

R5 V AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING CHAPTER 110 OF THE CODE OF THE CITY OF MIAMI BEACH ENTITLED "UTILITIES," AMENDING ARTICLE IV, ENTITLED "FEES, CHARGES, RATES AND BILLING PROCEDURE," BY AMENDING SECTION 110-167 THEREOF, ENTITLED "WATER IMPACT FEE"; BY AMENDING SECTION 110-169 THEREOF, ENTITLED "SEWER IMPACT FEE"; AND FURTHER, AMENDING APPENDIX A OF THE CITY CODE, ENTITLED "FEE SCHEDULE," TO INCREASE THE WATER IMPACT FEES AND SEWER IMPACT FEES IMPOSED BY THE CITY PURSUANT TO SECTIONS 110-167, 110-169, AND APPENDIX A; PROVIDING FOR CODIFICATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

Applicable Area:

MIAMI BEACH

COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission

FROM: Eric Carpenter, City Manager

DATE: April 23, 2025 10:50 a.m. First Reading Public Hearing

TITLE: AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING CHAPTER 110 OF THE CODE OF THE CITY OF MIAMI BEACH ENTITLED "UTILITIES," AMENDING ARTICLE IV, ENTITLED "FEES, CHARGES, RATES AND BILLING PROCEDURE," BY AMENDING SECTION 110-167 THEREOF, ENTITLED "WATER IMPACT FEE"; BY AMENDING SECTION 110-169 THEREOF, ENTITLED "SEWER IMPACT FEE"; AND FURTHER, AMENDING APPENDIX A OF THE CITY CODE, ENTITLED "FEE SCHEDULE," TO INCREASE THE WATER IMPACT FEES AND SEWER IMPACT FEES IMPOSED BY THE CITY PURSUANT TO SECTIONS 110-167, 110-169, AND APPENDIX A; PROVIDING FOR CODIFICATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

RECOMMENDATION

The Administration recommends amending the impact fee adjustments as presented to the City Commission on March 19, 2025.

Upon approval of the First Reading of the Ordinance, the Administration will proceed with a Second Reading Public Hearing on May 21, 2025.

BACKGROUND/HISTORY

The Public Works Department engaged GovRates, Inc. to conduct a utility rate study, which is now completed.

A presentation of the formulation of the proposed rates, as well as public comments, were offered at the February 21, 2025, Finance and Economic Resiliency Committee (FERC) meeting. The Administration recommended that the Committee consider adopting the proposed adjusted water and sewer impact fees as discussed in Section 2 of the Utility Rate Study (Attachment A).

At the conclusion of the presentation and discussion, FERC members made a motion to proceed to the City Commission with a favorable recommendation to adjust the impact fees with implementation to start upon approval by the City Commission.

ANALYSIS

The City of Miami Beach owns, operates, and maintains water and sewer utility systems that provide essential water and sanitary sewer services to residences and businesses 24 hours per day, 365 days per year.

The City is constructing water and sewer infrastructure to support and provide future capacity within the City's utility service area. Water and sewer impact fees can be used to help fund growth-related capital projects and growth-related debt service. The water and sewer impact fees

were last adjusted in the 1990's and have not been increased to reflect the City's current costs of providing water and sewer capacity.

The City retained the firm GovRates, Inc. (GovRates) to assist in the determination of revised water impact fees and sewer impact fees (Attachment B). GovRates has recommended right-sizing water and sewer impact fees to accurately recover the cost of transmission capacity. Separate impact fees are paid to Miami-Dade County for water and sewer treatment capacity. 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. The purpose of assessing impact fees is to assign the proportionate share of growth-related capital costs to new customers benefiting from such additional costs.

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. Level of service standards, which indicates the capacity per unit of demand for each public facility or service, were 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. The level of service that is commonly used in the industry is the amount of capacity (service) allocable to an Equivalent Residential Connection (ERC) – known as an equivalent residential unit (ERU) or equivalent dwelling unit (EDU) – expressed as the amount of usage (gallons) allocated. Since Miami-Dade County provides the City's water supply and sewer treatment, the proposed impact fees for the City were developed assuming the County's level of service standard of 210 gallons per day for units under 3,001 square feet.

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 functional cost categories are based on the purpose of the assets and the service that such assets provide. The City's reported utility asset information served as the basis of the functionalization of the existing utility assets.

The City's Capital Improvement Program (CIP) through the Fiscal Year 2034, as prepared and estimated by 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.

Based on 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).

The recommended increase in impact fees is shown in the table below:

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.

FISCAL IMPACT STATEMENT

The proposed increases in water and sewer impact fees shown in the table above will be effective upon approval.

