

CITY OF MIAMI BEACH, FLORIDA

MIAMI BEACH

FINANCIAL FEASIBILITY REPORT

for the Issuance of

**Stormwater Revenue and
Revenue Refunding Bonds, Series 2017**

December 7, 2017

Appendix C



Public Resources Management Group, Inc.

Utility, Rate, Financial and Management Consultants



Public Resources Management Group, Inc.

Utility, Rate, Financial and Management Consultants

December 7, 2017

Honorable Mayor and
Members of the City Commission
City of Miami Beach
1700 Convention Center Drive
Miami Beach, FL 33129

Subject: **Financial Feasibility Report – City of Miami Beach, Florida
Stormwater Revenue and Revenue Refunding Bonds, Series 2017**

Ladies and Gentlemen:

Presented herein is the Financial Feasibility Report prepared by Public Resources Management Group, Inc. ("PRMG" and the "Feasibility Consultant") in its capacity as the feasibility consultant to the City of Miami Beach, Florida (the "City") for inclusion in the Official Statement that summarizes our analyses, studies and conclusions with regard to the proposal by the City to issue in the principal amount of approximately \$154,745,000 tax-exempt Stormwater Revenue and Revenue Refunding Bonds, Series 2017 (the "Series 2017 Bonds"). The City is expected to use the proceeds from the Series 2017 Bonds to: i) advance refund and defease approximately \$44,270,000 of the Stormwater Revenue Bonds, Series 2011A; ii) advance refund and defease approximately \$25,265,000 of the Stormwater Revenue Refunding Bonds, Series 2011B; iii) finance a portion of the costs of certain capital improvements currently contemplated as part of the City's multi-year program to improve and enhance the effectiveness and reliability of the City's stormwater utility system (the "System") (the "Series 2017 Project"); and iv) pay certain expenses related to the issuance and sale of the Series 2017 Bonds and the refunding of the Bonds to be refunded. This report recognizes only the effects of the portion of the Series 2017 Bonds associated with the financing of the Series 2017 Project. Should the City refund portions of the Stormwater Revenue Bonds, Series 2011A and the Stormwater Revenue Refunding Bonds, Series 2011B as mentioned above, the financial projections presented herein would be improved. For the purposes of this report, it has been assumed that the City will issue approximately \$87,650,000^[1] of tax-exempt Stormwater Revenue Bonds, Series 2017 (the "Series 2017 Revenue Bonds").

Capitalized undefined terms referenced in this letter shall have the meaning ascribed thereto in the Bond Resolution as defined hereinafter.

[1] Preliminary; as of November 20, 2017, assuming a 3.985500% All-In True Interest Cost ("TIC"), as provided by the City's Financial Advisor and is subject to change based on actual sale of the Series 2017 Bonds.

The primary purpose of this report is to provide information for parties reviewing the Official Statement associated with the issuance of the Series 2017 Bonds (the "Official Statement"). This report provides a summary of the financial projections of the System operations for the fiscal years ending September 30, 2018 through 2022 (the "Forecast Period") and the ability of the projected revenues derived from System operations to meet the forecasted expenditure and funding obligations of the System. The report includes, among other things, a presentation and discussion of: i) recent historical and projected billing determinants and customer growth for the System; ii) historical and projected System revenues; iii) the capital improvement needs anticipated to be financed by System operations, including the capital improvements to be financed by the Series 2017 Revenue Bonds, as well as other sources; and iv) the recent historical and projected financial operating results of the System. The projections of financial operating results include estimates of the System's ability to meet the rate covenant requirements of Resolution No. 2000-24127 adopted by the Commission of the City of Miami Beach, Florida (the "City Commission") on October 18, 2000 (the "Original Resolution" and as it may be further amended and supplemented from time to time, the "Bond Resolution"), authorizing the issuance of the Series 2017 Bonds. The financial projections were based on discussions with and information provided by the City; the financial advisor for the City, RBC Capital Markets, LLC (the "Financial Advisor"); the Consulting Engineer for the System, AECOM (the "Consulting Engineer"); as well as certain assumptions and analyses made by PRMG, as the Feasibility Consultant for the System. PRMG does not offer any opinion as to the condition of the System, compliance with regulations imposed by various agencies upon the System, or the estimated costs of the capital improvements anticipated to be funded during the Forecast Period. For additional information regarding a description of the facilities that comprise the System and the capital improvement projects, please refer to Appendix "B" – Engineer's Report attached to the Official Statement.

Findings and Conclusions

Based upon the principal considerations and assumptions and the results of our studies and analyses as summarized in this report, which should be read in its entirety and in conjunction with the following, we are of the opinion that:

1. The projected growth in customers of the System represents reasonable and attainable projections for the purposes of this report. It should be noted that the City's service territory is essentially built out, with very little opportunity for future growth. For the Forecast Period the Annual Compound Growth in Equivalent Residential Units ("ERU") is projected to be approximately 0.05% per year.
2. The projections of Revenues and Current Expenses, including the assumptions used to develop such projections, are reasonable for the purposes of this report. Such projections were based on historical trends in costs, Fiscal Year 2017 preliminary (unaudited) expenses, and budgeted Fiscal Year 2018 expenses as prepared and provided by the City, discussions with the City and its Consulting Engineers, and other industry sources.

3. The System revenues for the Forecast Period under the adopted rates contained in the City's Ordinance No. 2017-4145 and such rates as revised annually pursuant to Section 110-171 of Ordinance No. 2017-4145 (the "Rate Ordinance") and the anticipated rate adjustment assumed to be implemented for Fiscal Year 2019 should be sufficient to pay the projected Current Expenses, pay the estimated Principal and Interest Requirements on the Outstanding Bonds^[2] and anticipated Series 2017 Revenue Bonds coming due in such years.
4. Based on the financial information provided by the City, the Net Revenues of the System have historically (for the past five Fiscal Years ended September 30, 2017) and are projected for the Forecast Period to continue to be in compliance with the rate covenant contained in the Bond Resolution.
5. The existing rates for stormwater service are higher when compared to charges for similar service provided by other neighboring and coastal utilities located in Southeast Florida.

(Remainder of page intentionally left blank)

[2] The Outstanding Bonds include the: i) Stormwater Revenue Refunding Bonds, Taxable Series 2009J-2; ii) Stormwater Revenue Bonds, Series 2011A; iii) Stormwater Revenue Refunding Bonds, Series 2011B; and iv) Stormwater Revenue Bonds, Series 2015.

Honorable Mayor and Members of the City Commission
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The financial projections set forth herein associated with the issuance of the Series 2017 Revenue Bonds were based on discussions with and information provided by the City, the Financial Advisor for the City, and the Consulting Engineers as well as certain assumptions and analyses made by us with respect to such financial projections. The ability of the Net Revenues of the System to fund the Principal and Interest Requirements and comply with the rate covenant set forth in the Bond Resolution is subject to the assumptions and considerations identified herein, including information obtained during the preparation of this report and the projected operating results.

Respectfully submitted,

Public Resources Management Group, Inc.



Henry L. Thomas
Senior Vice President



K. Ryan Smith
Rate Consultant

HLT/dlc
Attachments

CITY OF MIAMI BEACH, FLORIDA
FINANCIAL FEASIBILITY REPORT
STORMWATER REVENUE AND REVENUE REFUNDING BONDS, SERIES 2017

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FINANCIAL FEASIBILITY REPORT
STORMWATER REVENUE AND REVENUE REFUNDING BONDS, SERIES 2017

INTRODUCTION

Presented herein is the Financial Feasibility Report prepared by Public Resources Management Group, Inc. ("PRMG" and the "Feasibility Consultant") in its capacity as the Feasibility Consultant to the City of Miami Beach, Florida (the "City") that summarizes our analyses, studies, and conclusions with regard to the proposal by the City to issue in the principal amount of approximately \$154,745,000 tax-exempt Stormwater Revenue and Revenue Refunding Bonds, Series 2017 (the "Series 2017 Bonds"). The City is expected to use the proceeds from the Series 2017 Bonds primarily to: i) advance refund and defease approximately \$44,270,000 of the Stormwater Revenue Bonds, Series 2011A; ii) advance refund and defease approximately \$25,265,000 of the Stormwater Revenue Refunding Bonds, Series 2011B; iii) finance a portion of the costs of certain capital improvements currently contemplated as part of the City's multi-year program to improve and enhance the effectiveness and reliability of the City's stormwater utility system (the "System"). This report recognizes only the effects of the portion of the Series 2017 Bonds associated with the financing of the Series 2017 Project (defined below). Should the City refund portions of the Stormwater Revenue Bonds, Series 2011A and the Stormwater Revenue Refunding Bonds, Series 2011B as mentioned above, the financial projections presented herein would be improved. For the purposes of this report, it has been assumed that the City will issue approximately \$87,650,000^[1] of tax-exempt Stormwater Revenue Bonds, Series 2017 (the "Series 2017 Revenue Bonds"). The Series 2017 Bonds are being issued under the authority of Resolution No. 2000-24127 as adopted by the Commission of the City of Miami Beach, Florida (the "City Commission") on October 18, 2000 (the "Original Resolution" and as it may be further amended and supplemented from time to time, the "Bond Resolution"). For a more complete description of the Bond Resolution, please refer to Appendix "E" – "The Resolution" in the Official Statement relating to the Series 2017 Bonds (the "Official Statement"). Capitalized, undefined terms used in this report shall have the meanings ascribed thereto in the Bond Resolution.

The City plans to issue the Series 2017 Revenue Bonds in order to finance a portion of the costs of certain capital improvements currently contemplated as part of the City's multi-year program to improve and enhance the effectiveness and reliability of the City's System (the "Series 2017 Project") and pay certain expenses related to the issuance and sale of the Series 2017 Revenue Bonds.

[1] Preliminary; as of November 20, 2017, assuming a 3.985500% All-In True Interest Cost ("TIC"), as provided by the City's Financial Advisor and is subject to change based on actual sale of the Series 2017 Bonds.

Payment of the Outstanding Bonds^[2], the Series 2017 Revenue Bonds, and any additional parity bonds issued by the City pursuant to the Bond Resolution on behalf of the System, together with interest thereon, shall be solely from, and secured equally by, a lien on the Net Revenues derived by the City from the operation of the System. Neither the credit nor taxing power of the City will be pledged for debt repayment of any bonds issued pursuant to the terms of the Bond Resolution.

The primary purpose of this report is to provide information for parties reviewing the Official Statement associated with the issuance of the Series 2017 Bonds. This report summarizes the Feasibility Consultant's findings including the following: i) financial projections of the System for the Fiscal Years ending September 30, 2018 through and including September 30, 2022 (the "Forecast Period"); ii) the ability of the revenues derived from the System operations to meet the estimated expenditure and funding obligations of the System; and iii) the anticipated ability of the System to meet the rate covenant requirements as described in the Bond Resolution in order to provide information for parties reviewing the Official Statement associated with the issuance of the Series 2017 Revenue Bonds. This report also presents the following as documented by the Feasibility Consultant: i) recent historical and projected equivalent residential units ("ERUs") for the System; ii) the schedule of currently effective and anticipated rates for stormwater service; iii) the capital improvement needs anticipated to be financed by the City from System operations, including the Series 2017 Project to be financed by the Series 2017 Revenue Bonds, as well as other capital improvements and funding sources; and iv) the recent historical and projected financial operating results of the System.

PRMG was responsible for the compilation of financial information and the preparation of the recent historical and projected financial results, including the projections of ERUs and System revenues, Current Expenses, and other components that comprise the projected operating results of the System. PRMG is a recognized utility management consulting firm that specializes in the development of rates, charges, and financial projections for publicly-owned and not-for-profit utility systems, primarily in Florida and the southeastern United States. The firm has been involved in numerous utility financings that have involved the preparation of financial forecasts on behalf of local governments and utility corporations in Florida that issue utility bonds secured for repayment solely by the revenues of such utility.

PRMG does not offer any opinion as to the condition of the System, the compliance with regulations promulgated and imposed by various agencies upon the operation or construction of the System, or the estimated cost of improvements funded from System operations as referenced in this report. For a discussion of the System facilities and conditions, reference is made to the report prepared by AECOM (the "Consulting Engineer") and dated December 4, 2017 that is included as Appendix "B" to the Official Statement (the "Engineer's Report").

In the preparation of this report, PRMG relied upon financial, statistical, and operational data provided by the City that has been derived from operating and financial reports and records prepared and provided by City management, including information contained in the

[2] The Outstanding Bonds include the: i) Stormwater Revenue Refunding Bonds, Taxable Series 2009J-2; ii) Stormwater Revenue Bonds, Series 2011A; iii) Stormwater Revenue Refunding Bonds, Series 2011B; and iv) Stormwater Revenue Bonds, Series 2015.

Comprehensive Annual Financial Reports ("CAFR") prepared and provided by the City. We have relied on information provided by the City and other parties and, unless otherwise expressly indicated, have made no independent investigation or audit as to the validity, completeness, or accuracy of such information. PRMG has been furnished information and assumptions from the City and others including the estimated debt service requirements associated with the issuance of the Series 2017 Bonds by the City's financial advisor, RBC Capital Markets, LLC (the "Financial Advisor"), and certain information about the System from the City's Consulting Engineer. We have also utilized information obtained from other utility systems in Florida and other sources. PRMG believes the sources of such information, assumptions, and projections to be reasonable for the purposes of this report. The actual results achieved during the Forecast Period reflected in this report may vary from those projected and such variations could be material. Therefore, such projections and the underlying assumptions are subject to change and we can give no assurances that the projections will be realized. PRMG also relied upon certain assumptions regarding the timing and structure of the Series 2017 Bonds that will be secured for repayment from the Net Revenues of the System. These assumptions were provided by the City's Financial Advisor. The debt-related assumptions may vary from actual results and are subject to market conditions, as well as the City's credit rating at the time of issuance. In using the report prepared by PRMG, the City expressly acknowledges that PRMG is not a "Municipal Advisor" as defined under Section 15B(e)(4)(A) of the Exchange Act of 1934 as amended, and specially as amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act and thus is not providing advice with respect to municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms and conditions and other similar matters concerning financial products or issues.

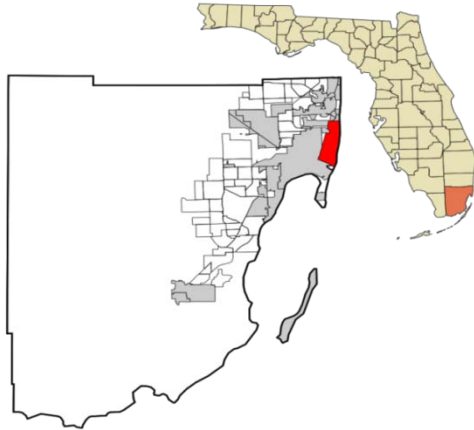
This report summarizes the results of our studies and analyses up to the date of this report. Prospective purchasers of the Series 2017 Bonds should not rely upon the information contained in this report for a current description of any matters set forth herein as of any date subsequent to the date of this report. Changed conditions occurring or becoming known after such date could affect the projections presented herein.

The remainder of this report provides: i) a general overview of the City and the System; ii) a summary of the existing rates for the System as approved by the City Commission and a planned rate adjustment in Fiscal Year 2019; iii) a discussion of the recent and projected customer billing statistics; iv) a presentation of the estimated funding program for the Capital Improvement Program for the System as identified by the City and its Consulting Engineers; v) a discussion of the projected System operating results for the Forecast Period, including a summary of all primary assumptions and analyses relied upon in the development of such projections and the ability of the estimated Net Revenues to meet the rate covenant requirements set forth in the Bond Resolution during the Forecast Period; vi) a summary of the cash reserves of the System at the end of each projected Fiscal Year of the Forecast Period by specific fund or account established by the Bond Resolution and the City; and vii) a summary of our conclusions based on the results of our analyses.

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GENERAL

Figure 1:
Location of the City of Miami Beach, Florida



The City is a political subdivision of the State of Florida governed by the State Constitution and the general laws of the State of Florida, and was incorporated on March 26, 1915. The City occupies approximately 17.5 square miles and is located in the southeastern portion of the State in Miami-Dade County (the "County"). Based on information developed by the Bureau of Economic and Business Research, University of Florida ("BEBR") and published on the website of the State of Florida Office of Economic and Demographic Research (the "2016 BEBR Estimates"), the City had an estimated permanent population of approximately 92,797 people as of April 1, 2016. There are currently 34 municipalities in the County and the City ranks as the 4th largest municipality in the County in terms of population.

In addition to the City, the incorporated municipalities in the County include the county seat of Miami and the major cities of Hialeah and Miami Gardens. Among the sixty-seven counties of Florida, the County ranked first in terms of population in 2016. With a permanent population of approximately 2,700,794 estimated as of April 1, 2016, the County is the seventh highest populated county in the country according to the United States Census Bureau. The population for Miami-Dade County is projected by the Florida Legislative Office of Economics and Demographic Research to increase to approximately 2,832,036 people by the year 2020 (4.9% above 2016 estimates or 1.2% annually), 2,995,956 by the year 2025 (10.9% above 2016 estimates), and 3,155,342 by the year 2030 (16.8% above 2016 estimates). Population projections for individual municipalities were not published.

