,516,115	\$ 75,231,707	\$ 80,209,544	\$ 106,940,532	\$ 124,035,545	\$ 87,305,495	\$ 95,875,228	\$ 101,021,567
	<u>Uses of Funds</u>											
7	Operating Expenses:	\$ 11,681,000	\$ 13,375,000	\$ 14,501,851	\$ 15,692,975	\$ 16,420,289	\$ 17,182,920	\$ 17,959,514	\$ 18,775,860	\$ 19,634,217	\$ 20,536,991	\$ 21,474,156
8	City Debt Service	17,180,328	17,178,828	17,178,528	17,178,778	19,918,445	22,661,649	24,339,169	26,016,057	26,936,860	27,856,363	27,858,113
9	Capital Funded from Rates	25,494,813	(635,969)	18,851,079	59,585,510	26,099,902	3,312,000	12,628,729	66,020,142	21,131,850	24,988,444	33,296,379
11	Transfers Out	778,000	738,000	774,900	813,645	854,327	897,044	941,896	988,991	1,038,440	1,090,362	1,144,880
12	Cash Outflow Associated with Loan to Utility Fund	-	-	-	-	-	-	-	-	-	-	-
13	Total Uses of Funds	\$ 55,134,141	\$ 30,655,859	\$ 51,306,358	\$ 93,270,908	\$ 63,292,963	\$ 44,053,612	\$ 55,869,307	\$ 111,801,050	\$ 68,741,367	\$ 74,472,161	\$ 83,773,528
14	Ending Cash Balances	\$ 41,444,531	\$ 52,702,473	\$ 50,813,914	\$ 13,245,207	\$ 11,938,744	\$ 36,155,932	\$ 51,071,225	\$ 12,234,495	\$ 18,564,128	\$ 21,403,067	\$ 17,248,039
15	Total Uses of Funds and Ending Cash Balances	\$ 96,578,672	\$ 83,358,331	\$ 102,120,273	\$ 106,516,115	\$ 75,231,707	\$ 80,209,544	\$ 106,940,532	\$ 124,035,545	\$ 87,305,495	\$ 95,875,228	\$ 101,021,567
16	Difference Between Sources and Uses of Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	RENEWAL AND REPLACEMENT FUND											
	<u>Sources of Funds</u>											
17	Available Cash Balances	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059
18	Transfers In - Operations	-	-	-	-	-	-	-	-	-	-	-
19	Interest Income	12,135	12,135	12,135	24,270	24,270	24,270	36,405	36,405	36,405	48,541	48,541
20	Total Sources of Funds	\$ 4,866,194	\$ 4,866,194	\$ 4,866,194	\$ 4,878,329	\$ 4,878,329	\$ 4,878,329	\$ 4,890,464	\$ 4,890,464	\$ 4,890,464	\$ 4,902,600	\$ 4,902,600
	<u>Uses of Funds</u>											
21	Capital Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	Interest Income to Fund Operations	12,135	12,135	12,135	24,270	24,270	24,270	36,405	36,405	36,405	48,541	48,541
23	Total Uses of Funds	\$ 12,135	\$ 12,135	\$ 12,135	\$ 24,270	\$ 24,270	\$ 24,270	\$ 36,405	\$ 36,405	\$ 36,405	\$ 48,541	\$ 48,541
24	Ending Cash Balances	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059	\$ 4,854,059
25	Total Uses of Funds and Ending Cash Balances	\$ 4,866,194	\$ 4,866,194	\$ 4,866,194	\$ 4,878,329	\$ 4,878,329	\$ 4,878,329	\$ 4,890,464	\$ 4,890,464	\$ 4,890,464	\$ 4,902,600	\$ 4,902,600
26	Difference Between Sources and Uses of Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Table 3-9
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

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

(Rates Effective in January 2025)

Line No.	Description	Rate	Impervious Square Feet Per ERU	Rate Per 1,000 Square Feet
City of Miami Beach, Florida				
1	Current Rates - Effective 10/1/2024	\$31.86	791	\$ 40.28
2	Proposed Rates	39.00	791	49.30
Other Southeast Florida Utilities:				
3	City of Aventura	\$ 3.50	1,548	\$ 2.26
4	City of Boca Raton	4.20	2,837	1.48
5	City of Coconut Creek	5.08	2,070	2.45
6	City of Cooper City	3.22	1,750	1.84
7	City of Coral Gables	23.51	2,346	10.02
8	City of Fort Lauderdale [2]	23.06	N/A	N/A
9	Town of Golden Beach	150.00	8,000	18.75
10	City of Hallandale Beach [3]	9.81	958	10.24
11	City of Hollywood	10.62	2,250	4.72
12	City of Homestead	3.37	2,000	1.69
13	Village of Key Biscayne [4]	52.65	[3]	[3]
14	City of Lauderdale Lakes [2]	6.25	2,133	2.93
15	City of Lauderhill	23.67	3,800	6.23
16	City of Margate	10.52	2,382	4.42
17	City of Miami	3.50	1,191	2.94
18	Miami-Dade County	5.00	1,548	3.23
19	City of Miramar [2]	10.00	3,619	2.76
20	City of North Lauderdale [2]	10.42	2,138	4.87
21	City of North Miami Beach	4.60	N/A	N/A
22	City of Opa Locka	6.00	1,548	3.88
23	City of Oakland Park [2]	10.42	1,507	6.91
24	Town of Pembroke Park	10.12	1,548	6.54
25	Village of Pinecrest [5]	14.07	N/A	N/A
26	City of Pompano Beach	6.46	2,880	2.24
27	City of Sunny Isles Beach	4.48	1,548	2.89
28	City of Sunrise	10.47	1,884	5.56
29	City of Tamarac [2]	13.83	1,830	7.56
30	City of West Palm Beach	16.20	2,171	7.46
31	City of Wilton Manors	8.21	3,460	2.37