CONCLUSION

The Administration recommends amending the impact fee adjustments as presented to the City Commission on March 19, 2025.

Upon approval of the First Reading of the Ordinance, the Administration will proceed with a Second Reading Public Hearing on May 21, 2025.

Applicable Area

Citywide

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-17?

Yes

Is this item related to a G.O. Bond Project?

No

Department

Public Works

Sponsor(s)

Commissioner Tanya Bhatt

Condensed Title

10:50 a.m. 1st Rdg PH, Ch. 110, Increase Water Impact/Sewer Impact Fees. (Bhatt) PW

Previous Action (For City Clerk Use Only)

ORDINANCE NO. 2025-_____

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING CHAPTER 110 OF THE CODE OF THE CITY OF MIAMI BEACH ENTITLED "UTILITIES," AMENDING ARTICLE IV, ENTITLED "FEES, CHARGES, RATES AND BILLING PROCEDURE," BY AMENDING SECTION 110-167 THEREOF, ENTITLED "WATER IMPACT FEE"; BY AMENDING SECTION 110-169 THEREOF, ENTITLED "SEWER IMPACT FEE"; AND FURTHER, AMENDING APPENDIX A OF THE CITY CODE, ENTITLED "FEE SCHEDULE," TO INCREASE THE WATER IMPACT FEES AND SEWER IMPACT FEES IMPOSED BY THE CITY PURSUANT TO SECTIONS 110-167, 110-169, AND APPENDIX A; PROVIDING FOR CODIFICATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

WHEREAS, the City of Miami Beach owns and operates utility systems that provide essential water and sanitary sewer services to residences and businesses, and that operate 24 hours per day and 365 days per year; and

WHEREAS, the operational and financial sustainability of the utility systems is vital to the public health and safety of the City's residents; and

WHEREAS, the City has constructed water and sewer infrastructure to support and provide water and sewer capacity to meet both current demand and future growth within the City's utility service area; and

WHEREAS, water and sewer impact fees, which are assessed as "connection fees" based on the size of the meter, can be used to fund growth-related capital projects and growth-related debt service; and

WHEREAS, Section 163.31801, Florida Statutes (the "Florida Impact Fee Act"), imposes specific requirements on the adoption, collection, and use of impact fees; and

WHEREAS, pursuant to Section 163.31801(12), Fla. Stat., the Florida Impact Fee Act does not apply to water and sewer connection fees; and

WHEREAS, the City's water and sewer connection fees were last adjusted in the 1990s and have not been increased to reflect the City's current costs of providing water and sewer capacity to growth; and

WHEREAS, Chapter 110 of the Code of the City of Miami Beach ("City Code"), entitled "Utilities" and Appendix A to the City Code establish the City's potable water rates for all water users; the sanitary sewer rates for all sanitary sewer users except sewer rates for wholesale customers established through contract; and the stormwater rates for all users of the stormwater system; and

WHEREAS, through a formal procurement process, the City retained the firm of GovRates, Inc. (GovRates) to assist in the determination of revised water impact fees and sewer impact fees, including connection fees; and

WHEREAS, GovRates has recommended updated impact fees to fairly reflect the City's current costs of providing water and sewer capacity to growth and has also recommended periodic reviews of the impact fee amounts; and

WHEREAS, the recommended impact fees for water and sewer, which are assessed as "connection fees," are competitive with those charged by other Florida local governments; and

WHEREAS, the City seeks to amend Chapter 110 and Appendix A to codify the GovRates recommendations; and

WHEREAS, at its February 21, 2025 meeting, the Finance and Economic Resiliency Committee recommended approval of the GovRates recommendations; and

WHEREAS, on March 19, 2025, the City Commission approved accepting the recommendation of the Finance and Economic Resiliency Committee to increase the City's water impact fees and sewer impact fees; and

WHEREAS, the amendments set forth below are necessary to accomplish the above objectives.

NOW THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA:

SECTION 1. That Chapter 110 of the Miami Beach City Code entitled "Utilities," Article IV, entitled "Fees, Charges, Rates and Billing procedure," at Section 110-167, entitled "Water impact fee," and Section 110-169, entitled "Sewer impact fee," are hereby amended as follows:

**CHAPTER 110
UTILITIES**

* * *

ARTICLE IV. Fees, Charges, Rates and Billing Procedure.

Sec. 110-167. Water impact fee.

- (a) There is hereby imposed upon all new connections to the water system and upgrades to meter sizes a one-time water impact fee. Such water impact fee shall be assessed as a connection fee based on the size of water meter serving such premises as set forth in appendix A.
- (b) The water impact fee shall be due and payable at the time of issuance of the initial building permit for the premises or upon submittal of the application to the public works department.