GENERAL – THE SYSTEM

Stormwater System

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

The System was established to: 1) reduce undesirable stormwater impacts through stormwater run-off reduction; 2) maintain the integrity of the City's stormwater infrastructure; 3) plan for and implement future System improvements; and 4) ensure compliance with Federal and State stormwater management rules and regulations.

The City established the Stormwater Enterprise Fund to create a dedicated funding source to address stormwater management issues. The City bills stormwater rates on a monthly basis along with other utility charges. The City has completed a Stormwater Capital Improvement Program to identify stormwater issues in order to deal with tidal flooding among other issues. The current Capital Improvement Program has identified approximately \$352.8 million in Stormwater

System projects to be appropriated in the Fiscal Years 2018 through 2022. In addition the City's capital spending plan includes \$28.2 million of projects that have been appropriated and begun in prior years and are still under construction for a total amount of \$381 million. The projects consist of a series of major upgrades to the existing stormwater infrastructure located inside the City's jurisdictional boundaries.

The purpose of this feasibility report is to evaluate the sufficiency of the adopted and planned stormwater rates to recover the costs of operating the System and financing the Capital Improvement Program, which, in part, will be funded from the Series 2017 Bonds and allow the System to maintain compliance with the covenants of the Bond Resolution. The adopted and planned rates outlined in this report are intended to fund the capital projects along with the projected costs of operating the System through Fiscal Year 2022. These costs are referred to herein as the System revenue requirements.

The City bills for stormwater service on an ERU basis. An ERU is defined as the average impervious area of a single-family residential home or 791 square feet. For all non-residential properties, each property's impervious area is measured and then divided by 791 square feet to determine the equivalent residential units that are billed for that property. The existing monthly charge for stormwater service is \$23.30 per ERU.

The City adopted the Stormwater Rate Ordinance No. 2017-4145, which among other things, allows the City to adjust monthly user rates automatically in the future based on a price index factor in order to offset the effects of inflation on the cost of operating and maintaining the System. The price indexing factor utilized to adjust the rates annually shall be equal to Consumer Price Index (CPI) – All Urban Consumers, Miami-Fort Lauderdale (Series ID CUURA320SA0), as published by the Bureau of Labor Statistics as reported for the month of April of the current year compared to the index reported for the immediately preceding month of April. The price index factor that was calculated and applied for the rates in effect during Fiscal Year 2018 was 2.80%.

Additionally, the projected operating results presented in this report recognize a planned Fiscal Year 2019 rate adjustment that is needed to maintain compliance with the covenants of the Bond Resolutions which require that the Net Revenues of the System be equal to or greater than: i) one hundred and ten percent (110%) of the annual Principal and Interest Requirement (essentially an accrual of the senior lien debt service payments); ii) provide for 100% of deposits or amounts to be paid to the Reserve Account, Rate Stabilization Account, and Subordinate Indebtedness Account; and iii) provide additional funds available to fund additional future indebtedness currently anticipated to be issued in Fiscal Year 2022; and iv) provide additional annual cash flow to fund capital improvements. The purpose of the Series 2022 Bonds is to fund further stormwater infrastructure improvements in the Capital Improvement Program as set forth herein. Should the City elect to not implement the Fiscal Year 2019 rate adjustment, the City would still be in compliance with the covenants of the Bond Resolution, but would need to reevaluate compliance prior to the issuance of the Series 2022 Bonds. Such amounts are estimated based on information from the City's Financial Advisor, information included in the Engineer's Report and discussions with City staff and are subject to change with respect to both amount and start dates.

EXISTING SYSTEM DEBT AND PLAN OF FINANCE

The City has previously issued long-term debt to fund certain capital improvements to the System. As of September 30, 2017 (the most recently completed Fiscal Year for the City and for which the City has provided PRMG with preliminary operating results [unaudited]), the City had Bonds outstanding in the aggregate principal amount of \$181,255,000 that were issued pursuant to the terms and conditions of the Bond Resolution (the "Outstanding Bonds"), and which are secured by a senior lien pledge on the Net Revenues of the System. The City intends to use the proceeds of the Series 2017 Bonds to finance the cost of construction of the Series 2017 Project as discussed in the Engineer's Report, refund the Refunded Bonds, and pay certain expenses related to the issuance and sale of the Series 2017 Bonds and refunding the Refunded Bonds.

The following is a summary of the Outstanding Bonds for the System as of September 30, 2017:

Outstanding Bonds	As of September 30, 2017
Stormwater Revenue Refunding Bonds, Taxable Series 2009J-2 (the "Series 2009 Bonds") [1]	\$7,190,000
Stormwater Revenue Bonds, Series 2011A (the "Series 2011A Bonds") [2]	49,055,000
Stormwater Revenue Refunding Bonds, Series 2011B (the "Series 2011B Bonds") [3]	25,855,000
Stormwater Revenue Bonds, Series 2015 (the "Series 2015 Bonds")	99,155,000
Total Outstanding Bonds	<u>\$181,255,000</u>

[1] The Series 2009 Bonds are currently outstanding in the aggregate principal amount of \$5,505,000 after December 1, 2017.

[2] Subject to market conditions at the time of pricing of the Series 2017 Bonds, \$44,270,000 of the Series 2011A Bonds are expected to be refunded upon issuance of the Series 2017 Bonds.

[3] Subject to market conditions at the time of pricing of the Series 2017 Bonds, \$25,265,000 of the Series 2011B Bonds are expected to be refunded upon issuance of the Series 2017 Bonds.

In addition to the Outstanding Bonds, the System has two (2) subordinate debts that are pledged for repayment from revenues of the System (the "Subordinate Obligations"). The Subordinate Obligations include: i) a loan with the City for the purchase of machinery and equipment; and ii) Clean Water State Revolving Fund ("SRF") loan SW131300 for surface water restoration projects. The following is a summary of the Subordinate Obligations as of September 30, 2017:

Subordinate Obligations	As of September 30, 2017
Equipment Loan (the "Equipment Loan")	\$38,650
Clean Water State Revolving Fund Loan SW131300 (the "SRF Loan")	5,233,113
Total Subordinate Obligations	<u>\$5,271,763</u>

It should be noted that since September 30, 2017, based on the total SRF loan approved, the amount of the Subordinate Obligations have increased. For the purposes of this report, it has been assumed that of the total amount of Subordinate Obligations will be \$38,650 and \$7,797,500 for the Equipment Loan and the SRF Loan, respectively.

For the purposes of this report and based on the direction of the City's Financial Advisor for the Series 2017 Revenue Bonds, it was assumed that the Series 2017 Revenue Bonds would have: i) an aggregate principal amount of approximately \$87,650,000; ii) an All-In True Interest Cost

(previously defined as "TIC") of 3.985500%; and iii) a delivery date of December 22, 2017. The following is a summary of the estimated sources and uses of the proceeds of the Series 2017 Bonds as provided by the City's Financial Advisor for the Series 2017 Bonds:

Summary of Estimated Series 2017 Revenue Bonds Sources and Uses of Funds [*]	
	Amount
Sources:	
Series 2017 Bond Proceeds – Par Amount	\$87,650,000
Premium	13,139,242
Total Sources of Funds	<u>\$100,789,242</u>
Uses of Funds:	
Deposit to Series 2017 Project Construction Account	\$100,000,000
Cost of Issuance	789,242
Total Uses of Funds	<u>\$100,789,242</u>

[*] Amounts provided by the City's Financial Advisor and are preliminary and subject to change based on the actual sale of the Series 2017 Bonds. Amounts shown reflect City Financial Advisor estimates as of November 20, 2017 and assumes a 3.985500% All-In TIC, which may be different based on actual sale of Series 2017 Bonds.

Additionally, this report assumes the issuance of additional senior lien bonds in order to fund capital improvements beginning in Fiscal Year 2022. For the purposes of this report and based on information provided by the City's Financial Advisor for the additional debt needs, it has been assumed that the City will issue Stormwater Revenue Bonds, Series 2022 (the "Series 2022 Bonds"). The Series 2022 Bonds assume: i) an aggregate principal amount of approximately \$96,920,000; ii) an All-In TIC of 6.063798%; and iii) a delivery date of August 1, 2022.

SYSTEM RATES AND CHARGES

General

The Bond Resolution authorizing the issuance of the Series 2017 Bonds contains a covenant that 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..."^[3]

The City further covenants that it will make revisions to the rates as necessary to ensure that the rate covenant requirements are continuously met.

[3] Reference derived from Article V, Section 502 of the Bond Resolution; for further information, reference "Appendix "E" The Resolution in the Official Statement for the Series 2017 Bonds.

Stormwater Rates for Monthly Service

The rates for monthly service are regulated or set by the City Commission and are not subject to regulation by any other jurisdiction. On October 17, 2017, the City Commission enacted Ordinance No. 2017-4145 that established the stormwater monthly user rates for the System (the "Rate Ordinance"). The adopted monthly rates as referenced in the Rate Ordinance include a service charge that is predicated on the number of ERUs for each parcel or property. The revenues derived from the application of the rates for monthly service has accounted for approximately 99% of the reported System Revenues, which include investment earnings on unrestricted fund balances but not funds where earnings are considered restricted (i.e., any Construction Fund balances) and realized gains from the sale of investments that are considered by the City as a component of the Revenues of the System during the Fiscal Year 2017. It should be noted that the System does not charge any other charges, deposits, or impact fees to customers beyond the monthly service charges.

The following is a summary of the existing adopted monthly rates per ERU for the System as contained in the Rate Ordinance.

	Monthly Stormwater Rate (per ERU)
Adopted Effective October 1, 2017	\$23.30

This report assumes that the City will adjust rates during Fiscal Year 2019 to provide additional funds available to fund additional future indebtedness currently anticipated to be issued in Fiscal Year 2022 and provide additional annual cash flow to fund capital improvements; currently this additional adjustment in Fiscal Year 2019 is assumed to be approximately 19.7%.

No Other Miscellaneous Fees or Charges

The Rate Ordinance does not include any additional fees, charges, deposits, or miscellaneous service charges. The City does not charge stormwater impact fees, which would recover the proportionate share of the cost for the stormwater infrastructure of the System associated with new development. While the imposition of impact fees is common in the state of Florida, typically stormwater utilities do not charge an impact fee to new connections.

Rate Comparisons

Table 11 at the end of this report provides a comparison of the monthly cost of providing stormwater service under the currently existing rates of the System. Also included on the comparison is the impervious surface area per ERU of other neighboring Florida utilities as of the billing month of August 2017. The monthly bills for the various Florida utilities used for the comparison are exclusive of local taxes. As can be seen in the comparisons, the rates charged by the City produce bills that are generally higher than the bills charged for similar service by other neighboring utilities. A summary of the comparison results as shown on Table 11 at the end of this report follows:

(Remainder of page intentionally left blank)

Comparison of Monthly Rates for Stormwater Service [1]

	Rate	Impervious Surface per ERU [2]
<u>City of Miami Beach:</u>		
Existing Rates Effective on October 1, 2017	\$23.30	791
<u>Surveyed Utilities:</u>		
City of Aventura	\$2.50	1,548
City of Boca Raton	3.22	2,837
City of Coral Gables	8.80	2,346
City of Delray Beach	5.33	2,502
City of Fort Lauderdale [3]	10.00	N/A
City of Hollywood	3.22	2,250
City of Homestead [4]	3.37	N/A
City of Miami	3.50	1,191
Miami Dade County	4.00	1,548
City of North Miami	6.19	1,760
Village of Pinecrest	10.00	1,548
City of Pompano Beach	4.21	2,880
City of West Palm Beach	13.57	2,171
<u>All Surveyed Florida Utilities:</u>		
Average	\$5.99	2,053

[1] Amounts based on rate survey of 13 neighboring utility systems as shown on Table 11 at the end of this report.

[2] Impervious Surface Area per ERU is based on the square footage designated by the municipality.

[3] The City of Fort Lauderdale charges residential customers with 3 or less units \$10.00 per month per unit.

[4] The City of Homestead charges residential customers a flat rate of \$3.37 per month.

STORMWATER CUSTOMER STATISTICS

General

This section of the report summarizes the recent trends in the stormwater system customer accounts and projected growth for the System (the "customer billing statistics"). The historical period reflected in this report covers the Fiscal Years ended September 30, 2013 through 2017 (the "Historical Period") and the projected or Forecast Period is for the Fiscal Years 2018 through 2022. Table 1 at the end of this report reflects the historical customer accounts as well as ERU for the System. Table 2 at the end of this report presents the projected customers or accounts, the corresponding ERUs by customer class, and the forecast of stormwater service charge revenues for the Forecast Period.

During Fiscal Year 2017, the City provided stormwater service to an average of 10,067 accounts, and 108,340 stormwater equivalent residential units ("ERU"). An ERU represents the effective impervious surface of a single-family residence and is defined as seven hundred and ninety one (791) square feet of the area covered by all impervious improvements. Use of the ERU methodology allows all accounts to be billed based on relative contribution to stormwater run-off, which recognizes that large, highly developed parcels (a commercial land use such as a mall and absent on-site retention and detention facilities) account for a greater amount of stormwater run-off when compared to a single-family residence. The associated ERUs assigned to all properties regardless of property or customer type are predicated on this impervious surface

relationship. Based on information provided by the City, a summary of the average number of customer accounts and associated ERUs by customer class being served by the Stormwater System for Fiscal Year 2017 is summarized below:

Stormwater System Average Monthly Billed Accounts and ERUs				
Fiscal Year 2017				
	Average Accounts		ERUs	
	Amount	Percent	Amount	Percent
Residential	5,764	57.26%	8,103	7.48%
Condo	953	9.47%	41,054	37.89%
Apartment	1,168	11.60%	14,630	13.50%
Duplex	17	0.17%	46	0.04%
Commercial	1,940	19.27%	28,978	26.75%
Hotel	181	1.80%	6,518	6.02%
City	44	0.43%	9,011	8.32%
Totals	10,067	100.00%	108,340	100.00%

As can be seen above, the single-family residential class represents approximately 57.3% of the total accounts served but only about 7.5% of the total ERUs served, whereas condos make up only 9.5% of the accounts and account for 37.9% of the ERUs of the System.

The following table shows the average annual customer accounts and average annual ERUs during the Historical Period, as can be seen the average annual growth in customer accounts is approximately 0.1% and the average annual growth in ERUs is approximately (0.07%). This low level of growth is indicative of the City's service area being essentially built-out with little available vacant properties that can be improved or developed.

Stormwater System Historical Customer Growth [*]		
Fiscal Year Ended September 30, (Historical)	Average Annual Accounts [2]	Average Annual ERUs [2]
2013	10,024	108,639
2014	10,032	108,951
2015	10,051	107,844
2016	10,070	108,500
2017	10,067	108,340
2013 to 2017	0.1%	(0.07%)

[*] Amounts shown derived from Table 1 at the end of the report.

For the Forecast Period it has been assumed that the average annual growth in customer accounts is estimated at approximately 0.1% per year and the average annual growth in ERUs is estimated at approximately 0.05% per year. This level of growth assumes average annual customer account growth of approximately twelve (12) accounts. Based on discussions with the City and review of recent historical trends, PRMG is of the opinion that this level of growth is conservative and attainable. The following is a summary of the projected stormwater customer accounts and ERUs served during the Forecast Period; this information is presented in detail on Table 2 at the end of this report:

Projected Stormwater Accounts and ERUs [*]

	2017		2018		2019		2020		2021		2022	
	Accounts	ERUs	Accounts	ERUs	Accounts	ERUs	Accounts	ERUs	Accounts	ERUs	Accounts	ERUs
Residential	5,764	8,103	5,774	8,113	5,784	8,123	5,794	8,133	5,804	8,143	5,814	8,153
Condo	953	41,054	953	41,054	953	41,054	953	41,054	953	41,054	953	41,054
Apartment	1,168	14,630	1,168	14,630	1,168	14,630	1,168	14,630	1,168	14,630	1,168	14,630
Duplex	17	46	17	46	17	46	17	46	17	46	17	46
Commercial	1,940	28,978	1,942	29,008	1,944	29,038	1,946	29,068	1,948	29,098	1,950	29,128
Hotel	181	6,518	181	6,518	181	6,518	181	6,518	181	6,518	181	6,518
City	44	9,011	44	9,011	44	9,011	44	9,011	44	9,011	44	9,011
Total	<u>10,067</u>	<u>108,340</u>	<u>10,079</u>	<u>108,380</u>	<u>10,091</u>	<u>108,420</u>	<u>10,103</u>	<u>108,460</u>	<u>10,115</u>	<u>108,500</u>	<u>10,127</u>	<u>108,540</u>

[*] Amounts shown derived from Table 2 at the end of this report.

For the Stormwater System, it is expected that the predominance of the growth will be for serving residential and commercial customers. Actual levels of customer account and ERU growth may vary from these projections if future redevelopment (i.e., residential single-family properties being converted to condos or apartments) occurs within the City's jurisdictional boundaries.

Revenue Forecast

As shown in the previous section and for the determination of projected revenues from stormwater utility service charges during the Forecast Period, in Fiscal Year 2017, the City implemented a thirty-six percent (36.0%) increase to stormwater utility service charges in order to provide additional revenues to fund System capital improvements funded by the anticipated issuance of the Series 2017 Bonds. With respect to the remainder of the Forecast Period for the projection of stormwater revenues, it was assumed that the level of ERUs currently served by the System would not increase significantly and that there would be no decline as a result of the implementation of the increased stormwater utility service charges. The stormwater ERU and revenue projections are shown below and on Table 2 at the end of this report served as the basis for the projection of financial operating results for the System over the Forecast Period.