Table 3-9
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study

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

(Rates Effective in January 2025)

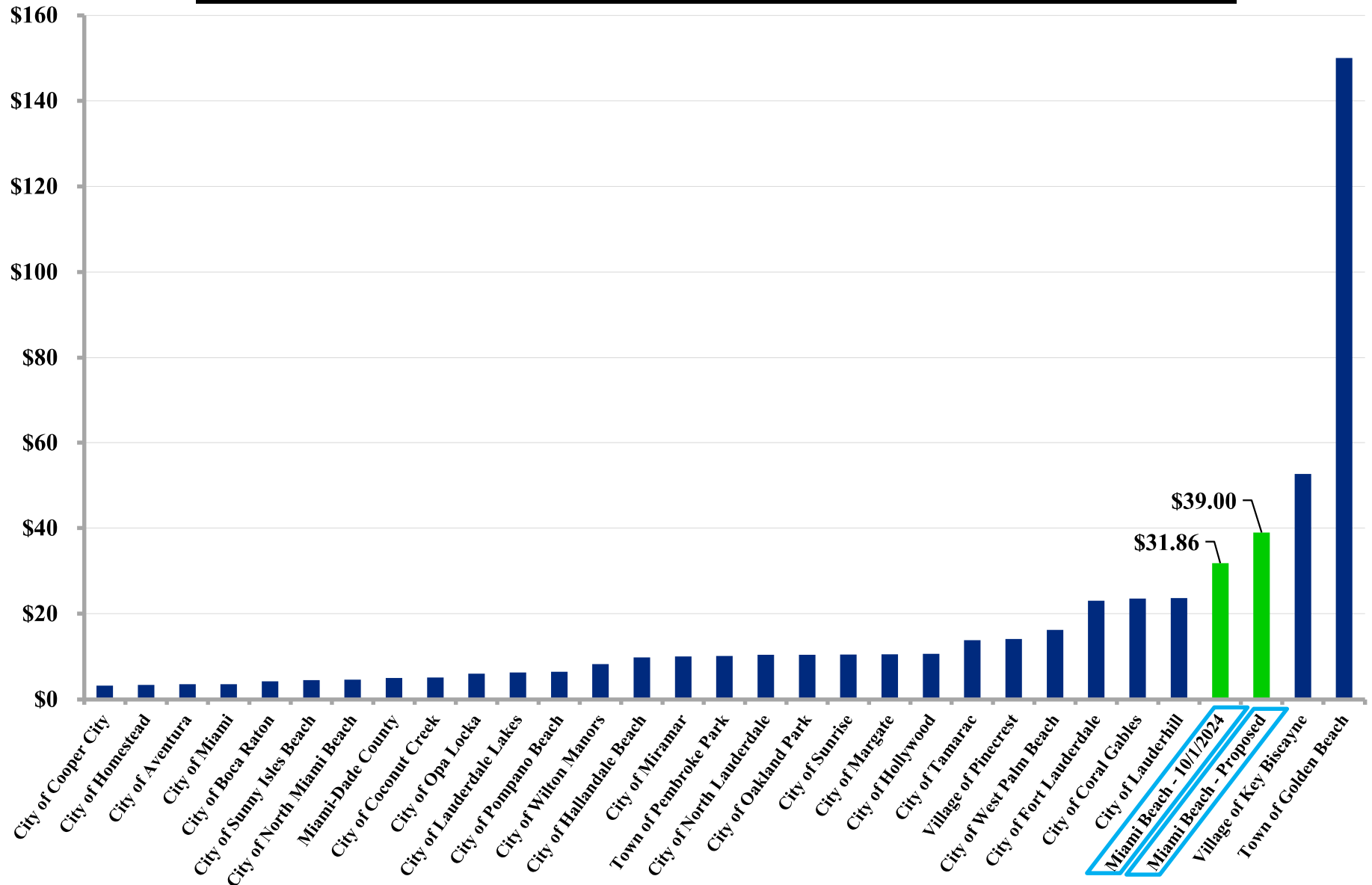
Line No.	Description	Rate	Impervious Square Feet Per ERU	Rate Per 1,000 Square Feet
32	Other Southeast Florida Utilities' Average	\$ 15.97	2,358	\$ 5.05
33	Minimum	3.22	958	1.48
34	Maximum	150.00	8,000	18.75

Footnotes:

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- [1] Unless otherwise noted, amounts shown reflect stormwater rates in effect January 2025.
 - [2] Effective monthly rate based on annual assessment.
 - [3] Charged \$97.32 per ERU per year. An ERU is defined as 0.022 acres, which is 958.32 square feet.
 - [4] Reflects annual assessment for medium single-family home. \$47.19 base fee plus \$584.57 impervious area fee.
 - [5] \$99.51 per parcel plus \$3.15 per Equivalent Billing Unit which is defined as 100 square feet of impervious area. Assumed 2,200 square foot house.
-

Figure 3-1
City of Miami Beach, Florida

Comparison of Monthly Stormwater Fees Per Equivalent Residential Unit (ERU)



2025

CITY OF MIAMI BEACH, FLORIDA
Water, Sewer, and Stormwater Rate Study



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