- (c) All water impact fees collected shall be deposited into the city's water impact fee subaccount within the water and sewer impact fee account. The moneys on deposit in the water impact fee subaccount, together with investment earnings thereon, shall be used by the city only in accordance with the provisions of applicable law.
- (d) The city manager or their designee has the authority to determine the applicable water connection fee imposed pursuant to this section for each particular property based on the adopted fee amounts, the intent of the fee, and the customer's specific configurations or circumstances.
- (e) The amount of, and methodology used, to calculate, the water connection fee imposed pursuant to this section shall be reviewed by the city manager at least once every five years to ensure that the fees remain cost-based.

Sec. 110-169. Sewer impact fee.

- (a) There is hereby imposed upon all new connections to the sewer system or upgrades to water meter sizes a one-time sewer impact fee. Such sewer impact fee shall be assessed as a connection fee based on the size of water meter serving such premises as set forth in appendix A.
No sewer impact fees shall be charged for water meters used strictly for irrigation or other purpose that does not generate wastewater returned to the sanitary sewer system.
- (b) The sewer impact fee shall be due and payable at the time of issuance of the initial building permit for the premises.
- (c) All sewer impact fees collected shall be deposited into the city's sewer impact fee subaccount within the water and sewer impact fee account. The moneys on deposit in the sewer impact fee subaccount, together with investment earnings thereon, shall be used by the city only in accordance with the provisions of applicable law.
- (d) The city manager or their designee has the authority to determine the applicable sewer connection fee imposed pursuant to this section for each particular property based on the adopted fee amounts, the intent of the fee, and the customer's specific configurations or circumstances.
- (e) The amount of, and methodology used, to calculate, the sewer connection fee imposed pursuant to this section shall be reviewed by the city manager at least once every five years to ensure that the fees remain cost-based.

SECTION 2. That Chapter 110, "UTILITIES," Article IV "Fees, charges, rates and billing procedures," in APPENDIX A is hereby amended as follows:

**APPENDIX A
FEE SCHEDULE**

| | | | | |
|------------|---|--|------------------------------------|---|
| * * * | | | | |
| 110-167(a) | Water impact fee, <u>assessed as a connection</u> | | <u>Fee Effective Upon Approval</u> | Annual Adjustment (References shown are defined at the end of |

| | <u>fee based on the per meter size in inches:</u> | | | this Appendix A) |
|--|--|-----------|------------|------------------|
| | $\frac{5}{8}$ | \$155.00 | \$1,630.00 | N/A |
| | $\frac{3}{4}$ | 230.00 | N/A | N/A |
| | 1 | 385.00 | 4,075.00 | N/A |
| | 1½ | 775.00 | 8,150.00 | N/A |
| | 2 | 1,240.00 | 13,040.00 | N/A |
| | 3 | 2,480.00 | 26,080.00 | N/A |
| | 4 | 3,875.00 | 40,750.00 | N/A |
| | 6 | 7,750.00 | 81,500.00 | N/A |
| | 8 | 12,400.00 | 130,400.00 | N/A |
| | 10 | | 187,450.00 | N/A |
| | 12 | | 350,450.00 | N/A |
| | Larger than 8 inches, based on relative meter capacities | 0.00 | | N/A |

* * *

| 110-169(a) | <u>Sewer impact fee, assessed as a connection fee based on the per meter size in inches:</u> | | <u>Fee Effective Upon Approval</u> | Annual Adjustment (References shown are defined at the end of this Appendix A) |
|------------|--|-----------|------------------------------------|--|
| | $\frac{5}{8}$ | \$235.00 | \$2,030.00 | N/A |
| | $\frac{3}{4}$ | 350.00 | N/A | N/A |
| | 1 | 585.00 | 5,075.00 | N/A |
| | 1½ | 1,175.00 | 10,150.00 | N/A |
| | 2 | 1,880.00 | 16,240.00 | N/A |
| | 3 | 3,760.00 | 32,480.00 | N/A |
| | 4 | 5,875.00 | 50,750.00 | N/A |
| | 6 | 11,750.00 | 101,500.00 | N/A |
| | 8 | 18,800.00 | 162,400.00 | N/A |
| | 10 | | 233,450 | N/A |

| | | | | |
|--|--|------|----------------|------------|
| | <u>12</u> | | <u>436,450</u> | <u>N/A</u> |
| | Larger than 8 inches, based on relative meter capacities | 0.00 | | N/A |

* * *

SECTION 3. REPEALER.