Stormwater Utility Revenue Projection [1]

Fiscal Year Ended September 30, (Historical)	Average Annual ERUs	Existing Stormwater Utility Service Charge (Monthly)	Estimated Revenue
2018	108,380	\$23.30	\$30,133,813
2019 [2]	108,420	28.54	36,924,310
2020 [2]	108,460	29.34	37,973,334
2021 [2]	108,500	30.16	39,049,016
2022 [2]	108,540	31.00	40,151,385

[1] Amounts shown derived from Table 2 at the end of the report.

[2] Estimated Revenues shown reflect the application of annual rate indexing adjustments and the anticipated additional rate adjustment to become effective on October 1, 2018. It should be noted that except for adjustments resulting from annual rate indexing, the additional rate adjustment has not yet been approved by the City Commission.

As can be seen above the rate adjustment for Fiscal Year 2019 will produce approximately \$6.8 million dollars of additional System revenue that will be required to provide sufficient revenues available to meet the requirements of the System and meet the estimated debt service coverage

requirements associated with the issuance of the proposed Series 2022 Bonds and to fund other capital needs.

Ten Largest Customers of System

In order to provide additional information regarding the System's existing customer base, a summary of certain statistical information of the ten largest retail customers in Fiscal Year 2016 on the basis of revenue billed (pursuant to rates in effect for the System) has been presented based on information compiled by the City. It should be noted that PRMG, is not presenting this information for Fiscal Year 2017, since certain billing information was not yet available at the time of production of this report and Fiscal Year 2016 represents the most recently completed CAFR that was issued for the City. The top ten System customer accounts on a combined basis accounted for approximately fourteen and sixty-five one hundredths (14.65%) of the System's utility service charge revenue in Fiscal Year 2016 as shown in the following table.

Top Ten Stormwater System Retail Customers for Fiscal Year 2016 Based on Stormwater Utility Service Charge Revenue				
Customer Name	Customer Class	Equivalent Residential Units	Annual Rate Revenue [*]	Percent of Total Rate Revenue
Convention Center	City	3,764	\$752,951	3.48%
Metered Parking Division	City	3,100	620,124	2.87%
Mt Sinai Hospital	Commercial	2,453	490,698	2.27%
Fontainebleau Florida	Hotel	1,516	303,261	1.40%
Miami Beach Redevelopment	Commercial	1,277	255,451	1.18%
Deauville Hotel Condominiums	Condominium	1,164	232,847	1.08%
2201 Collins Fee LLC	Condominium	667	133,427	0.62%
Carillon South Joint	Condominium	652	130,426	0.60%
Triton Tower Condominiums	Condominium	630	126,025	0.58%
Decoplage Condominiums	Condominium	598	119,624	0.55%
Total of Ten Largest Users			\$3,164,833	14.65%
All Other System Retail Users			18,443,035	85.35%
Total Fiscal Year 2016 Billed Revenue – All Customer Accounts			\$21,607,868	100.00%

[*] Amounts shown reflect only revenue derived from the monthly stormwater utility service charges.

CAPITAL IMPROVEMENT PROGRAM

Capital Improvement Program Summary

The City has planned capital improvements associated with providing additional stormwater mitigation which includes repairs, replacements, and/or installation of curbs and gutters, reconstruction and/or raising of streets and sidewalks, installation of collection systems, catch basins and manholes, construction of pumping stations, installation of water quality treatment devices, and repairs or upgrades to existing outfalls. The Capital Improvement Program as set forth in this report includes a summary of project appropriations, as shown on Table 5, and associated project expenditures, as shown on Table 6, which reflects project spending curves. Out of a total capital improvement project appropriation of approximately \$381 million, as shown on Table 5, the projected expenditures for new projects during the Forecast Period, based on project spending curves, total \$352.8 million. This excludes the \$28.1 million in capital projects that were appropriated and started in prior Fiscal Years and are assumed to be completed

in Fiscal Year 2018. The cost of the capital improvements is based on capital plans prepared by the City as part of its ongoing Capital Improvement Program. A summary of the Capital Improvement Program project expenditure estimates by funding source for the Forecast Period is presented in the following table and shown in more detail on Table 6 at the end of this report. Based on the total project appropriations of approximately \$381.0 million, for the Forecast Period, approximately \$78.7 million of the capital project expenditures will be spent subsequent to the Forecast Period. The total amount of projects that are anticipated to be appropriated are shown on Table 5 along with the funding sources.

Summary of Capital Improvement Program Spending by Facility Function for the Forecast Period [1][2]							
	Fiscal Year Ending September 30,					Total for Forecast Period	Post [3] Forecast Period
	2018	2019	2020	2021	2022		
Total Annual Capital Projects	\$69,252,199	\$58,646,832	\$59,225,978	\$41,960,466	\$73,198,162	\$302,283,637	\$78,674,987
Funding Sources:							
Operating Reserves	\$225,872	\$263,517	\$138,033	\$14,481,872	\$24,235,703	\$39,344,996	\$14,275,388
Prior Bond Proceeds	28,206,833	0	0	0	0	28,206,833	0
Series 2017 Bond Proceeds	40,819,495	42,112,081	17,068,424	0	0	100,000,000	0
Series 2022 Bond Proceeds	0	0	0	0	37,451,356	37,451,356	\$58,644,047
Miami-Dade County – TIF	0	16,271,234	42,019,522	27,478,595	11,511,103	97,280,453	5,755,551
Total Capital Funding	<u>\$69,252,199</u>	<u>\$58,646,832</u>	<u>\$59,225,978</u>	<u>\$41,960,466</u>	<u>\$73,198,162</u>	<u>\$302,283,637</u>	<u>\$78,674,987</u>

[1] Totals may not add due to rounding.

[2] Amounts shown derived from Table 6 at end of report; amounts reflect capital project spending and not when funds are appropriated for capital projects.

[3] Total amounts of projects to be funded by the proposed Series 2022 Bonds are \$96,095,403. However, the amount shown reflects Fiscal Year 2022 expenditures based on the spending curves provided by the City.

The Capital Improvement Program shown above is presented on a cash basis, which shows when the spending on such projects is expected to occur as compared to an appropriations basis in which the funds must be set aside at the onset of such project. This basis was utilized because the majority of the identified capital projects are estimated to take 24 to 48 months to complete. Additionally, for informational purposes, Table 5 at the end of this report presents the Capital Improvement Program on an appropriations basis. The appropriations basis Capital Improvement Program identified approximately \$381.0 million in capital projects to be appropriated during the Forecast Period, which includes projects started in prior Fiscal Years.

The Series 2017 Project

The City staff has identified for the Fiscal Year 2018 a total amount of capital expenditure appropriations of \$100,000,000 that will be funded from the issuance of the Series 2017 Bonds and are planned to be constructed in the next 36 months. The Series 2017 Project is a grouping of projects which, when combined with the remaining CIP and amounts funded from the proceeds of the Series 2015 Bonds, represents the City's total capital improvement needs to address tidal flooding and stormwater run-off mitigation issues. The capital projects anticipated to be funded from the proceeds of the Series 2017 Bonds include the following:

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Summary of Series 2017 Project [*]	
Capital Project	Total Capital Cost
Indian Creek (FDOT)	\$5,500,000
West Avenue	37,583,744
South Pointe 1st Street	1,178,381
La Gorce / Lakeview	40,000,000
City Center	2,300,000
Sunset Island 3 & 4	2,343,000
Sunset Harbour	3,750,973
Palm and Hibiscus Islands	4,791,402
Central Bayshore South	1,065,000
Central Bayshore	250,000
SCADA and PLC Replacement	1,237,500
Total Series 2017 Project Expenditures	\$100,000,000

[*] Amounts shown provided by the City and represents estimated capital expenditures anticipated to be funded by the Series 2017 Revenue Bonds; such amounts could be modified by the City if capital expenditure priorities change.

For a more detailed description of the capital projects that comprise the Series 2017 Project, please refer to the Engineer's Report included in Appendix "B" in the Official Statement.

Funding Sources for Capital Improvement Program

As discussed above, and show on Tables 5 and Table 6 at the end of this report, the City has identified approximately \$352.8 million in capital requirements funds that will need to be appropriated for the Forecast Period (excludes remaining expenditures for capital projects that were initiated either during or prior to the Fiscal Year 2018; the available fund balance for such work in progress has also been adjusted to recognize the capital appropriations). The City has identified several funding sources for the construction of the above referenced capital projects. Based on an analysis of available funds to the City (e.g., Operating Reserves), the funding sources for the total appropriations-based Capital Improvement Program as assumed for the financial forecast is as follows:

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**Summary of Appropriations Based Capital Funding Sources
for the Forecast Period (Dollars in 000s) [1]**

	Estimated Funding Source [2]	Percent
Series 2017 Bonds [3]	\$100,000	26.25%
Additional Parity Bonds – Series 2022 Bonds[4]	96,095	25.22%
Prior Bond Proceeds	28,207	7.40%
Available Operating Reserves [5]	53,620	14.08%
Tax Increment Financing [6]	103,036	27.05%
Total Estimated Funding Sources	<u>\$380,959</u>	<u>100.00%</u>

[1] Totals may not add due to rounding.

[2] Amounts derived from detailed Capital Improvement Program funding analysis assumed for the purposes of this report; amounts shown include use of available unrestricted funds at beginning of Forecast Period (i.e., October 1, 2017) as well as estimated deposits to such accounts during the Forecast Period from System operations and other sources. Amounts shown are in thousands of dollars (\$000s).

[3] Represents deposit to Series 2017 Construction Account from Series 2017 Revenue Bonds proceeds being issued for the funding of capital improvements on behalf of the System.

[4] Reflects proceeds from the anticipated issuance of additional parity bonds to finance capital projects as identified by the City.

[5] Reflects the use of System reserves earned in prior periods that represent available, unencumbered funds that are not restricted by the City or by resolution / law as to its use or purpose.

[6] Amounts shown represent funds derived from the proposed real estate tax assessment by Miami-Dade County, Florida on the real property located inside the jurisdictional boundaries of Miami-Dade County, Florida.

As can be seen above, approximately 14.08% of the capital program is anticipated by the City to be funded from internal sources (e.g., capital reserve accounts, rate revenues, and other sources). The remainder of the funding for the capital program is primarily associated with external funding sources which include the proceeds of the Series 2017 Bonds, additional bond proceeds (the Series 2022 Bonds), prior bond proceeds, and \$103,036,000 to be funded with tax increment funding anticipated to be available to the City in support of the capital program.

HISTORICAL OPERATING RESULTS

General

The historical operating results for the System are presented for the Fiscal Years ended September 30, 2013 through 2017 (previously defined as the "Historical Period"), and are shown in detail on Table 8 at the end of this report. The operating results for Fiscal Years 2013, 2014, 2015, and 2016 were prepared based on financial information compiled and provided by the City and information included in the CAFR as prepared by the management of the City for the respective fiscal years shown. Amounts shown for Fiscal Year 2017 were based on preliminary operating results as compiled by City staff, while such amounts have not been audited, they appear to be reasonable when compared with Fiscal Year 2016 results. The historical operating results have been presented in a manner consistent with the requirements of the Bond Resolution relative to the determination of Net Revenues of the System. Therefore, the amounts shown reflect certain differences in the presentation of the financial results when compared to the CAFR of the City. Specifically, these major differences include, but may not be limited to: i) Current Expenses do not include depreciation or amortization expenses or internal administrative (central service) charges; ii) interest income does not include earnings on the Construction Fund accounts, if any; and iii) exclusion of other revenues such as proceeds derived from the sale of System property.

Summary of Historical Operating Results

The historical operating results for the System are shown on Table 8 at the end of this report and are summarized as follows:

Summary of Historical System Operating Results and Debt Service Coverage

	Fiscal Year Ended September 30,				
	2013	2014	2015	2016	2017 [1]
Charges for Service [2]	\$11,671,714	\$11,659,582	\$21,258,353	\$21,490,894	\$28,570,734
Interest Income [3]	344,743	220,480	61,205	334,377	187,125
Other Operating Revenues [4]	0	0	0	0	0
Total Revenues	\$12,016,457	\$11,880,062	\$21,319,558	\$21,825,271	\$28,757,859
Current Expenses					
Personal Services [5]	\$1,709,332	\$2,296,788	\$2,559,349	\$2,831,997	\$3,224,137
Operating Supplies	49,114	3,011	17,860	22,703	43,015
Contractual Services	134,718	441,718	1,004,910	1,196,667	2,221,783
Utilities	60,567	69,343	131,791	222,053	288,323
Insurance	0	0	0	0	0
Internal Charges	936,189	357,511	359,129	425,571	436,128
Claims and Judgements	0	0	0	0	0
Other Operating	127,159	124,955	872,332	249,633	300,693
Administrative Fees [6]	584,000	637,000	658,000	798,000	798,000
Less Total Current Expenses	\$3,601,079	\$3,930,326	\$5,603,371	\$5,746,624	\$7,312,079
Net Revenues	\$8,415,378	\$7,949,736	\$15,716,187	\$16,078,647	\$21,445,780
Debt Service Coverage Test:					
Net Revenues	\$8,415,378	\$7,949,736	\$15,716,187	\$16,078,647	\$21,445,780
Principal and Interest Requirements	\$5,847,595	\$5,848,872	\$6,828,297	\$11,236,865	\$11,361,226
Calculated Coverage	144%	136%	230%	143%	189%
Minimum Required	110%	110%	110%	110%	110%

[1] Amounts shown based on preliminary operating results as prepared by City Staff for Fiscal Year 2017; certain adjustments may still be made as the City's external auditor completes their audit of the Comprehensive Annual Financial Report ("CAFR") for Fiscal Year 2017.

[2] Amounts shown are derived from Table 8 at the end of this report and are based on information in the CAFR for Fiscal Years 2013 through 2016 and preliminary information provided by City staff for Fiscal Year 2017 and other financial information provided by the City.

	2013	2014	2015	2016	2017
Revenues:					
Charges for Service	\$11,671,714	\$11,659,582	\$21,258,353	\$21,490,894	\$28,570,734
Permits, Rentals, and Other Revenues	0	55,717	0	0	0
Total Operating Revenues	\$11,671,714	\$11,715,299	\$21,258,353	\$21,490,894	\$28,570,734
FEMA Grant [b]	0	(55,717)	0	0	0
Charges for Service Recognized	\$11,671,714	\$11,659,582	\$21,258,353	\$21,490,894	\$28,570,734

[a] Amounts shown have been excluded from the calculation of debt service compliance since such amounts represent a reimbursement of Operating expenses from a prior period and should not be considered revenue for the current period.

[b] Amount shown has been excluded from the calculation of debt service compliance since such amounts represents a grant received from Federal Emergency Management Agency ("FEMA") for operating expenses associated with the hurricane Wilma event which occurred in 2006, since such event occurred in a prior period such amounts have been excluded from current period revenues.

Footnotes continued on following page.

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Footnotes (cont'd.)

- [3] Amounts shown reflect interest income as reported in the CAFR for Fiscal Years 2013 through 2016 and preliminary information provided by City Staff for Fiscal Year 2017. Amounts shown were adjusted consistent with the definition set forth in the Bond Resolution.

	2013	2014	2015	2016	2017
Interest Income Reported	\$345,512	\$223,638	\$67,119	\$342,414	\$578,395
Adjustments					
Interest Income on Customer Deposits	0	0	0	0	0
Interest Income on Debt Service (430)	(611)	(2,815)	(2,192)	(1,529)	(1,527)
Interest Income on 2011 Bond Construction Fund (431)	(158)	(343)	(640)	(822)	(1,511)
Interest Income on 2015 Bond Construction Fund (432)	0	0	(3,082)	(5,686)	(388,232)
Interest Income Recognized:	<u>\$344,743</u>	<u>\$220,480</u>	<u>\$61,205</u>	<u>\$334,377</u>	<u>\$187,125</u>

- [4] Based on the definition of Revenues as set forth in the Bond Resolution the following Non-operating Revenues and Capital Contributions, as shown for Fiscal Years 2013 through 2016 in each year's CAFR and for Fiscal Year 2017 compiled from preliminary operating results provided by City Staff, have been excluded from the calculation of Revenues. The following has been assumed for Other Operating Revenues in the Calculation of Debt Service Coverage:

	2013	2014	2015	2016	2017
Non-operating Revenues and Capital Contributions per CAFR					
Gain (Loss) on Disposal of Assets	\$4,184	\$23,284	\$36,889	\$37,388	\$0
Unrealized Gains (Losses) on Investments	(171,778)	(81,605)	69,807	84,835	0
Capital Contributions	2,678	0	311	0	(420)
Total Non-operating Revenues and Capital Contributions per CAFR	<u>(\$164,916)</u>	<u>(\$58,321)</u>	<u>\$107,007</u>	<u>\$122,223</u>	<u>(\$420)</u>
Excluded Non-operating Revenues and Capital Contributions per CAFR					
Gain (Loss) on Disposal of Assets	(\$4,184)	(\$23,284)	(\$36,889)	(\$37,388)	\$0
Unrealized Gains (Losses) on Investments	171,778	81,605	(69,807)	(84,835)	0
Capital Contributions	(2,678)	0	(311)	0	420
Other Operating Revenues Recognized:	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

- [5] The following adjustments have been made to personal services as reported in the CAFRs for Fiscal Years 2013 through 2016 and as reported in the preliminary operating results compiled by City Staff for Fiscal Year 2017: i) a contra-expense was recorded in Fiscal Year 2015 and 2016 to report the reduction in the long-term pension liability to account for reporting requirements for Governmental Accounting Standards Board ("GASB") Statement 68, this contra-expense has been removed for the calculation of Current Expenses; and ii) to reclassify transfers out pension funds. The Bond Resolution's definition of Current Expenses states "any reasonable payments to pension or retirement funds properly chargeable to the Stormwater Utility" shall be included as Current Expenses.

	2013	2014	2015	2016	2017
Personal Expenses	\$1,703,961	\$2,290,564	\$2,418,608	\$2,435,996	\$3,511,472
Adjustments:					
Change in Long Term Pension Liability (GASB 68 Actuarial Expense)	0	0	130,741	385,001	(298,335)
Transfer Out – Pension Obligations	5,371	6,224	10,000	11,000	11,000
Total Personal Expenses	<u>\$1,709,332</u>	<u>\$2,296,788</u>	<u>\$2,559,349</u>	<u>\$2,831,997</u>	<u>\$3,224,137</u>

- [6] The Bond Resolution's definition of Current Expenses states the Current Expenses shall not include "any administrative expenses payable to the City's General Fund". The following administrative expenses have been identified as being paid from the Stormwater Utility during the Historical Period. In accordance with the Bond Resolution such amounts that have been paid to the City's General Fund have been excluded from the calculation of Current Expenses. The Stormwater Utility has incurred transfers out to the Sanitation Fund (Fund 435) for administration of the Stormwater Utility; these transfers have been reclassified to Current Expenses. The following summarizes the Administrative Fees recognized in the calculation of Current Expenses.

	2013	2014	2015	2016	2017
Administrative Fees (to General Fund)	\$433,000	\$435,000	\$631,000	\$612,996	\$667,000
Transfers Out (to Sanitation Fund) for Administrative Fees	584,000	637,000	658,000	798,000	798,000
Total Administrative Fees	\$1,017,000	\$1,072,000	\$1,289,000	\$1,410,996	\$1,465,000
Less Administrative Fees Paid to General Fund	<u>(433,000)</u>	<u>(435,000)</u>	<u>(631,000)</u>	<u>(612,996)</u>	<u>(667,000)</u>
Administrative Fees Recognized as Current Expenses:	<u>\$584,000</u>	<u>\$637,000</u>	<u>\$658,000</u>	<u>\$798,000</u>	<u>\$798,000</u>

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In the development of the historical operating results and evaluation of the debt service coverage test as shown above and in more detail on Table 8, several observations and information sources were recognized. The following is a summary of such observations and information sources.

1. The increase in charges for service revenues beginning in Fiscal Year 2015 was due to the implementation of increased monthly stormwater utility service charges as adopted and implemented by the City Commission as a part of Ordinance No. 2014-3894. This rate adjustment was adopted by the City Commission, among other things, to provide sufficient annual revenues to meet the requirements of the Bond Resolution associated with increases in the annual Principal and Interest Requirement associated with the issuance of the Stormwater Revenue Bonds, Series 2015 Bonds (the "Series 2015 Bonds") to fund capital improvements to the System's infrastructure.
2. On a combined basis, Current Expenses increased at a compound annual rate of approximately 20.37% from Fiscal Year 2013 to 2017. Personal Services and Contractual Services account for approximately 97% of the increases to Current Expenses from Fiscal Year 2013 to Fiscal Year 2017. This increase reflects the City's goal of achieving higher maintenance service levels provided to the customers of the Stormwater System.
3. During the Historical Period, the City issued the Series 2015 Bonds in the aggregate principal amount of \$99,590,000 in order to fund certain capital improvements of the System's infrastructure.

There were no subordinate lien bonds pledged from the Net Revenues of the System during the Historical Period. However, the City did execute an equipment capital lease between the City and SunTrust Equipment Finance and Leasing Corporation to finance several vehicles for the City, including for the System. This equipment lease is accounted for as a debt obligation in the City's General Fund and the pledge for repayment is from General Fund revenue sources. The System does transfer to the General Fund its proportionate share of the capital lease payment for the vehicles financed on behalf of the System and this payment has been recognized as a required transfer or payment from the System and would be made prior to the funding of any capital reinvestment requirements from operations.

4. The City currently charges the System administrative fees associated with those costs that are accounted for in the City's General Fund that are allocable to the operations and management of the System. Examples of such expenses would include, but not be limited to, City Manager and City Commission, purchasing, finance and accounting, human resources, and other related costs. Pursuant to the Bond Resolution, the administrative fees are not recognized as Current Expenses. Since such expenses are ongoing and payments are budgeted and made annually from System operations, such payments were also classified as a required transfer and would be made prior to the funding of any capital reinvestment requirements from operations.

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ADDITIONAL BONDS TEST

Since the City is issuing additional indebtedness (the Series 2017 Bonds) on a parity basis with the Outstanding Bonds, the City must meet certain financial tests relative to the issuance of such parity bonds as defined in Section 209 of the Bond Resolution (the "Additional Bonds Test"). The Additional Bonds Test requirements as outlined in the Bond Resolution states that the Net Revenues, as may be adjusted as provided in the Bond Resolution (the "Adjusted Net Revenues"), of the System must comply with certain coverage requirements recognizing the Maximum Principal and Interest Requirements for the Outstanding and additional Series of parity bonds (the "Additional Bonds") for the Fiscal Year following the Fiscal Year in which the improvements to be financed by the Additional Bonds are completed or during any twelve consecutive months in the eighteen months immediately preceding the date of the issuance of the Additional Bonds. Specifically, the Bond Resolution provides that the Adjusted Net Revenues during the Test Period or the Measurement Period (each as hereinafter defined) must be at least equal to one hundred ten percent (110%) of the Maximum Principal and Interest Requirements on the Outstanding and Additional Bonds. For the purposes of the Additional Bonds Test, two tests were performed: i) a historic analysis based on the Fiscal Year 2017 preliminary reported results as compiled by City staff (the "Test Period"), which represents to the most recently completed fiscal year for the City as of the date of this report and occurred within the last 18 months and ii) a projected test based on estimated Fiscal Year 2020 results, which is the assumed Fiscal Year following the construction of the Series 2017 Project (the "Measurement Period").

The Bond Resolution does provide that adjustments to the Net Revenues can be made to reflect, among others, i) increases in rates, fees, rentals and other charges for the services furnished by the System if such increases had been implemented and in effect during such Test Period; and ii) the acquisition of any privately or publicly owned existing water and/or sewer system which became a part of the System if such existing system had been operated as part of the System during such Test Period or Measurement Period. Based on the provisions of the Bond Resolution, the following adjustments were made with respect to the determination of the Additional Bonds Test as reflected in this report for the Test Period and the Measurement Period calculations:

1. The Revenues were increased to reflect the application of the Fiscal Year 2018 rate adjustment of approximately 2.80%, which was adopted with Ordinance No. 2017-4145; this increased the stormwater service charge per ERU from \$22.67 to \$23.30.
2. The annual Principal and Interest Requirements for the Outstanding Bonds were adjusted to recognize the estimated Maximum Principal and Interest Requirements on such Outstanding Bonds, including the issuance of the Series 2017 Revenue Bonds, which were based on assumptions as provided by the City's Financial Advisor. The Fiscal Year of the Maximum Bond Service Requirement for the System was estimated to occur during Fiscal Year 2045 based on: i) the actual Principal and Interest Requirement schedule for the Outstanding Bonds; and ii) the estimated Principal and Interest Requirement schedule for the Series 2017 Revenue Bonds as provided by the City's Financial Advisor. It should be noted, that if the City elects to refund a portion of the Outstanding Bonds as is currently anticipated as a component of the issuance of the Series 2017 Bonds, the potential savings could result in a decreased Maximum Principal and Interest Requirement.

Based on our understanding of the Additional Bonds Test requirements as defined in the Bond Resolution, the Adjusted Net Revenues derived from System operations should be sufficient to meet the Additional Bonds Test requirements as shown as follows:

Estimated Additional Bonds Test [1]				
	Test Period – Twelve Months Ended September 30, 2017			Measurement Period – Fiscal Year 2020
	City-Reported Actual [2]	Adjustments	As Adjusted	As Projected [3]
Revenues:				
Charges for Service [4]	\$28,570,734	\$1,563,079	\$30,133,813	\$30,133,813
Unrestricted Interest Income [5]	187,125	0	187,125	187,125
Other Operating Revenues	0	0	0	0
Total Revenues	\$28,757,859	\$28,757,859	\$28,757,859	\$28,757,859
Current Expenses [6]	\$7,312,079	\$0	\$7,312,079	\$9,266,191
Net Revenues Available for Debt Service	\$21,445,780	\$1,559,171	\$23,008,859	\$21,054,746
Maximum Principal and Interest Requirements				
Maximum Principal and Interest Requirements [7]	\$11,361,226	\$5,461,974	\$16,823,200	\$16,823,200
Maximum Principal and Interest Requirement Coverage – Requirement	110%		110%	110%
Maximum Principal and Interest Requirement Coverage – Calculated	188%		137%	125%

[1] Historical information based on preliminary operating results provided by City Staff for Fiscal Year 2017.

[2] Amounts shown derived from Table 8 and are based on preliminary operating results provided by City Staff for Fiscal Year 2017 for the Test Period.

[3] In accordance with the Bond Resolution, the "Measurement Period" was recognized as the Fiscal Year following the Fiscal Year in which the improvements to be financed by the Additional Bonds are completed, which was assumed to be the Fiscal Year 2021.

[4] The Revenues were increased to reflect the application of the Fiscal Year 2018 rate adjustment of approximately 2.80%, which was adopted with Ordinance No. 2017-4145, which increased the stormwater service charge per ERU from \$22.67 to \$23.30.

[5] Amounts shown reflect interest income on unrestricted fund balances as defined in the Bond Resolution.

[6] Pursuant to the Bond Resolution, Current Expenses do not include depreciation or amortization expenses (non-cash expense) or any administrative expenses (considered as a required transfer) payable the General Fund.

[7] Adjustments reflect estimated increase to reflect the Maximum Principal and Interest Requirements upon the issuance of the Series 2017 Revenue Bonds. The Maximum Principal and Interest Requirements for the combined Bonds are estimated to occur in Fiscal Year 2045 based on information provided by the City's Financial Advisor.

As can be seen in the preceding table and recognizing the estimated Maximum Principal and Interest Requirements on the Outstanding Bonds and the Series 2017 Revenue Bonds as of the date of issuance of the Series 2017 Revenue Bonds, it is estimated that the City would meet the Additional Bonds Test requirements as defined in the Bond Resolution from the Adjusted Net Revenues of the System.

PROJECTED OPERATING RESULTS

General

Projections of the operating results of the System have been prepared for the five Fiscal Years 2018 through 2022 (previously defined as the "Forecast Period"). Projections were based on: i) the adopted Fiscal Year 2018 Budget for the System as provided by City staff; ii) preliminary Fiscal Year 2017 operating results as prepared by City staff, and other supporting financial information as reported by the City for the System; iii) discussions with City staff and its engineering consultants regarding current and future needs associated with capital improvements to the System; iv) information regarding the issuance of additional parity debt requirements as

provided by the City and the City's Financial Advisor; and vi) other information provided by the City and its consultants and advisors.

Presented on Table 9 at the end of this report are the financial projections prepared by PRMG for the System. The table includes annual projections of Revenues, Current Expenses, Principal, and Interest Requirements on the estimated Outstanding Bonds, the Series 2017 Revenue Bonds, and additional parity bonds (the Series 2022 Bonds) anticipated to be issued during the Forecast Period, and balances available for capital outlay and other purposes. Projected revenue includes those from System rates and interest income on the available funds derived from System operations. The projected revenue has been forecasted based on revenue anticipated to be derived from the existing and anticipated monthly stormwater utility rates of the System. The projected total Principal and Interest Requirement shown on Table 9 at the end of this report is subject to change based upon the actual terms of the sale of the Series 2017 Revenue Bonds.

Projected revenue for the System was based on historical growth coupled with information provided by the City relating to projected service area population and development within the System. The projected System revenue has been forecasted based on revenue anticipated to be derived from the adopted rates as reflected the Rate Ordinance (which includes automatic annual rate increases, based on the CPI), and the anticipated additional rate adjustment assumed in Fiscal Year 2019 to provide increased funds for capital projects of the System and to fund the issuance of the Series 2022 Bonds. Such increases, expressed as a percentage of System sales revenue, are projected as follows:

Estimated System Average Rate Percentage Adjustments [1]		
Fiscal Year	Stormwater System	Additional Revenue
2019 [2]	22.5%	\$6,790,497
2020	2.8%	\$1,049,024
2021	2.8%	\$1,075,682
2022	2.8%	\$1,102,369

[1] All rate adjustments are assumed to become effective with bills rendered on October 1st of each Fiscal Year.

[2] Reflects application of a 19.7% rate adjustment in addition to the assumed annual rate indexing adjustment; the 19.7% rate adjustment has not yet been adopted by the City.

Interest income has been estimated on cash (fund) balances estimated to be on deposit and available to the City during the Forecast Period. The projected Current Expenses were increased above current Fiscal Year 2017 estimates based on various factors such as projected expense increases due to inflation and changes in System operations associated with the Capital Improvement Program, and other factors.

Principal Considerations and Assumptions Regarding Projected Operating Results

In the preparation of this report and the conclusions that follow, we have made certain assumptions with respect to conditions that may occur in the future. While we believe the assumptions are reasonable for the purpose of this report, they are dependent upon future events and actual conditions may differ from those assumed. In addition, for our projections and estimates, we have used and relied upon certain information and assumptions provided to us or prepared by others, including: i) information and assumptions provided to us by the City

regarding historical financial information and historical customer and sales statistics; ii) information contained in the City's CAFR and other financial information provided by the City for the Historical Period; iii) assumptions provided by the Financial Advisor with respect to the issuance of the Series 2017 Bonds and the proposed Series 2022 Bonds for the Forecast Period; iv) information provided by the City's Consulting Engineer regarding the System; and v) information provided by the City and its Consulting Engineer with respect to the Capital Improvement Program of the System. While we believe use thereof to be reasonable for the purpose of this report, we offer no further assurances with respect thereto. To the extent that actual conditions differ from those assumed by us herein or from information or assumptions provided to us, or prepared by others, the actual results will vary from those estimated and projected herein.

In making the projections and estimates summarized in this report, the principal considerations and assumptions made by us and the principal information and assumptions provided to us or prepared by others include the following:

1. Projected revenues from current and anticipated rates were based on the schedule of rates as adopted by the City Commission on October 17, 2017 pursuant to Ordinance No. 2017-4145 (previously defined as the "Rate Ordinance"), the application of the assumed rate indexing adjustment, as delineated in Section No. 110-171 of the Rate Ordinance, and the application of an additional rate adjustment of approximately 19.7% the City also anticipates adopting effective October 1, 2018 to provide sufficient revenues to meet the requirements for the issuance of the Series 2022 Bonds and to provide funding for future capital improvements. The following is a summary of the additional stormwater system rate revenues associated with the anticipated rate adjustment recognized for Fiscal Year 2019 which does not include the effect of the assumed rate indexing adjustment:

Revenue from Additional System Rate Adjustment for Series 2022 Bonds and Additional Capital Needs [*]	
	<u>Effective October 1, 2018</u>
Rate Adjustment	19.70%
Rate Adjustment Status	Anticipated / Not Yet Adopted by City Commission
Additional Rate Revenue	<u>\$5,945,458</u>

[*] Amounts based on assumed increases in monthly stormwater utility service charges as billed by the City.

2. The financial projections do not include any other operating revenues associated with sale of scrap or surplus materials and other miscellaneous revenue. As has been discussed previously in this report, the System does not charge any other fees beyond the stormwater utility service. Additionally, while the System may realize additional revenues from the sales of scrap or surplus material from the implementation of the Capital Improvement Program, such amounts have not been included for the purposes of the projected operating results herein. If such revenues do materialize during the Forecast Period that would further enhance the operating results of the System.