All ordinances or parts of ordinances in conflict herewith be and the same are hereby repealed.

SECTION 4. SEVERABILITY.

If any section, subsection, clause or provision of this Ordinance is held invalid, the remainder shall not be affected by such invalidity.

SECTION 5. CODIFICATION.

It is the intention of the Mayor and City Commission of the City of Miami Beach, and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Miami Beach City Code. The sections of this ordinance may be renumbered or re-lettered to accomplish such intention, and the word "ordinance" may be changed to "section," "article," or other appropriate word.

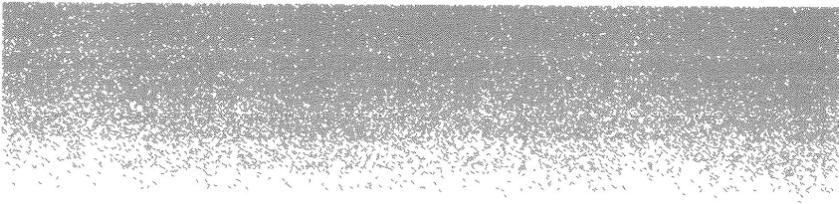
SECTION 6. EFFECTIVE DATE.

This Ordinance shall take effect ten days following adoption, and the revised impact fee rates shall be applied to all bills rendered on or after the effective date.

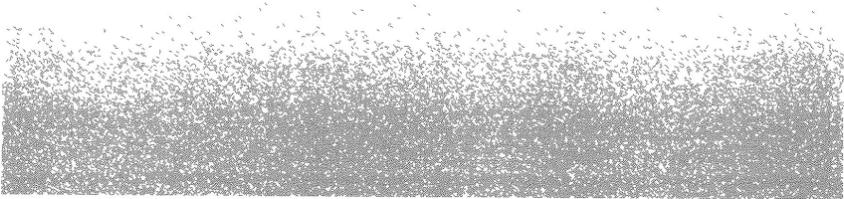
PASSED and ADOPTED this ____ day of _____, 2025.

ATTEST:

Steven Meiner, Mayor



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 | <u>\$390</u> | <u>\$3,660</u> | <u>\$3,270</u> |

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
Determining the Existing Water and Sewer Rates

[illegible]

Table 2-3
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Summary of Existing Water, Sewer, and Stormwater Rates

| Line | Account Number | Description | Usage | Rate | Water | Sewer | Stormwater | General |
|------|----------------|-------------|---------|---------|-------|-------|------------|---------|
| | | | | | Rate | Rate | Rate | Rate |
| 131 | 0000 | WATER | 114,082 | 114,082 | | | | |
| 132 | 0000 | SEWER | 32,307 | 32,307 | | | | |
| 133 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 134 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 135 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 136 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 137 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 138 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 139 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 140 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 141 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 142 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 143 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 144 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 145 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 146 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 147 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 148 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 149 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 150 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 151 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 152 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 153 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 154 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 155 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 156 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 157 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 158 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 159 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 160 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 161 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 162 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 163 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 164 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 165 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 166 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 167 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 168 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 169 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 170 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 171 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 172 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 173 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 174 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 175 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 176 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 177 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 178 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 179 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 180 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 181 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 182 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 183 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 184 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 185 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 186 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 187 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 188 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 189 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 190 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 191 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 192 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 193 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 194 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 195 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 196 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 197 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 198 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 199 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 200 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 201 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 202 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 203 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 204 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 205 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 206 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 207 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 208 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 209 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 210 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 211 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 212 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 213 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 214 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 215 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 216 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 217 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 218 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 219 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 220 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 221 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 222 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 223 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 224 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 225 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 226 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 227 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 228 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 229 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 230 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 231 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 232 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 233 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 234 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 235 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 236 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 237 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 238 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 239 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 240 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 241 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 242 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 243 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 244 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 245 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 246 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 247 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 248 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 249 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 250 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 251 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 252 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 253 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 254 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 255 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 256 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 257 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 258 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 259 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 260 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 261 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 262 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 263 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 264 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 265 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 266 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 267 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 268 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 269 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 270 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 271 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 272 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 273 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 274 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 275 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 276 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 277 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 278 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 279 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 280 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 281 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 282 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 283 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 284 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 285 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 286 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 287 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 288 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 289 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 290 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 291 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 292 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 293 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 294 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 295 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 296 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 297 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 298 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 299 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 300 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 301 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 302 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 303 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 304 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 305 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 306 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 307 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 308 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 309 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 310 | 0000 | STORMWATER | 1,111 | 1,111 | | | | |
| 311 | 0000 | WATER | 1,111 | 1,111 | | | | |
| 312 | 0000 | SEWER | 1,111 | 1,111 | | | | |
| 313 | 0000 | STORMWATER | | | | | | |