3. The Fiscal Year 2018 Budget (the "Budget"), and actual Fiscal Year 2016 and 2017 operating results served as the primary baseline for the expenditure projections. The Budget represents the most recent financial plan for the System as approved by the City Commission. The Fiscal Year 2018 Budget was incorporated into the Fiscal Year 2018 component of the Current Expenses and served as the basis for the projections of the Current Expenses for the Forecast Period.
4. Projected System Current Expenses associated with the operation of the System have been escalated from Fiscal Year 2018 budgeted levels based upon several assumptions. A summary of Current Expenses for the Forecast Period is included on Table 3 at the end of this report, and the escalation references are shown in Table 4. These projected expenditures were escalated for the Forecast Period as follows:
 - a. The projected Current Expenses for the Fiscal Year 2018 were based upon the City's Operating Budget for such Fiscal Year that reflects the most recent annual financial projection of the System prepared by management. Such amounts were incorporated into the Fiscal Year 2018 component of the Forecast Period and were adjusted for other known or anticipated conditions and contingencies in developing the financial forecast included in this report.
 - b. The projected cost of personnel expenses (wages and salaries and associated benefits) were escalated above Fiscal Year 2018 budget estimates by 3.5% annually as discussed with the City staff to reflect increases due to inflation and allowances for salary adjustments, such as position changes of the existing personnel, merit increases, and cost of living adjustments. For the purposes of the projected operating results, it was assumed that all budgeted positions would be filled (no vacancies) for each respective full Fiscal Year, which is consistent with the City's budget process. However, it is anticipated that during the course of each respective Fiscal Year that vacancies may occur which could reduce the overall personnel costs actually paid by the City. Based on discussions with the City and recognizing the growth of the System, no additional personnel (net change in total employees associated with the System) were assumed for the Forecast Period.
 - c. Based on discussions with the City, the City has historically funded 100% of its annual required transfers for its Other Post Employment Benefit ("OPEB") liability, which as a result is required to be recognized in accordance with Governmental Accounting Standards Board Statement (previously defined as "GASB") No. 45, as well as its accrued liability for pensions, which is required to be recognized in accordance with GASB No. 68. The City anticipates that 100% of the required annual transfers will continue to be funded during the Forecast Period.
 - d. Materials and supplies expenses, other contractual services expenses, repair and maintenance expenses, and certain other operating expenses have been projected to increase in general from historical and current budgetary levels at an annual rate equal to inflation ranging from 1.0% to 5.0% based on the nature of the expenditure. These escalation factors were based, in part, on the Implicit GDP Deflator and the Consumer Price Index forecast prepared by the Congressional Budget Office, as contained in the

Economic and Budget Outlook dated August 2017 and recent operating expense trends.

- e. With respect to the projection of the cost for purchased power for the stormwater pumping facilities, such expenses were projected to increase during the Forecast Period based on: i) a review of historical costs and trends recently incurred by the City; ii) discussions with the City staff; and iii) the estimates contained in the 2018 Budget; and as shown on Table 3 at the end of this report. In addition to the growth of the System, an allowance for impacts of cost inflation was recognized for the Forecast Period. With respect to the cost of electricity, an inflationary adjustment equal to 3.00% was assumed, based on the twenty-year average change (1996-2016) in the Consumer Price Index for All South Urban Consumers for Electricity (CUSR0000SEFH01), as published by the Bureau of Labor Statistics.
- f. In the projection of the estimated expenditure requirements, a contingency allowance has been included in each year of the Forecast Period. The contingency allowance assumed for the development of the projected total expenditure needs of the System was based on one percent (1.0%) of the total System Current Expenses for each respective Fiscal Year of the Forecast Period. The allowance has been included as a component of Current Expenses in order to meet any unknown or unplanned expenses throughout each respective Fiscal Year. To the extent the contingency allowance is not required to pay for any Current 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 providing increased funds to finance renewals, replacements, and upgrades to the System over time or to increase cash reserve fund balances. The result of this contingency adjustment was to increase the Current Expenses by approximately \$284,000 for each Fiscal Year of the Forecast Period.
- g. An allowance for bad debt expenses has been made to recognize that a certain amount of revenues will be considered as uncollectible and written-off throughout the year, which is typical for a utility business enterprise. This expenditure item was included as a Current Expense and reflects an incremental adjustment to each year's expenses, and was estimated at 0.25% of rate revenue. The result of this expense adjustment was to increase annual Current Expenses by approximately \$87,000 during the Forecast Period.
- h. Although considered a System operating expense for financial reporting purposes, depreciation and amortization expenses have not been recognized as a component of the Current Expenses, consistent with the provisions of the Bond Resolution, since such amounts represent non-cash expenses.
- i. Included as an operating expense for financial reporting purposes are administrative expenses that represent certain costs accounted for in and payable to the City's General Fund, which supports the ongoing operations of the System. Such expenses include, but are not limited to, City management, financial accounting and reporting, human resources, purchasing, legal, and other service or cost categories. Although considered as an operating expense for financial reporting purposes, such expenses are not

considered as a Current Expense in accordance with the provisions of the Bond Resolution. For the purposes of the projected operating results, the administrative expenses were based on estimates contained in the Fiscal Year 2018 Budget and escalated for the remainder of the Forecast Period at approximately 2.4% annually. Such amounts were recognized as a required transfer for the determination of compliance with the flow of funds pursuant to the Bond Resolution since such costs are required by the City to be paid to the General Fund.

5. As previously discussed in this report and as restated below, the City had outstanding as of September 30, 2017 in the principal amount \$181,255,000 of Bonds issued pursuant to the Bond Resolution (previously defined as the "Outstanding Bonds") that were issued to finance capital improvements to the System and to refund prior Bonds issued for that purpose to achieve interest expense savings. Repayment of the Outstanding Bonds is from the Net Revenues derived from System operations.

Outstanding Bonds	As of September 30, 2017
Stormwater Revenue Refunding Bonds, Taxable Series 2009J-2 (the "Series 2009 Bonds") [1]	\$7,190,000
Stormwater Revenue Bonds, Series 2011A (the "Series 2011A Bonds") [2]	49,055,000
Stormwater Revenue Refunding Bonds, Series 2011B (the "Series 2011B Bonds") [3]	25,855,000
Stormwater Revenue Bonds, Series 2015 (the "Series 2015 Bonds")	99,155,000
Total Outstanding Bonds	<u>\$181,255,000</u>

[1] The Series 2009 Bonds are currently outstanding in the aggregate principal amount of \$5,505,000 after December 1, 2017.

[2] Subject to market conditions at the time of pricing of the Series 2017 Bonds, \$44,270,000 of the Series 2011A Bonds are expected to be refunded upon issuance of the Series 2017 Bonds.

[3] Subject to market conditions at the time of pricing of the Series 2017 Bonds, \$25,265,000 of the Series 2011B Bonds are expected to be refunded upon issuance of the Series 2017 Bonds.

The Principal and Interest Requirement on the Outstanding Bonds included in this report for each year of the Forecast Period was based on the existing debt service schedule for each respective issue and are presented on a "gross" basis (i.e., not net of interest earnings on any debt service related funds or accounts). Furthermore, the amounts shown are based on the Principal and Interest Requirements (i.e., the monthly funding requirements (deposits from rates to the Debt Service Account – an accrual basis) as provided in the Bond Resolution.

6. In addition to the Outstanding Bonds, the System has two (2) subordinate debts that are pledged for repayment from revenues of the System (previously defined as the "Subordinate Obligations"). The Subordinate Obligations include: i) a loan with the City for the purchase of machinery and equipment; and ii) Clean Water SRF loan SW131300 for surface water restoration projects. The following is a summary of the Subordinate Obligations as of September 30, 2017:

Subordinate Obligations	As of September 30, 2017
Equipment Loan (the "Equipment Loan")	\$38,650
Clean Water State Revolving Fund Loan SW131300 (the "SRF Loan")	5,233,113
Total Subordinate Obligations	<u>\$5,271,763</u>

It should be noted that since September 30, 2017, based on the total SRF loan approved, the amount of the Subordinate Obligations have increased. For the purposes of this report, it has been assumed that the total amount of Subordinate Obligations will be \$38,650 and \$7,797,500 for the Equipment Loan and the SRF Loan, respectively.

7. The City plans to issue the tax-exempt Series 2017 Revenue Bonds on parity with then Outstanding Bonds for the primary purpose of financing certain capital improvements as discussed previously in this report. Based on the direction of the City's Financial Advisor for the Series 2017 Revenue Bonds, it was assumed that the Series 2017 Revenue Bonds would have: i) an aggregate principal amount of approximately \$87,650,000; ii) an All-In TIC of 3.985500%; and iii) a delivery date of December 21, 2017. The following is a summary of the estimated sources and uses of the proceeds of the Series 2017 Revenue Bonds as provided by the Financial Advisor for the Series 2017 Revenue Bonds:

Summary of Estimated Series 2017 Revenue Bonds Sources and Uses of Funds [*]	
Sources of Funds:	
Series 2017 Bond Proceeds – Par Amount	\$87,650,000
Premium	13,139,242
Total Sources of Funds	<u>\$100,789,242</u>
Uses of Funds:	
Deposit to Series 2017 Construction Account	\$100,000,000
Cost of Issuance	789,242
Total Uses of Funds	<u>\$100,789,242</u>

[*] Amounts provided by the City's Financial Advisor and are preliminary and subject to change based on the actual sale of the Series 2017 Revenue Bonds. Amounts shown reflect City Financial Advisor estimates as of November 20, 2017 and assumes a 3.985500% All-In TIC, which may be different based on actual sale of Series 2017 Bonds.

8. Based on the multi-year Capital Improvement Program and the corresponding plan of finance, as shown on Tables 5 and 6 at the end of this report, a portion of the projects in the Capital Improvement Program was assumed to be funded from the issuance of additional senior lien bonds (the Series 2022 Bonds) in Fiscal Year 2022. Based on information provided by the City's Financial Advisor for the additional debt needs, it has been assumed that the City would issue of the Stormwater Revenue Bonds, Series 2022 (previously defined as the "Series 2022 Bonds"). The Series 2022 Bonds assume: i) an aggregate principal amount of approximately \$96,920,000; ii) an All-In TIC of 6.063798%; and iii) a delivery date of August 1, 2022.
9. In accordance with normal utility operations and the flow of funds, as provided in the Bond Resolution that authorized the issuance of Outstanding Bonds and additional parity Bonds for the System, interest income has been recognized as an available revenue source to fund the annual expenditure needs and meet the Bond Resolution rate covenant requirements of the System. For the Forecast Period, interest income was based on the estimated balances held in the Enterprise Fund, Stormwater Revenue Bonds Debt Service Account, and the Subordinate Indebtedness Account, anticipated to be on deposit. For the purposes of estimating compliance with the covenants of the Bond Resolution, no interest income has been recognized on fund balances held in accounts, from the issuance of additional parity

bonds (Series 2015 Bonds, Series 2017 Bonds, and Series 2022 Bonds); should the City realize interest income from these fund balances, it would improve the operating results as compared to the amounts presented in this report. With respect to the evaluation of the compliance with the rate covenant described in the Bond Resolution, interest earned on those fund balances, which were available to meet total utility expenditures, was recognized. These fund balances included debt service funds and operating reserves. No earnings on the Construction Fund (established by each series of additional parity bonds issued by the City) were considered for the purposes of meeting the covenant requirements as described in the Bond Resolution.

In development of the estimated interest earnings for the Forecast Period, an average annual interest rate of 0.50% was applied to the estimated average fund balances in each account maintained by the City during the Forecast Period. This interest rate assumption is based on recent earnings performance results of the System and discussions with City staff. A summary of the interest earnings recognized in the financial forecast for each Fiscal Year as well as the estimated cash balances by individual fund or account is presented in Table 10 at the end of this report. The projected interest income recognized in the determination of Net Revenues for the Forecast Period is shown as follows:

Summary of Projected Interest Earnings – For the Forecast Period [1][2]					
	Fiscal Year Ending September 30,				
	2018	2019	2020	2021	2022
Unrestricted Interest Income:					
Enterprise Fund	\$121,942	\$162,153	\$219,835	\$247,534	\$219,372
Stormwater Revenue Bonds Debt Service Account	37,274	40,548	40,495	42,051	43,269
Subordinate Indebtedness Account	1,240	1,147	1,147	1,146	1,146
Total Interest Income	\$160,456	\$203,848	\$261,477	\$290,731	\$263,787

[1] Derived from Table 10 at the end of this report.

[2] Reflects earnings recognized in the development of Revenues.

10. The Capital Improvement Program and corresponding financing plan for the System was based on: i) the City's most recent multi-year Capital Improvement Program; ii) information provided by the City regarding the status of current and anticipated projects (appropriated in prior periods that are considered as active projects with expenditures occurring during the Forecast Period); and iii) discussions with the City and its Consulting Engineer. The Capital Improvement Program is summarized on Tables 5 and 6 at the end of this report. It should be noted that the City continues to redefine and adjust the program due to the changing capital requirements of the City and updates the program annually as part of the normal budget process.

The funding plan for the Capital Improvement Program was based on: i) the purpose of the expenditures; ii) available fund balances in accounts established by the City, which are available for capital projects; iii) the use of proceeds from the Series 2017 Revenue Bonds and the proposed additional parity bonds, the Series 2022 Bonds; and iv) tax increment financing on the real property as imposed by Miami-Dade County, Florida. The following is a summary of the cash expenditures associated with the Capital Improvement Program

recognized in the development of the projected operating results, which is shown in detail on Table 6 at the end of this report:

Summary of Capital Improvement Program by Funding Source for the Forecast Period [1][2]						
	Fiscal Year Ending September 30,					Total for Forecast Period
	2018	2019	2020	2021	2022	
Total Annual Capital Projects	\$69,252,199	\$58,646,832	\$59,225,978	\$41,960,466	\$73,198,162	\$302,283,637
Funding Sources:						
Operating Reserves	\$225,872	\$263,517	\$138,033	\$14,481,872	\$24,235,703	\$39,344,996
Prior Bond Proceeds	28,206,833	0	0	0	0	28,206,833
Series 2017 Revenue Bonds Proceeds	40,819,495	42,112,081	17,068,424	0	0	100,000,000
Series 2022 Bonds Proceeds [3]	0	0	0	0	37,451,356	37,451,356
Miami-Dade County – TIF	0	16,271,234	42,019,522	27,478,595	11,511,103	97,280,453
Total Capital Funding	\$69,252,199	\$58,646,832	\$59,225,978	\$41,960,466	\$73,198,162	\$302,283,637

[1] Totals may not add due to rounding.

[2] Amounts shown derived from Tables 5 and 6 at end of report; amounts reflect capital project spending and not when funds are appropriated for capital projects.

[3] Amounts shown reflect expenditures in Fiscal Year 2022 from the proceeds of the proposed Series 2022 Bonds.

Summary of Projected Operating Results

As shown on Table 9 at the end of this report and summarized as follows, projections have been prepared of the operating results for the System. Such projections were prepared in accordance with our understanding of the flow of funds prescribed by the Bond Resolution and the assumptions and considerations used in the projections as described above.

Summary of Projected System Operating Results and Debt Service Coverage [1]					
	Fiscal Year Ending September 30,				
	2018	2019	2020	2021	2022
Revenues [2]	\$30,294,269	\$37,128,158	\$38,804,411	\$40,520,004	\$42,249,222
Current Expenses [3]	\$8,669,835	\$8,734,305	\$8,996,197	\$9,266,191	\$9,544,544
Net Revenues	\$21,624,434	\$28,393,854	\$29,808,214	\$31,253,812	\$32,704,677
Debt Service Coverage Test [4]					
Net Revenues	\$21,624,434	\$28,393,854	\$29,808,214	\$31,253,812	\$32,704,677
Principal and Interest Requirements	14,909,534	16,219,005	16,197,927	16,820,552	17,307,665
Calculated Coverage	145%	175%	184%	186%	189%
Minimum Required	110%	110%	110%	110%	110%
Other Required Transfers	1,168,836	1,147,176	1,163,700	1,180,180	1,197,506
Amounts Available for Other System Purposes After Payment of Debt Service and Required Transfers [6]	\$5,546,065	\$11,027,672	\$12,446,586	\$13,253,080	\$14,199,506

[1] Amounts shown are derived from Table 9 at the end of this report.

[2] Amounts shown include additional rate revenues derived from the application of the anticipated rate adjustments. It should be noted that the additional rate adjustment of 19.7% for Fiscal Year 2019 has not yet been approved by the City Commission.

[3] Pursuant to the Bond Resolution, amounts shown do not include i) depreciation or amortization expenses that are considered as a non-cash expense; or ii) any administrative expenses payable to the General Fund.

[4] The Principal and Interest Requirements include the Outstanding Bonds, Series 2017 Revenue Bonds, and Series 2022 Bonds. Reference is made to the rate covenant as more fully described in Section 502 of the Bond Resolution (referred to as the "Rate Covenant").

[5] Other required transfers as defined in the Bond Resolution include any required transfers to the Reserve Account, Rate Stabilization Account, and Subordinated Indebtedness Account. For purposes of this report, the administrative fees not recognized as Current Expenses pursuant to the Bond Resolution were classified as required transfers.

[6] Represents amounts available for other System purposes such as future capital expenditures of the System.

CONCLUSIONS

Based upon the principal considerations and assumptions and the results of our studies and analyses, as summarized in this report, which should be read in its entirety in conjunction with the following, we are of the opinion that:

1. The projected growth in customers and usage of the System represents reasonable and attainable projections for the purposes of this report.
2. The projections of Revenues and Current Expenses represent reasonable projections for the purposes of this report. Such projections were based on historical trends in costs, the Fiscal Year 2018 Operating Budget as provided by the City, discussions with the City and its Consulting Engineers, and other industry sources.
3. The System revenues for the Forecast Period under the City approved rates contained in the City's Rate Ordinance and the rates based on the application of the rate indexing provision of the Rate Ordinance and the additional rate adjustment anticipated in Fiscal Year 2019 should be sufficient to pay the projected Current Expenses, pay the estimated Principal and Interest Requirements on the remaining Outstanding Bonds^[4] and anticipated Series 2017 Revenue Bonds coming due in such years, and make the projected deposits to the other accounts established by the Bond Resolution for the System.
4. Based on the financial information provided by the City and assumptions identified in this report, the Net Revenues of the System have historically (for the past five Fiscal Years ended September 30, 2017) and are projected for the Forecast Period to continue to be in compliance with the rate covenant contained in the Bond Resolution.
5. The existing monthly stormwater services charges are generally higher when compared to charges for similar service provided by other neighboring and coastal stormwater utilities located in Southeast Florida.

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[4] The Outstanding Bonds include the: i) Stormwater Revenue Refunding Bonds, Taxable Series 2009J-2; ii) Stormwater Revenue Bonds, Series 2011A; iii) Stormwater Revenue Refunding Bonds, Series 2011B; and iv) Stormwater Revenue Bonds, Series 2015.

CITY OF MIAMI BEACH, FLORIDA
FINANCIAL FEASIBILITY REPORT
STORMWATER REVENUE AND REVENUE REFUNDING BONDS, SERIES 2017

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City of Miami Beach, Florida
Financial Feasibility Report

Summary of Historical Stormwater Customers Statistical Information

Line No	Description	Historical Fiscal Year Ending September 30,				
		2013	2014	2015	2016	2017
1	Residential Accounts	5,737	5,742	5,756	5,772	5,764
2	Residential ERUs [1]	8,076	8,083	8,016	8,152	8,103
3	ERU per Account	1.41	1.41	1.39	1.41	1.41
4	Condo Accounts	954	954	952	953	953
5	Condo ERUs [1]	41,296	41,581	41,010	41,078	41,054
6	ERU per Account	43.29	43.60	43.07	43.10	43.08
7	Apartment Accounts	1,165	1,166	1,165	1,168	1,168
8	Apartment ERUs [1]	14,747	14,742	14,553	14,651	14,630
9	ERU per Account	12.65	12.65	12.50	12.54	12.53
10	Duplex Accounts	17	17	17	17	17
11	Duplex ERUs [1]	48	49	47	46	46
12	ERU per Account	2.87	2.90	2.78	2.71	2.71
13	Commercial Accounts	1,932	1,934	1,936	1,934	1,940
14	Commercial ERUs [1]	29,072	29,065	28,706	29,020	28,978
15	ERU per Account	15.05	15.03	14.83	15.01	14.94
16	Hotel Accounts	181	181	182	182	181
17	Hotel ERUs [1]	6,453	6,486	6,500	6,542	6,518
18	ERU per Account	35.72	35.88	35.78	35.95	36.01
19	City Accounts	39	39	44	44	44
20	City ERUs [1]	8,946	8,946	9,011	9,011	9,011
21	ERU per Account	229.38	229.38	204.80	204.80	204.80
22	Total Accounts	10,024	10,032	10,051	10,070	10,067
23	Total ERUs [1]	108,639	108,951	107,844	108,500	108,340
24	ERU per Account	10.84	10.86	10.73	10.77	10.76

Footnote

- [1] An Equivalent Residential Usage Unit ("ERU") as defined in the City's Code of Ordinance, Chapter 110 Utilities Article III - Stormwater Utility, as the rate per 791 square feet of impervious surface area. Accordingly each residential dwelling unit is assigned one (1) ERU and all non-residential properties are assigned an ERU value based on that properties impervious area divided by 791 square feet.

**City of Miami Beach, Florida
Financial Feasibility Report**

Summary of Projected Customer Statistics and Forecast of System Revenues

Line No	Description	Historical 2017 [1]	Fiscal Year Ending September 30,				
			2018	2019	2020	2021	2022
1	Utility Service Charge (Monthly) [2]	\$ 22.67	\$ 23.30	\$ 28.54	\$ 29.34	\$ 30.16	\$ 31.00
2	Residential Accounts	5,764	5,774	5,784	5,794	5,804	5,814
3	Account Growth	-	10	10	10	10	10
4	ERU Growth	-	10.00	10.00	10.00	10.00	10.00
5	Residential ERUs	8,103	8,113	8,123	8,133	8,143	8,153
6	Average ERUs Per Account	1.41	1.41	1.41	1.41	1.41	1.41
7	Residential Revenue	\$ 2,204,340	\$ 2,268,395	\$ 2,781,965	\$ 2,863,467	\$ 2,947,115	\$ 3,032,916
8	Condo Accounts	953	953	953	953	953	953
9	Account Growth	-	-	-	-	-	-
10	ERU Growth	-	-	-	-	-	-
11	Condo ERUs	41,054	41,054	41,054	41,054	41,054	41,054
12	Average ERUs Per Account	43.08	43.08	43.08	43.08	43.08	43.08
13	Condo Revenue	\$ 11,168,330	\$ 11,478,698	\$ 14,060,174	\$ 14,454,292	\$ 14,858,264	\$ 15,272,088
14	Apartment Accounts	1,168	1,168	1,168	1,168	1,168	1,168
15	Account Growth	-	-	-	-	-	-
16	ERU Growth	-	-	-	-	-	-
17	Apartment ERUs	14,630	14,630	14,630	14,630	14,630	14,630
18	Average ERUs Per Account	12.53	12.53	12.53	12.53	12.53	12.53
19	Apartment Revenue	\$ 3,979,945	\$ 4,090,548	\$ 5,010,482	\$ 5,150,930	\$ 5,294,890	\$ 5,442,360
20	Duplex Accounts	17	17	17	17	17	17
21	Account Growth	-	-	-	-	-	-
22	ERU Growth	-	-	-	-	-	-
23	Duplex ERUs	46	46	46	46	46	46
24	Average ERUs Per Account	2.71	2.71	2.71	2.71	2.71	2.71
25	Duplex Revenue	\$ 12,514	\$ 12,862	\$ 15,754	\$ 16,196	\$ 16,648	\$ 17,112
26	Commercial Accounts	1,940	1,942	1,944	1,946	1,948	1,950
27	Account Growth	-	2.00	2.00	2.00	2.00	2.00
28	ERU Growth	-	30.00	30.00	30.00	30.00	30.00
29	Duplex ERUs	28,978	29,008	29,038	29,068	29,098	29,128
30	Average ERUs Per Account	14.94	14.94	14.94	14.94	14.94	14.94
31	Commercial Revenue	\$ 7,883,175	\$ 8,110,637	\$ 9,944,934	\$ 10,234,261	\$ 10,531,148	\$ 10,835,616
32	Hotel Accounts	181	181	181	181	181	181
33	Account Growth	-	-	-	-	-	-
34	ERU Growth	-	-	-	-	-	-
35	Hotel ERUs	6,518	6,518	6,518	6,518	6,518	6,518
36	Average ERUs Per Account	36.01	36.01	36.01	36.01	36.01	36.01
37	Hotel Revenue	\$ 1,773,157	\$ 1,822,433	\$ 2,232,285	\$ 2,294,857	\$ 2,358,995	\$ 2,424,696
38	City Accounts	44	44	44	44	44	44
39	Account Growth	-	-	-	-	-	-
40	ERU Growth	-	-	-	-	-	-
41	City ERUs	9,011	9,011	9,011	9,011	9,011	9,011
42	Average ERUs Per Account	204.80	204.80	204.80	204.80	204.80	204.80
43	City Revenue	\$ 2,451,352	\$ 2,519,476	\$ 3,086,087	\$ 3,172,593	\$ 3,261,261	\$ 3,352,092
43	Adjustment - Percentage [3]	(0.56%)	(0.56%)	(0.56%)	(0.56%)	(0.56%)	(0.56%)
44	Adjustment - Dollars	\$ (164,599)	\$ (169,235)	\$ (207,372)	\$ (213,263)	\$ (219,304)	\$ (225,495)
Total System							
45	Accounts	10,067	10,079	10,091	10,103	10,115	10,127
46	Account Growth	-	12	12	12	12	12
47	ERU Growth	-	40.00	40.00	40.00	40.00	40.00
48	ERUs	108,340	108,380	108,420	108,460	108,500	108,540
49	ERU Growth	-	40	40	40	40	40
50	Average ERUs Per Account	10.76	10.75	10.74	10.74	10.73	10.72
51	Projected Charges for Service Revenue	\$ 29,308,215	\$ 30,133,813	\$ 36,924,310	\$ 37,973,334	\$ 39,049,016	\$ 40,151,385

Footnotes:

- [1] Fiscal Year 2017 Revenues based on 10 months of actual customer billing data and 2 month of estimated customer billing data. Effective October 1, 2016 the City's stormwater utility service charge increased from \$16.67 to \$22.67 per ERU, per Ordinance 2016-4040. Additionally, the Fiscal Year 2017 Revenue do not include adjustments for accounts receivables. Based on discussions with City Staff, the preliminary Charges for Services presented on Table 8, include an adjustment of approximately (\$737,481) to account for accounts receivables.

- [2] Amounts shown based on the application of rate indexing as adopted by the City in Ordinance No. 2017-4145 and the projected additional rate adjustment to provide revenues sufficient to meet the requirements of the Series 2022 Bonds and internally funded capital needs.

	2018	2019	2020	2021	2022
Projected Rate Indexing Adjustment (a)	2.80%	2.80%	2.80%	2.80%	2.80%
Additional Adjustment - Series 2022 Bonds / Capital Needs	0.00%	19.70%	0.00%	0.00%	0.00%
Total Adjustment	2.80%	22.50%	2.80%	2.80%	2.80%
Utility Service Charge (Monthly)	\$ 23.30	\$ 28.54	\$ 29.34	\$ 30.16	\$ 31.00

(a) Amounts shown based on Section 110-171 of the Rate Ordinance which allows for annual automatic adjustments based upon the Consumer Price Index - All Urban Consumers, Miami-Fort Lauderdale, as published by the Bureau of Labor Statistics as reported for the month of April of the current year.

- [3] Adjustment to calibrate customer billing information from the City's billing system as provided by the City Staff to the total revenue reported in the City's financial accounting system for Fiscal Year 2017.

**City of Miami Beach, Florida
Financial Feasibility Report**

Summary of Budgeted and Projected Operating Expenses

Line No	Description	Adopted	Adjustments	Adjusted	Escalator	Fiscal Year Ending September 30,			
		2018		2018		2019	2020	2021	2022
Stormwater Expenses									
PERSONNEL SERVICES									
1	Salaries and Wages	\$ 2,077,000	\$ -	\$ 2,077,000	Labor	\$ 2,149,695	\$ 2,224,934	\$ 2,302,807	\$ 2,383,405
2	Shift Differential	1,000	-	1,000	Labor	1,035	1,071	1,109	1,148
3	Steeplejack	1,000	-	1,000	Labor	1,035	1,071	1,109	1,148
4	Overtime	151,000	-	151,000	Labor	156,285	161,755	167,416	173,276
5	Holiday Pay - Overtime	3,000	-	3,000	Labor	3,105	3,214	3,326	3,443
6	Work Above Classification	4,000	-	4,000	Labor	4,140	4,285	4,435	4,590
7	Allowances	97,000	-	97,000	Labor	100,395	103,909	107,546	111,310
8	Uniforms	19,000	-	19,000	Labor	19,665	20,353	21,066	21,803
9	Transfers-Pension Obligation	9,000	-	9,000	Labor	9,315	9,641	9,978	10,328
10	Retirement Contributions-Pension	598,000	-	598,000	Labor	618,930	640,593	663,013	686,219
11	Health & Life Insurance	241,000	-	241,000	Labor	249,435	258,165	267,201	276,553
12	Workmen's Compensation Pay	3,000	-	3,000	Labor	3,105	3,214	3,326	3,443
13	FICA	15,000	-	15,000	Labor	15,525	16,068	16,631	17,213
14	Social Security Medicare	33,000	-	33,000	Labor	34,155	35,350	36,588	37,868
15	FICA Alternative (457)	-	-	-	Labor	-	-	-	-
16	OPEB Contributions	10,000	-	10,000	Labor	10,350	10,712	11,087	11,475
17	OPEB Pay-As-You-Go	148,000	-	148,000	Labor	153,180	158,541	164,090	169,833
18	Employee Fringe Benefits	30,000	-	30,000	Labor	31,050	32,137	33,262	34,426
19	TOTAL PERSONNEL SERVICES	\$ 3,440,000	\$ -	\$ 3,440,000		\$ 3,560,400	\$ 3,685,014	\$ 3,813,989	\$ 3,947,479
OPERATING EXPENDITURES									
20	Temporary Labor	\$ 50,000	\$ -	\$ 50,000	ProfSvc	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275
21	Professional Services	452,000	-	452,000	ProfSvc	465,560	479,527	493,913	508,730
22	Bank Fees	100,000	-	100,000	ProfSvc	103,000	106,090	109,273	112,551
23	Electricity	350,000	-	350,000	Electric	360,500	371,315	382,454	393,928
24	Telephone	19,000	-	19,000	Utilities	19,618	20,255	20,913	21,593
25	Water	19,000	-	19,000	Utilities	19,618	20,255	20,913	21,593
26	Sewer	30,000	-	30,000	Utilities	30,975	31,982	33,021	34,094
27	Sanitation Fees	2,000	-	2,000	Utilities	2,065	2,132	2,201	2,273
28	Administration Fee	673,000	-	673,000	Inflation	688,479	705,002	721,923	739,249
29	Rent-Building & Equipment	274,000	-	274,000	Inflation	280,302	287,029	293,918	300,972
30	Hurricane Irma Debris Clean-Up	-	191,000	191,000	Eliminate	-	-	-	-
31	Contract Maintenance	1,615,000	-	1,615,000	Inflation	1,652,145	1,691,796	1,732,400	1,773,977
32	Stormwater	23,000	-	23,000	Utilities	23,748	24,519	25,316	26,139
33	Supplies-Information Technology	-	-	-	Inflation	-	-	-	-
34	Supplies-Office	6,000	-	6,000	Inflation	6,138	6,285	6,436	6,591
35	Contracted Services - Repairs and Maint.	311,000	-	311,000	Repair	323,440	336,378	349,833	363,826
36	Other Operating Expenditures	159,000	-	159,000	Inflation	162,657	166,561	170,558	174,652
37	Engine and Fuel Lubricants	8,000	-	8,000	Oil	8,400	8,820	9,261	9,724
38	Contingencies	371,000	(93,500)	277,500	Calculated	274,765	281,964	289,357	296,949
39	Bad Debt Expense	-	75,335	75,335	Calculated	92,311	94,933	97,623	100,378
40	Dues & Memberships	1,000	-	1,000	Inflation	1,023	1,048	1,073	1,098
41	Travel	-	-	-	Inflation	-	-	-	-
42	Training & Awards	17,000	-	17,000	Inflation	17,391	17,808	18,236	18,673
43	Funded Renewal & Replacement	1,456,000	(1,456,000)	-	Inflation	-	-	-	-
44	TOTAL OPERATING EXPENDITURES	\$ 5,936,000	\$ (1,283,165)	\$ 4,652,835		\$ 4,583,634	\$ 4,706,746	\$ 4,833,258	\$ 4,963,266
DEBT SERVICE									
45	Transfers Out	\$ 798,000	\$ -	\$ 798,000	Inflation	\$ 816,354	\$ 835,946	\$ 856,009	\$ 876,553
46	Transfers Out - Debt Service	3,000	(3,000)	-	Inflation	-	-	-	-
47	TOTAL DEBT SERVICE	\$ 801,000	\$ (3,000)	\$ 798,000		\$ 816,354	\$ 835,946	\$ 856,009	\$ 876,553
OTHER DEBT SERVICE									
48	Equipment Loan	\$ 39,000	\$ (39,000)	\$ -	Inflation	\$ -	\$ -	\$ -	\$ -
49	Debt Service 09	1,966,000	(1,966,000)	-	Inflation	-	-	-	-
50	Line of Credit Fees	75,000	(75,000)	-	Inflation	-	-	-	-
51	Debt Service-11 Additional Bonds	4,856,000	(4,856,000)	-	Inflation	-	-	-	-
52	Stormwater Bond Series 2015	4,549,000	(4,549,000)	-	Inflation	-	-	-	-
53	Stormwater Bond Series 2017	4,952,000	(4,952,000)	-	Inflation	-	-	-	-
54	State Revolving Fund	459,000	(459,000)	-	Inflation	-	-	-	-
55	Cost of Debt Issuance	-	-	-	Inflation	-	-	-	-
56	TOTAL OTHER DEBT SERVICE	\$ 16,896,000	\$ (16,896,000)	\$ -		\$ -	\$ -	\$ -	\$ -