Table 2-4
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Summary of Estimated Water, Sewer, and Stormwater Rates

[illegible]

Table 2-4
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
November 22, 2013
Exhibiting W-6(a) and S-6(a) Utility Assets

[illegible]

Table 2-1
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
SOURCES OF EXISTING WATER AND SEWERAGE SYSTEMS

[illegible]

Table 2-4
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Suzanne, 13, of Keesling, Waco, and Samuel L. Miller, Austin

[illegible]

Table 2-1
City of Miami Beach, Florida
Water, Sewer and Stormwater Rates, Surcharges
SCHEDULE OF RATES, SURCHARGES AND FEES, 2020

| Line No. | Account | Description | Applicable | Volume | Unit | Rate | Minimum | Maximum | Other | Notes |
|----------|---------|----------------------------|------------|--------|------|------|---------|---------|-------|-------|
| 137 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 138 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 139 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 140 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 141 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 142 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 143 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 144 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 145 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 146 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 147 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 148 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 149 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 150 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 151 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 152 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 153 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 154 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 155 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 156 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 157 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 158 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 159 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 160 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 161 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 162 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 163 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 164 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 165 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 166 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 167 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 168 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 169 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 170 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 171 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 172 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 173 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 174 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 175 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 176 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 177 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 178 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 179 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 180 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 181 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 182 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 183 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 184 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 185 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 186 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 187 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 188 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 189 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 190 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 191 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 192 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 193 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 194 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 195 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 196 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 197 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 198 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 199 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |
| 200 | 1100 | GRASS QUALITY SURVEILLANCE | | | | | | | | |

Table 2-1
City of Miami Beach, Florida
Water, Sewer, and Stormwater Rate Study
Srinivas, D. of Ealing Water and Natural Resources

| Row | Code | System | Registration | Registration | Uniqueness | Agreement | Adopt | Supply | Investment | Redistribution | Area | Ref. points | Market | Investment | PRR/Rp | Source %/System | Transaction | Collection | Climate |
|-----|------|--------|--------------|-----------------------------------|------------|------------|-------|--------|------------|----------------|------|-------------|--------|------------|--------|-----------------|-------------|------------|---------|
| | | | | | | | | | | | | | | | | | | | |
| 700 | | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 701 | 700 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 702 | 701 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 703 | 702 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 704 | 703 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 705 | 704 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 706 | 705 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 707 | 706 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 708 | 707 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 709 | 708 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 710 | 709 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 711 | 710 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 712 | 711 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 713 | 712 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 714 | 713 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 715 | 714 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 716 | 715 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 717 | 716 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 718 | 717 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 719 | 718 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 720 | 719 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 721 | 720 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 722 | 721 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 723 | 722 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 724 | 723 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 725 | 724 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 726 | 725 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 727 | 726 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 728 | 727 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 729 | 728 | | | personnel (3) Per person (3) 100% | 1.0 - 2.0 | (100-1000) | | | | | | | | | | | | | |
| 730 | 729 | | | personnel (3) Per person (3) 100% | | | | | | | | | | | | | | | |

Table 2-1
CITY OF MIAMI BEACH, FLORIDA
WATER, SEWER, AND STORMWATER RATE STUDY
SUMMARY OF EXISTING WATER AND SEWER UTILITIES ASSETS