Table 3

**City of Miami Beach, Florida
Financial Feasibility Report**

Summary of Budgeted and Projected Operating Expenses

Line No	Description	Adopted 2018	Adjustments	Adjusted 2018	Escalator	Fiscal Year Ending September 30,			
						2019	2020	2021	2022
	INTERNAL CHARGES								
57	Central Services-Internal Svc	\$ 1,000	\$ -	\$ 1,000	Inflation	\$ 1,023	\$ 1,048	\$ 1,073	\$ 1,098
58	Property Mgmt-Internal Svc	5,000	-	5,000	Inflation	5,115	5,238	5,363	5,492
59	Fleet Management-Internal Svc	65,000	-	65,000	Inflation	66,495	68,091	69,725	71,398
60	Self Insurance-Internal Svc	263,000	-	263,000	Inflation	269,049	275,506	282,118	288,889
61	Applications/Computer Hardware/Network	109,000	-	109,000	Inflation	111,507	114,183	116,924	119,730
62	Fleet Accidents - Internal Svc	9,000	-	9,000	Inflation	9,207	9,428	9,654	9,886
63	TOTAL INTERNAL CHARGES	\$ 452,000	\$ -	\$ 452,000		\$ 462,396	\$ 473,494	\$ 484,857	\$ 496,494
	CAPITAL EXPENDITURES								
64	Motor Vehicles	\$ -	\$ -	\$ -	Inflation	\$ -	\$ -	\$ -	\$ -
65	Machinery & Equipment	-	-	-	Inflation	-	-	-	-
66	Renovations	-	-	-	Inflation	-	-	-	-
67	TOTAL CAPITAL ACCOUNTS	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -
68	TOTAL:	\$ 27,525,000	\$ (18,182,165)	\$ 9,342,835		\$ 9,422,784	\$ 9,701,200	\$ 9,988,114	\$ 10,283,793

City of Miami Beach, Florida
Financial Feasibility Report

Calculation of Operating Expense Escalation Factors

Line No.	Description	Escalation Reference	2019	2020	2021	2022
1	Constant	Constant	1.0000	1.0000	1.0000	1.0000
2	General Inflation [1]	Inflation	1.0230	1.0240	1.0240	1.0240
3	Professional Services	ProfSvc	1.0300	1.0300	1.0300	1.0300
4	Labor Escalator	Labor	1.0350	1.0350	1.0350	1.0350
5	Customer Acct. Growth + Inflation	Customers	1.0234	1.0244	1.0244	1.0244
6	Repair and Maintenance [2]	Repair	1.0400	1.0400	1.0400	1.0400
7	Gas & Oil [3]	Oil	1.0500	1.0500	1.0500	1.0500
8	Rate Revenue	Revenue	1.1839	1.0276	1.0275	1.0275
9	Electric	Electric	1.0300	1.0300	1.0300	1.0300
10	Utilities [4]	Utilities	1.0325	1.0325	1.0325	1.0325
11	Property Taxes	Property	1.0000	1.0000	1.0000	1.0000
12	Insurance Escalator	Insurance	1.1000	1.1000	1.1000	1.1000
13	Management Contract	Mgt Contract	1.0300	1.0300	1.0300	1.0300
14	Elimination Factor	Eliminate	0.0000	0.0000	0.0000	0.0000

Footnotes:

- [1] General Inflation based on the Consumer Price Index (CPI) as published by the Congressional Budget Office as of August 2017.
- [2] Repair and Maintenance based on the Engineering Construction Cost Index as published by the Engineering News Record (ENR) as of August 2017.
- [3] Gas & Oil based on the Fuel Oil index for all United States Cities Average as published by the Bureau of Labor Statistics as of August 2017.
- [4] Utilities is based on the Water, Sewer, and Trash Collection Services Index for all United States Cities Average as published by the Bureau of Labor Statistics as of August 2017.

**City of Miami Beach, Florida
Financial Feasibility Report**

Capital Improvement Program - Appropriations Basis

Line No	Description	Funding Source	Fiscal Year Ending September 30,					
			2018	2019	2020	2021	2022	Total
Stormwater Master Plan Program								
1	Indian Creek (FDOT)	2017Bonds	\$ 5,500,000	\$ -	\$ -	\$ -	\$ -	\$ 5,500,000
2	West Avenue	2017Bonds	37,583,744	-	-	-	-	37,583,744
3	South Pointe 1st Street	2017Bonds	1,178,381	-	-	-	-	1,178,381
4	South Pointe 1st Street	MDC-TIF	-	11,682,780	12,387,961	-	-	24,070,741
5	La Gorce / Lakeview	2017Bonds	40,000,000	-	-	-	-	40,000,000
6	La Gorce / Lakeview - 2nd Funding Source	OpRes	627,421	-	-	-	-	627,421
7	Middle North Bay Road & Mount Sinai Pump Station	MDC-TIF	-	13,227,421	-	-	-	13,227,421
8	North Shore	MDC-TIF	-	-	15,000,000	25,627,421	-	40,627,421
9	City Center	2017Bonds	2,300,000	-	-	-	-	2,300,000
10	City Center [1]	PriorDebt	5,170,000	-	-	-	-	5,170,000
11	City Center	OpRes	-	-	-	40,227,421	-	40,227,421
12	Flamingo Park	2022Bonds	-	-	-	-	55,854,121	55,854,121
13	Nautilus/Orchard Park	2022Bonds	-	-	-	-	19,236,421	19,236,421
14	Normandy Isle South	2022Bonds	-	-	-	-	21,004,861	21,004,861
15	Sunset Island 1&2	OpRes	-	-	-	-	12,765,542	12,765,542
16	Town Center	MDC-TIF	-	-	20,110,421	-	-	20,110,421
17	Lower North Bay Road [1]	PriorDebt	105,973	-	-	-	-	105,973
18	Venetian Islands [1]	PriorDebt	5,407,313	-	-	-	-	5,407,313
19	Sunset Island 3 & 4 [1]	PriorDebt	697,555	-	-	-	-	697,555
20	Sunset Island 3 & 4	2017Bonds	2,343,000	-	-	-	-	2,343,000
21	Sunset Harbour	2017Bonds	3,750,973	-	-	-	-	3,750,973
22	Palm & Hibiscus Islands [1]	PriorDebt	6,642,002	-	-	-	-	6,642,002
23	Palm & Hibiscus Islands	2017Bonds	4,791,402	-	-	-	-	4,791,402
24	Central Bayshore South [1]	PriorDebt	10,133,990	-	-	-	-	10,133,990
25	Central Bayshore South	2017Bonds	1,065,000	-	-	-	-	1,065,000
26	Central Bayshore [1]	PriorDebt	50,000	-	-	-	-	50,000
27	Central Bayshore	2017Bonds	250,000	-	-	-	-	250,000
28	SCADA and PLC Replacement (Stormwater Portion)	2017Bonds	1,237,500	-	-	-	-	1,237,500
29	Lincoln Road Washington Ave to Lenox	MDC-TIF	-	-	5,000,000	-	-	5,000,000
30	Total		\$ 128,834,254	\$ 24,910,201	\$ 52,498,382	\$ 65,854,842	\$ 108,860,945	\$ 380,958,624
Funding Sources								
31	Operating Reserves	OpRes	\$ 627,421	\$ -	\$ -	\$ 40,227,421	\$ 12,765,542	\$ 53,620,384
32	Prior Debt Proceeds	PriorDebt	28,206,833	-	-	-	-	28,206,833
33	Series 2017 Revenue Bonds	2017Bonds	100,000,000	-	-	-	-	100,000,000
34	Series 2022 Bonds	2022Bonds	-	-	-	-	96,095,403	96,095,403
35	Miami Dade County - Tax Increment Financing	MDC-TIF	-	24,910,201	52,498,382	25,627,421	-	103,036,004
36	Total		\$ 128,834,254	\$ 24,910,201	\$ 52,498,382	\$ 65,854,842	\$ 108,860,945	\$ 380,958,624

Footnotes:

- [1] Identifies capital projects which funds were appropriated for and construction was started in prior fiscal years. Amounts shown represent total encumbrances and remaining project budget as of September 30, 2017 (end of Fiscal Year 2017), for the purposes of this analysis, these amounts are considered to be fully spent in Fiscal Year 2018.

**City of Miami Beach, Florida
Financial Feasibility Report**

Summary of Capital Improvement Program - Spending Plan [1]

Line No	Description	Funding Source	Fiscal Year Ending September 30,					
			2018	2019	2020	2021	2022	Total
Stormwater Master Plan Program								
1	Indian Creek (FDOT) [2]	2017Bonds	\$ 3,162,500	\$ 2,337,500	\$ -	\$ -	\$ -	\$ 5,500,000
2	West Avenue [2]	2017Bonds	13,530,148	15,785,172	8,268,424	-	-	37,583,744
3	South Pointe 1st Street [2]	2017Bonds	677,569	500,812	-	-	-	1,178,381
4	South Pointe 1st Street [2]	MDC-TIF	-	8,665,467	10,109,711	5,295,563	-	24,070,741
5	La Gorce / Lakeview [2]	2017Bonds	14,400,000	16,800,000	8,800,000	-	-	40,000,000
6	La Gorce / Lakeview - 2nd Funding Source [2]	OpRes	225,872	263,517	138,033	-	-	627,421
7	Middle North Bay Road & Mount Sinai Pump Station [2]	MDC-TIF	-	7,605,767	5,621,654	-	-	13,227,421
8	North Shore [3]	MDC-TIF	-	-	11,849,664	11,511,103	11,511,103	34,871,870
9	City Center [2]	2017Bonds	1,322,500	977,500	-	-	-	2,300,000
10	City Center [4]	PriorDebt	5,170,000	-	-	-	-	5,170,000
11	City Center [2]	OpRes	-	-	-	14,481,872	16,895,517	31,377,388
12	Flamingo Park [5]	2022Bonds	-	-	-	-	14,312,619	14,312,619
13	Nautilus/Orchard Park [2]	2022Bonds	-	-	-	-	11,060,942	11,060,942
14	Normandy Isle South [2]	2022Bonds	-	-	-	-	12,077,795	12,077,795
15	Sunset Island 1&2 [2]	OpRes	-	-	-	-	7,340,187	7,340,187
16	Town Center [2]	MDC-TIF	-	-	11,563,492	8,546,929	-	20,110,421
17	Lower North Bay Road [4]	PriorDebt	105,973	-	-	-	-	105,973
18	Venetian Islands [4]	PriorDebt	5,407,313	-	-	-	-	5,407,313
19	Sunset Island 3 & 4 [4]	PriorDebt	697,555	-	-	-	-	697,555
20	Sunset Island 3 & 4 [2]	2017Bonds	1,347,225	995,775	-	-	-	2,343,000
21	Sunset Harbour [2]	2017Bonds	2,156,809	1,594,164	-	-	-	3,750,973
22	Palm & Hibiscus Islands [4]	PriorDebt	6,642,002	-	-	-	-	6,642,002
23	Palm & Hibiscus Islands [2]	2017Bonds	2,755,056	2,036,346	-	-	-	4,791,402
24	Central Bayshore South [4]	PriorDebt	10,133,990	-	-	-	-	10,133,990
25	Central Bayshore South [2]	2017Bonds	612,375	452,625	-	-	-	1,065,000
26	Central Bayshore [2]	PriorDebt	50,000	-	-	-	-	50,000
27	Central Bayshore [2]	2017Bonds	143,750	106,250	-	-	-	250,000
28	SCADA and PLC Replacement (Stormwater Portion) [2]	2017Bonds	711,563	525,938	-	-	-	1,237,500
29	Lincoln Road Washington Ave to Lenox [2]	MDC-TIF	-	-	2,875,000	2,125,000	-	5,000,000
30	Total		\$69,252,199	\$58,646,832	\$59,225,978	\$41,960,466	\$73,198,162	\$302,283,637
Funding Sources								
31	Operating Reserves	OpRes	\$ 225,872	\$ 263,517	\$ 138,033	\$ 14,481,872	\$ 24,235,703	\$ 39,344,996
32	Prior Debt Proceeds	PriorDebt	28,206,833	-	-	-	-	28,206,833
33	Series 2017 Revenue Bonds	2017Bonds	40,819,495	42,112,081	17,068,424	-	-	100,000,000
34	Series 2022 Bonds [6]	2022Bonds	-	-	-	-	37,451,356	37,451,356
35	Miami Dade County - Tax Increment Financing [7]	MDC-TIF	-	16,271,234	42,019,522	27,478,595	11,511,103	97,280,453
36	Total		\$ 69,252,199	\$ 58,646,832	\$ 59,225,978	\$ 41,960,466	\$ 73,198,162	\$ 302,283,637

Footnotes:

- [1] Amounts shown based on the Capital Improvement Program shown on Table 5, which was based on identified capital needs of the System as indicated in the Engineer's Report, which is included in Appendix B of the Official Statement.
- [2] Amounts shown based on discussions with City staff and recognized the following assumptions: i) initial design / construction start date commencing with the onset of such fiscal year; ii) estimated project design lasting approximately six (6) months; iii) estimated project design cost equal to approximately fifteen percent (15.0%) of the total project cost; iv) estimated project construction time frame of approximately eighteen (18) months, commencing after project design is completed; and v) estimated project construction cost equal to approximately eighty-five percent (85.0%) of the total project cost.
- [3] Amounts shown based on discussions with City staff and recognized the following assumptions: i) initial design / construction start date commencing with the onset of such fiscal year; ii) estimated project design lasting approximately six (6) months; iii) estimated project design cost equal to approximately fifteen percent (15.0%) of the total project cost; iv) estimated project construction time frame of approximately twenty four (24) months, commencing after project design is completed; and v) estimated project construction cost equal to approximately eighty-five percent (85.0%) of the total project cost.
- [4] Identifies capital projects which funds were appropriated for and construction was started in prior fiscal years. Amounts shown represent total encumbrances and remaining project budget as of September 30, 2017 (end of Fiscal Year 2017), for the purposes of this analysis, these amounts are considered to be fully spent in Fiscal Year 2018.
- [5] Amounts shown based on discussions with City staff and recognized the following assumptions: i) initial design / construction start date commencing with the onset of such fiscal year; ii) estimated project design lasting approximately six (6) months; iii) estimated project design cost equal to approximately fifteen percent (15.0%) of the total project cost; iv) estimated project construction time frame of approximately forty eight (48) months, commencing after project design is completed; and v) estimated project construction cost equal to approximately eighty-five percent (85.0%) of the total project cost.
- [6] Amounts shown represent projects that are identified to be funded from the issuance of the proposed Series 2022 Bonds which are assumed to be additional senior lien bonds which will be issued on par with the Series 2017 Revenue Bonds of approximately \$96,095,403. The amount shown represents Fiscal Year 2022 spending, based on discussions with City staff.
- [7] Amounts shown represent projects that are identified to be funded from a tax increment financing assessments which will be assessed on the real property within Miami-Dade County, Florida (the "County"). The County will collect and distributed amounts collected to the City annually. Based on discussions with City staff, it has been assumed that sufficient funds will be available to fund the approximately \$103,741,185 of stormwater system projects.

**City of Miami Beach, Florida
Financial Feasibility Report**

Summary of Outstanding and Proposed Senior Lien Bonds - Principal and Interest Requirements