| Line | Amount | Department | Particulars | Account Number | Appropriation | Sub-Item | Source | Year | Project | Activity | Priority | Estimate | Actual | General |
|------|--------|------------|-------------------------------------|----------------|---------------|----------|--------|------|---------|----------|----------|----------|--------|---------|
| 912 | | | Internal Control | | | | | | | | | | | |
| 913 | | | 27000 National Service Center (NSC) | | | | | | | | | | | |
| 914 | | | 27100 National Service Center (NSC) | | | | | | | | | | | |
| 915 | | | 27200 National Service Center (NSC) | | | | | | | | | | | |
| 916 | | | 27300 National Service Center (NSC) | | | | | | | | | | | |
| 917 | | | 27400 National Service Center (NSC) | | | | | | | | | | | |
| 918 | | | 27500 National Service Center (NSC) | | | | | | | | | | | |
| 919 | | | 27600 National Service Center (NSC) | | | | | | | | | | | |
| 920 | | | 27700 National Service Center (NSC) | | | | | | | | | | | |
| 921 | | | 27800 National Service Center (NSC) | | | | | | | | | | | |
| 922 | | | 27900 National Service Center (NSC) | | | | | | | | | | | |
| 923 | | | 28000 National Service Center (NSC) | | | | | | | | | | | |
| 924 | | | 28100 National Service Center (NSC) | | | | | | | | | | | |
| 925 | | | 28200 National Service Center (NSC) | | | | | | | | | | | |
| 926 | | | 28300 National Service Center (NSC) | | | | | | | | | | | |
| 927 | | | 28400 National Service Center (NSC) | | | | | | | | | | | |
| 928 | | | 28500 National Service Center (NSC) | | | | | | | | | | | |
| 929 | | | 28600 National Service Center (NSC) | | | | | | | | | | | |
| 930 | | | 28700 National Service Center (NSC) | | | | | | | | | | | |
| 931 | | | 28800 National Service Center (NSC) | | | | | | | | | | | |
| 932 | | | 28900 National Service Center (NSC) | | | | | | | | | | | |
| 933 | | | 29000 National Service Center (NSC) | | | | | | | | | | | |
| 934 | | | 29100 National Service Center (NSC) | | | | | | | | | | | |
| 935 | | | 29200 National Service Center (NSC) | | | | | | | | | | | |
| 936 | | | 29300 National Service Center (NSC) | | | | | | | | | | | |
| 937 | | | 29400 National Service Center (NSC) | | | | | | | | | | | |
| 938 | | | 29500 National Service Center (NSC) | | | | | | | | | | | |
| 939 | | | 29600 National Service Center (NSC) | | | | | | | | | | | |
| 940 | | | 29700 National Service Center (NSC) | | | | | | | | | | | |
| 941 | | | 29800 National Service Center (NSC) | | | | | | | | | | | |
| 942 | | | 29900 National Service Center (NSC) | | | | | | | | | | | |
| 943 | | | 30000 National Service Center (NSC) | | | | | | | | | | | |
| 944 | | | 30100 National Service Center (NSC) | | | | | | | | | | | |
| 945 | | | 30200 National Service Center (NSC) | | | | | | | | | | | |
| 946 | | | 30300 National Service Center (NSC) | | | | | | | | | | | |
| 947 | | | 30400 National Service Center (NSC) | | | | | | | | | | | |
| 948 | | | 30500 National Service Center (NSC) | | | | | | | | | | | |
| 949 | | | 30600 National Service Center (NSC) | | | | | | | | | | | |
| 950 | | | 30700 National Service Center (NSC) | | | | | | | | | | | |
| 951 | | | 30800 National Service Center (NSC) | | | | | | | | | | | |
| 952 | | | 30900 National Service Center (NSC) | | | | | | | | | | | |
| 953 | | | 31000 National Service Center (NSC) | | | | | | | | | | | |
| 954 | | | 31100 National Service Center (NSC) | | | | | | | | | | | |
| 955 | | | 31200 National Service Center (NSC) | | | | | | | | | | | |
| 956 | | | 31300 National Service Center (NSC) | | | | | | | | | | | |
| 957 | | | 31400 National Service Center (NSC) | | | | | | | | | | | |
| 958 | | | 31500 National Service Center (NSC) | | | | | | | | | | | |
| 959 | | | 31600 National Service Center (NSC) | | | | | | | | | | | |
| 960 | | | 31700 National Service Center (NSC) | | | | | | | | | | | |

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 100% Allocable to Existing Users | | Net Amount For Future Expenditures | Allocation Reference | Supply and Treatment | Functional Category Storage, Pumping and Transmission | Distribution and Collection |
|--|--|----------------|------------------------------|---|-----------|------------------------------------|----------------------|----------------------|---|-----------------------------|
| | | | | \$ | (106,298) | | | | | |
| WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM | | | | | | | | | | |
| 1 | SCADA & PROGRAMMABLE LOGIC CONTROLLERS | Critical Needs | | | | | N/A | | | |
| 2 | STORMWATER CRITICAL NEEDS - ANCILLARY WATER AND SEWER LINE ADJUSTMENTS | Critical Needs | 8,065,000 | | | 8,065,000 | Distr/Collect | | | 8,065,000 |
| 3 | WATER & WASTEWATER MAINS AND RFI/AB | Critical Needs | 136,985,675 | | | 136,985,675 | Transmission | | 136,985,675 | |
| 4 | WATER PLANT 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 1 & 4 | Neighborhoods | 14,515,000 | | | 14,515,000 | W-TR-DistWeight | | 7,571,296 | 6,943,694 |
| 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 | 80 BLOCK OF LINCOLN ROAD | Other | 300,000 | | | 300,000 | Distr/Collect | | | 300,000 |
| 14 | 17TH STREET IMPROVEMENTS PHASE 1 | 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 LINCOLN RD CONNECTOR | Other | 2,711,673 | | | 2,711,673 | Transmission | | 2,711,673 | |
| 17 | FOOT ALTON ROAD UTILITIES RELAXATION | Other | 21,803,138 | | | 21,803,138 | W-TR-DistWeight | | 11,810,264 | 9,992,874 |
| 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 | \$ | | \$ | \$ 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 | Costs Considered 100% Allocable to Existing Users | Net Amount For Future Expenditures | Allocation Reference | Supply and Treatment | Functional Category Storage, Pumping and Transmission | Distribution and Collection |
|--|---|----------------|------------------------------|---|------------------------------------|----------------------|----------------------|---|-----------------------------|
| SEWER SYSTEM CAPITAL IMPROVEMENT PROGRAM | | | | | | | | | |
| 20 | UPGRADES | Critical Needs | \$ 16,105,000 | \$ - | \$ 16,105,000 | FMSCGW: N/A | \$ - | \$ 9,412,621 | \$ 6,492,379 |
| 21 | SCADA & PROGRAMMABLE LOGIC CONTROLLERS | Critical Needs | (425,194) | 425,194 | - | Transmission | - | - | - |
| 22 | SEWER PUMP STATION ODOR CONTROL | Critical Needs | 3,000,000 | - | 3,000,000 | Transmission | - | 3,000,000 | - |
| 23 | SILVER LINE ADJUSTMENTS | Critical Needs | 8,665,000 | - | 8,665,000 | District Collect | - | - | 8,065,000 |
| 24 | VALVE REPLACEMENT PROGRAM | Critical Needs | (811,493) | 811,493 | - | N/A | - | - | - |
| 25 | WASTEWATER STATIONS REHABILITATION | Critical Needs | (48,668,282) | - | - | Transmission | - | 48,668,282 | - |
| 26 | WATER & WASTEWATER MAINS AND RHH AB | Critical Needs | 5,924,865 | - | 5,924,865 | District Collect | - | - | 5,924,865 |
| 27 | 1ST STREET-ALTON RD TO WASHINGTON PH 31.4 | Neighborhoods | 6,494,518 | - | 6,494,518 | Transmission | - | 136,985,675 | - |
| 28 | FLAMINGO-LUDMUS C PHASE 1 | Neighborhoods | 14,515,000 | - | 14,515,000 | FMSCGW: N/A | - | 3,676,394 | 2,618,123 |
| 29 | NORMANDY ISLES A PHASE 1 | Neighborhoods | 2,421,459 | - | 2,421,459 | FMSCGW: N/A | - | 5,851,406 | 5,851,406 |
| 30 | NORMANDY ISLES A PHASE 2 | Neighborhoods | 28,233,218 | - | 28,233,218 | FMSCGW: N/A | - | 1,445,300 | 976,158 |
| 31 | NORMANDY ISLES A PHASE 3 | Neighborhoods | 5,771,581 | - | 5,771,581 | FMSCGW: N/A | - | 16,851,672 | 11,381,606 |
| 32 | NORTH SHORE D - TOWN CENTER PHASE 1 | Neighborhoods | 10,000,000 | - | 10,000,000 | FMSCGW: N/A | - | 1,085,161 | 1,138,161 |
| 33 | NORTH SHORE D - TOWN CENTER PHASE 2 | Neighborhoods | 7,953,802 | - | 7,953,802 | FMSCGW: N/A | - | 3,444,894 | 2,326,687 |
| 34 | WEST AVENUE PH III | Neighborhoods | 300,000 | - | 300,000 | FMSCGW: N/A | - | 5,968,718 | 4,031,282 |
| 35 | 100 BLOCK OF LINCOLN ROAD | Other | 9,600,000 | - | 9,600,000 | District Collect | - | 4,747,400 | 3,206,402 |
| 36 | 17TH STREET IMPROVEMENTS PHASE I | Other | 271,045 | - | 271,045 | FMSCGW: N/A | - | - | 300,000 |
| 37 | COLLINS PARK ANCILLARY IMPROVEMENTS | Other | 2,711,673 | - | 2,711,673 | District Collect | - | 5,729,969 | 3,870,031 |
| 38 | CONVENTION CNTR LINCOLN RD CONNECTOR | Other | 6,734,310 | - | 6,734,310 | Transmission | - | - | 473,045 |
| 39 | DERM & EPA CONSENT DECREE | Other | 21,505,138 | - | 21,505,138 | District Collect | - | 2,711,673 | - |
| 40 | FDOT ALTON ROAD UTILITIES RELOCATION | Other | 1,495,000 | - | 1,495,000 | FMSCGW: N/A | - | 6,734,310 | 6,734,310 |
| 41 | PUBLIC WORKS OPERATIONS FACILITY | Other | - | - | - | FMSCGW: N/A | - | 12,835,811 | 8,669,327 |
| 42 | TOTAL SEWER SYSTEM CAPITAL IMPROVEMENT PROGRAM | | \$ 337,924,199 | \$ 1,256,687 | \$ 339,180,885 | FMSCGW: N/A | \$ - | 892,323 | 602,677 |
| 43 | TOTAL WATER AND SEWER CAPITAL IMPROVEMENT PROGRAM | | \$ 621,500,440 | \$ 1,302,985 | \$ 622,803,425 | | \$ - | \$ 266,519,428 | \$ 72,661,457 |
| 44 | TOTAL WATER AND SEWER CAPITAL IMPROVEMENT PROGRAM | | \$ 621,500,440 | \$ 1,302,985 | \$ 622,803,425 | | \$ - | \$ 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 | 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 | 2,918,818 | 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 | 314 | 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 LINCEN 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 In-Service Date [2] | Estimated Original Cost [3] | Amount Recognized [4] | | Percent to Recognize for Expansion |
|---|--|---------------------------|----------------|-----------------------------|-----------------------------|-----------------------|-----------------|------------------------------------|
| | | | | | | Existing | 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 | 362,108 | 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 10 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 1 | 5,729,969 | Upgrade | 1965 | 692,006 | 5,729,969 | - | 0.00% |
| 27 | CONVENTION CNTR LINCOLN 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:

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

- [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

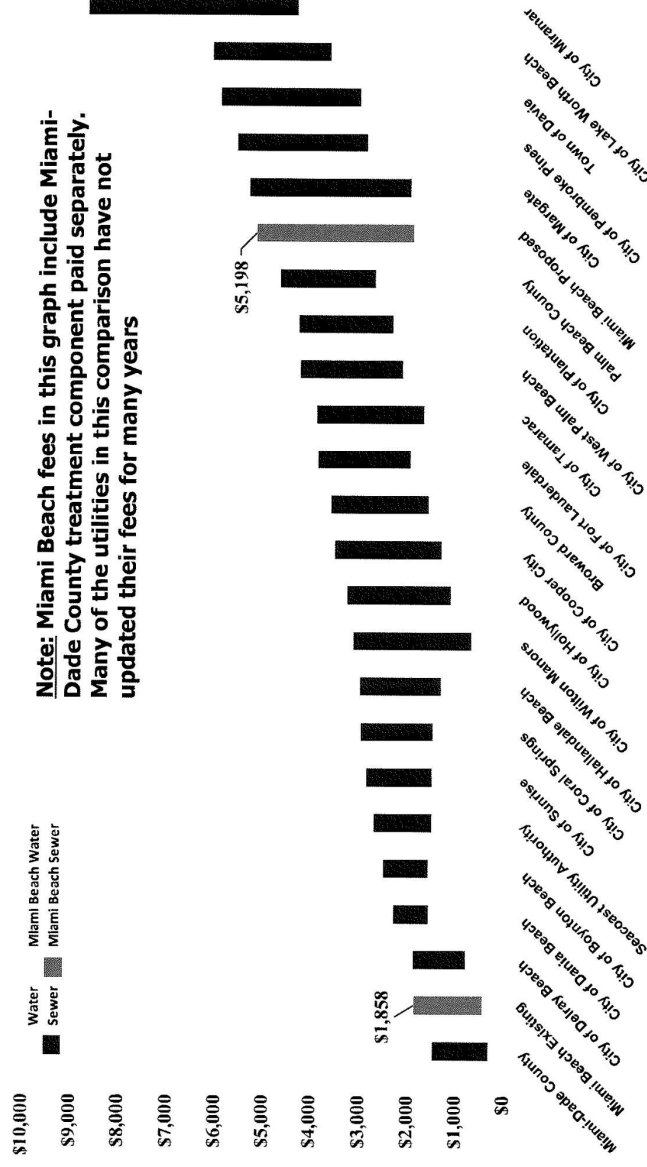
Comparison of Impact Fees Per
Equivalent Residential Connection (ERC) for Water and Sewer Service

| 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 | 2,970 | 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



**Proposed Water and Sewer Impact Fees
Per Equivalent Residential Connection (ERC)**

- Last Adjusted in 1995 – 30 Years Ago
- Case Law: Impact Fees Must Be Proportionate to Benefit Received

| 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

- Impact Fees Support "Growth Paying for Growth" and Help to Reduce Need for Monthly User Rate Increases