Line No	Fiscal Year	Outstanding Bonds - Annual Debt Service Payments											
		Stormwater Revenue Refunding Bonds, Taxable Series 2009J-2			Stormwater Revenue Bonds, Series 2011A			Stormwater Revenue Refunding Bonds, Series 2011B			Stormwater Revenue Bonds, Series 2015		
		Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
1	2018	\$ 1,685,000	\$ 280,916	\$ 1,965,916	\$ 1,110,000	\$ 2,384,496	\$ 3,494,496	\$ 140,000	\$ 1,218,700	\$ 1,358,700	\$ 445,000	\$ 4,102,019	\$ 4,547,019
2	2019	1,755,000	207,141	1,962,141	1,165,000	2,328,996	3,493,996	145,000	1,211,700	1,356,700	460,000	4,088,669	4,548,669
3	2020	1,835,000	127,463	1,962,463	1,225,000	2,270,746	3,495,746	150,000	1,207,350	1,357,350	475,000	4,074,869	4,549,869
4	2021	1,915,000	43,088	1,958,088	1,285,000	2,209,496	3,494,496	155,000	1,199,850	1,354,850	495,000	4,060,619	4,555,619
5	2022	-	-	-	1,350,000	2,145,246	3,495,246	2,295,000	1,192,100	3,487,100	330,000	4,050,719	4,380,719
6	2023	-	-	-	1,415,000	2,077,746	3,492,746	2,410,000	1,071,613	3,481,613	345,000	4,043,294	4,388,294
7	2024	-	-	-	1,490,000	2,003,459	3,493,459	2,540,000	945,088	3,485,088	350,000	4,034,669	4,384,669
8	2025	-	-	-	1,570,000	1,925,234	3,495,234	2,670,000	811,738	3,481,738	360,000	4,024,169	4,384,169
9	2026	-	-	-	1,650,000	1,842,809	3,492,809	2,810,000	671,563	3,481,563	375,000	4,013,369	4,388,369
10	2027	-	-	-	1,740,000	1,756,184	3,496,184	2,935,000	548,625	3,483,625	380,000	4,002,119	4,382,119
11	2028	-	-	-	1,810,000	1,684,409	3,494,409	3,065,000	420,219	3,485,219	395,000	3,990,244	4,385,244
12	2029	-	-	-	1,905,000	1,589,384	3,494,384	3,200,000	286,125	3,486,125	405,000	3,977,406	4,382,406
13	2030	-	-	-	1,990,000	1,506,040	3,496,040	3,340,000	146,125	3,486,125	420,000	3,963,738	4,383,738
14	2031	-	-	-	2,095,000	1,401,565	3,496,565	-	-	-	3,920,000	3,949,038	7,869,038
15	2032	-	-	-	2,185,000	1,307,290	3,492,290	-	-	-	4,060,000	3,811,838	7,871,838
16	2033	-	-	-	2,290,000	1,202,135	3,492,135	-	-	-	4,200,000	3,669,738	7,869,738
17	2034	-	-	-	2,400,000	1,091,925	3,491,925	-	-	-	4,355,000	3,517,488	7,872,488
18	2035	-	-	-	2,520,000	976,395	3,496,395	-	-	-	4,515,000	3,354,175	7,869,175
19	2036	-	-	-	2,640,000	855,075	3,495,075	-	-	-	4,695,000	3,172,363	7,867,363
20	2037	-	-	-	2,765,000	727,950	3,492,950	-	-	-	4,875,000	2,996,300	7,871,300
21	2038	-	-	-	2,900,000	595,700	3,495,700	-	-	-	5,115,000	2,752,550	7,867,550
22	2039	-	-	-	3,035,000	457,000	3,492,000	-	-	-	5,375,000	2,496,800	7,871,800
23	2040	-	-	-	3,185,000	311,838	3,496,838	-	-	-	5,640,000	2,228,050	7,868,050
24	2041	-	-	-	3,335,000	159,500	3,494,500	-	-	-	5,925,000	1,946,050	7,871,050
25	2042	-	-	-	-	-	-	-	-	-	9,715,000	1,649,800	11,364,800
26	2043	-	-	-	-	-	-	-	-	-	10,100,000	1,261,200	11,361,200
27	2044	-	-	-	-	-	-	-	-	-	10,505,000	857,200	11,362,200
28	2045	-	-	-	-	-	-	-	-	-	10,925,000	437,000	11,362,000
29	2046	-	-	-	-	-	-	-	-	-	-	-	-
30	2047	-	-	-	-	-	-	-	-	-	-	-	-
31	2048	-	-	-	-	-	-	-	-	-	-	-	-
32	2049	-	-	-	-	-	-	-	-	-	-	-	-
33	2050	-	-	-	-	-	-	-	-	-	-	-	-
34	2051	-	-	-	-	-	-	-	-	-	-	-	-
35	2052	-	-	-	-	-	-	-	-	-	-	-	-
36	2053	-	-	-	-	-	-	-	-	-	-	-	-
37	2054	-	-	-	-	-	-	-	-	-	-	-	-
38	2055	-	-	-	-	-	-	-	-	-	-	-	-
39	Total	\$ 7,190,000	\$ 658,607	\$ 7,848,607	\$ 49,055,000	\$ 34,810,618	\$ 83,865,618	\$ 25,855,000	\$ 10,930,796	\$ 36,785,796	\$ 99,155,000	\$ 90,525,488	\$ 189,680,488

**City of Miami Beach, Florida
Financial Feasibility Report**

Summary of Outstanding and Proposed Senior Lien Bonds - Principal and Interest Requirements

Line No	Fiscal Year	Proposed Bonds - Annual Debt Service Payments						Total Outstanding and Proposed Bonds - Annual Debt Service Payments					
		Stormwater Revenue Bonds, Series 2017			Stormwater Revenue Bonds, Series 2022			Principal			Interest		
		Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
40	2018	\$ 500,000	\$ 3,043,403	\$ 3,543,403	\$ -	\$ -	\$ -	\$ 3,880,000	\$ 11,029,534	\$ 14,909,534			
41	2019	500,000	4,357,500	4,857,500	-	-	-	4,025,000	12,194,005	16,219,005			
42	2020	500,000	4,332,500	4,832,500	-	-	-	4,185,000	12,012,927	16,197,927			
43	2021	1,150,000	4,307,500	5,457,500	-	-	-	5,000,000	11,820,552	16,820,552			
44	2022	1,210,000	4,250,000	5,460,000	-	484,600	484,600	5,185,000	12,122,665	17,307,665			
45	2023	1,270,000	4,189,500	5,459,500	25,000	5,815,200	5,840,200	5,465,000	17,197,353	22,662,353			
46	2024	1,330,000	4,126,000	5,456,000	30,000	5,813,700	5,843,700	5,740,000	16,922,916	22,662,916			
47	2025	1,400,000	4,059,500	5,459,500	30,000	5,811,900	5,841,900	6,030,000	16,632,541	22,662,541			
48	2026	1,470,000	3,989,500	5,459,500	30,000	5,810,100	5,840,100	6,335,000	16,327,341	22,662,341			
49	2027	1,545,000	3,916,000	5,461,000	30,000	5,808,300	5,838,300	6,630,000	16,031,228	22,661,228			
50	2028	1,615,000	3,838,750	5,453,750	35,000	5,806,500	5,841,500	6,920,000	15,740,122	22,660,122			
51	2029	1,700,000	3,758,000	5,458,000	35,000	5,804,400	5,839,400	7,245,000	15,415,315	22,660,315			
52	2030	1,780,000	3,673,000	5,453,000	40,000	5,802,300	5,842,300	7,570,000	15,091,203	22,661,203			
53	2031	1,870,000	3,584,000	5,454,000	45,000	5,799,900	5,844,900	7,930,000	14,734,503	22,664,503			
54	2032	1,965,000	3,490,500	5,455,500	45,000	5,797,200	5,842,200	8,255,000	14,406,828	22,661,828			
55	2033	2,065,000	3,392,250	5,457,250	50,000	5,794,500	5,844,500	8,605,000	14,058,623	22,663,623			
56	2034	2,165,000	3,289,000	5,454,000	50,000	5,791,500	5,841,500	8,970,000	13,689,913	22,659,913			
57	2035	2,275,000	3,180,750	5,455,750	55,000	5,788,500	5,843,500	9,365,000	13,299,820	22,664,820			
58	2036	2,390,000	3,067,000	5,457,000	60,000	5,785,200	5,845,200	9,785,000	12,879,638	22,664,638			
59	2037	2,510,000	2,947,500	5,457,500	60,000	5,781,600	5,841,600	10,210,000	12,453,350	22,663,350			
60	2038	2,635,000	2,822,000	5,457,000	65,000	5,778,000	5,843,000	10,715,000	11,948,250	22,663,250			
61	2039	2,765,000	2,690,250	5,455,250	70,000	5,774,100	5,844,100	11,245,000	11,418,150	22,663,150			
62	2040	2,905,000	2,552,000	5,457,000	70,000	5,769,900	5,839,900	11,800,000	10,861,788	22,661,788			
63	2041	3,050,000	2,406,750	5,456,750	75,000	5,765,700	5,840,700	12,385,000	10,278,000	22,663,000			
64	2042	3,200,000	2,254,250	5,454,250	80,000	5,761,200	5,841,200	12,995,000	9,665,250	22,660,250			
65	2043	3,365,000	2,094,250	5,459,250	85,000	5,756,400	5,841,400	13,550,000	9,111,850	22,661,850			
66	2044	3,535,000	1,926,000	5,461,000	90,000	5,751,300	5,841,300	14,130,000	8,534,500	22,664,500			
67	2045	3,710,000	1,749,250	5,459,250	95,000	5,745,900	5,840,900	14,730,000	7,932,150	22,662,150			
68	2046	15,255,000	1,563,750	16,818,750	105,000	5,740,200	5,845,200	15,360,000	7,303,950	22,663,950			
69	2047	16,020,000	801,000	16,821,000	105,000	5,733,900	5,838,900	16,125,000	6,534,900	22,659,900			
70	2048	-	-	-	16,935,000	5,727,600	22,662,600	16,935,000	5,727,600	22,662,600			
71	2049	-	-	-	17,950,000	4,711,500	22,661,500	17,950,000	4,711,500	22,661,500			
72	2050	-	-	-	19,025,000	3,634,500	22,659,500	19,025,000	3,634,500	22,659,500			
73	2051	-	-	-	20,170,000	2,493,000	22,663,000	20,170,000	2,493,000	22,663,000			
74	2052	-	-	-	21,380,000	1,282,800	22,662,800	21,380,000	1,282,800	22,662,800			
75	2053	-	-	-	-	-	-	-	-	-			
76	2054	-	-	-	-	-	-	-	-	-			
77	2055	-	-	-	-	-	-	-	-	-			
78	Total	\$ 87,650,000	\$ 95,651,653	\$ 183,301,653	\$ 96,920,000	\$ 162,921,400	\$ 259,841,400	\$ 365,825,000	\$ 395,498,561	\$ 761,323,561			

**City of Miami Beach, Florida
Financial Feasibility Report**

Summary of Outstanding and Proposed Senior Lien Bonds - Principal and Interest Requirements

Line No	Fiscal Year	Subordinate Obligation Debt Service - Annual Debt Service Payments						Total Subordinate		
		Equipment Loan			Clean Water State Revolving Loan - SW131300			Obligations - Annual Debt Service Payments		
		Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
79	2018	\$ 36,810	\$ 1,024	\$ 37,834	\$ 338,443	\$ 119,559	\$ 458,002	\$ 375,253	\$ 120,583	\$ 495,836
80	2019	664	31	695	343,948	114,054	458,002	344,612	114,085	458,697
81	2020	677	18	695	349,542	108,460	458,002	350,219	108,478	458,697
82	2021	247	8	256	355,228	102,774	458,002	355,475	102,782	458,258
83	2022	252	3	256	361,006	96,996	458,002	361,258	96,999	458,258
84	2023	-	-	-	366,878	91,124	458,002	366,878	91,124	458,002
85	2024	-	-	-	372,846	85,156	458,002	372,846	85,156	458,002
86	2025	-	-	-	378,910	79,092	458,002	378,910	79,092	458,002
87	2026	-	-	-	385,073	72,929	458,002	385,073	72,929	458,002
88	2027	-	-	-	391,337	66,665	458,002	391,337	66,665	458,002
89	2028	-	-	-	397,702	60,300	458,002	397,702	60,300	458,002
90	2029	-	-	-	404,171	53,831	458,002	404,171	53,831	458,002
91	2030	-	-	-	410,745	47,257	458,002	410,745	47,257	458,002
92	2031	-	-	-	417,426	40,576	458,002	417,426	40,576	458,002
93	2032	-	-	-	424,216	33,786	458,002	424,216	33,786	458,002
94	2033	-	-	-	431,116	26,886	458,002	431,116	26,886	458,002
95	2034	-	-	-	438,128	19,874	458,002	438,128	19,874	458,002
96	2035	-	-	-	445,255	12,747	458,002	445,255	12,747	458,002
97	2036	-	-	-	452,504	5,505	458,009	452,504	5,505	458,009
98	2037	-	-	-	-	-	-	-	-	-
99	2038	-	-	-	-	-	-	-	-	-
100	2039	-	-	-	-	-	-	-	-	-
101	2040	-	-	-	-	-	-	-	-	-
102	2041	-	-	-	-	-	-	-	-	-
103	2042	-	-	-	-	-	-	-	-	-
104	2043	-	-	-	-	-	-	-	-	-
105	2044	-	-	-	-	-	-	-	-	-
106	2045	-	-	-	-	-	-	-	-	-
107	2046	-	-	-	-	-	-	-	-	-
108	2047	-	-	-	-	-	-	-	-	-
109	2048	-	-	-	-	-	-	-	-	-
110	2049	-	-	-	-	-	-	-	-	-
111	2050	-	-	-	-	-	-	-	-	-
112	2051	-	-	-	-	-	-	-	-	-
113	2052	-	-	-	-	-	-	-	-	-
114	2053	-	-	-	-	-	-	-	-	-
115	2054	-	-	-	-	-	-	-	-	-
116	2055	-	-	-	-	-	-	-	-	-
117	Total	\$ 38,650	\$ 1,085	\$ 39,736	\$ 7,464,474	\$ 1,237,571	\$ 8,702,045	\$ 7,503,124	\$ 1,238,656	\$ 8,741,781

**City of Miami Beach, Florida
Financial Feasibility Report**

Calculation of Historical Operating Results and Debt Service Coverage

Line No	Description	Fiscal Year Ending September 30,				
		2013	2014	2015	2016	2017 [1]
	Calculation of Net Revenues					
	Revenues					
1	Charges for Services [2]	\$ 11,671,714	\$ 11,659,582	\$ 21,258,353	\$ 21,490,894	\$ 28,570,734
2	Interest Income [3]	344,743	220,480	61,205	334,377	187,125
3	Other Operating Revenues [4]	-	-	-	-	-
4	Total Revenues	\$ 12,016,457	\$ 11,880,062	\$ 21,319,558	\$ 21,825,271	\$ 28,757,859
	Current (Operating) Expenses					
5	Personal Services [5]	\$ 1,709,332	\$ 2,296,788	\$ 2,559,349	\$ 2,831,997	\$ 3,224,137
6	Operating Supplies	49,114	3,011	17,860	22,703	43,015
7	Contractual Services [6]	134,718	441,718	1,004,910	1,196,667	2,221,783
8	Utilities	60,567	69,343	131,791	222,053	288,323
9	Insurance	-	-	-	-	-
10	Internal Charges	936,189	357,511	359,129	425,571	436,128
11	Claims and Judgements	-	-	-	-	-
12	Other Operating [7]	127,159	124,955	872,332	249,633	300,693
13	Administrative Fees [8]	584,000	637,000	658,000	798,000	798,000
14	Total Current (Operating) Expenses	\$ 3,601,079	\$ 3,930,326	\$ 5,603,371	\$ 5,746,624	\$ 7,312,079
15	Net Revenues	\$ 8,415,378	\$ 7,949,736	\$ 15,716,187	\$ 16,078,647	\$ 21,445,780
	Principal and Interest Requirements					
16	Stormwater Revenue Refunding Bonds, Taxable Series 2009J-2	\$ 1,983,949	\$ 1,983,676	\$ 1,976,701	\$ 1,977,065	\$ 1,969,511
17	Stormwater Revenue Bonds, Series 2011A	2,507,496	2,507,496	3,492,496	3,493,096	3,492,096
18	Stormwater Revenue Refunding Bonds, Series 2011B	1,356,150	1,357,700	1,359,100	1,359,100	1,353,900
19	Stormwater Revenue Bonds, Series 2015	0	0	0	4,407,604	4,545,719
20	Total Principal and Interest Requirements	\$ 5,847,595	\$ 5,848,872	\$ 6,828,297	\$ 11,236,865	\$ 11,361,226
	Principal and Interest Requirement					
21	Coverage Ratio - Calculated	144%	136%	230%	143%	189%
22	Coverage Ratio - Required	110%	110%	110%	110%	110%
	Other Required Transfers [9]					
23	Administration Fee - Payable to General Fund	\$ (433,000)	\$ (435,000)	\$ (631,000)	\$ (612,996)	\$ (667,000)
23	Net Amount Available for Other System Purposes	\$ 2,134,783	\$ 1,665,864	\$ 8,256,890	\$ 4,228,786	\$ 9,417,554

Footnotes:

- [1] Amounts shown for Fiscal Year 2017 are based on preliminary operating results as compiled by City Staff, amounts may be adjusted based on the compilation of the financial statements performed by the City's external auditor.
- [2] Amounts shown reflect charges for service as reported in such years comprehensive annual financial report ("CAFR") for the Fiscal Years 2013 through 2016 and preliminary information provided by City Staff for Fiscal Year 2017. The Bond Resolution does not allow for contributions. For informational purposes the following was reported for contributions in the CAFR:
- | | 2013 | 2014 | 2015 | 2016 | 2017 |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|
| Revenues | | | | | |
| Charges for Services (a) | \$ 11,671,714 | \$ 11,659,582 | \$ 21,258,353 | \$ 21,490,894 | \$ 28,570,734 |
| Permits, Rental, and Other | - | 55,717 | - | - | - |
| Total Operating Revenues | \$ 11,671,714 | \$ 11,715,299 | \$ 21,258,353 | \$ 21,490,894 | \$ 28,570,734 |
| FEMA Grant (b) | - | (55,717) | - | - | - |
| Charges for Service Recognized | \$ 11,671,714 | \$ 11,659,582 | \$ 21,258,353 | \$ 21,490,894 | \$ 28,570,734 |
- (a) Effective October 1, 2014 the City's stormwater utility service charge increased from \$9.06 to \$16.67 per ERU.
- (b) Amounts shown has been excluded from the calculation of debt service coverage compliance since such amounts represents a grant received from Federal Emergency Management Agency (FEMA) for operating expenses associated with the hurricane Wilma event which occurred in 2006, since such event occurred in a prior period such amounts have been excluded from current period revenues.

**City of Miami Beach, Florida
Financial Feasibility Report**

Calculation of Historical Operating Results and Debt Service Coverage

Footnotes (Cont'd.):

- [3] Amounts shown reflect interest income as reported in the CAFR for Fiscal Years 2013 through 2016 and preliminary information provided by City Staff for Fiscal Year 2017. Amounts shown were adjusted consistent with the definition of Revenue set forth in the Bond Resolution.

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Interest Income Reported	\$ 345,512	\$ 223,638	\$ 67,119	\$ 342,414	\$ 578,395
Adjustments:					
Interest Income on Customer Deposits (a)	-	-	-	-	-
Interest Income on Debt Service Fund (430)	(611)	(2,815)	(2,192)	(1,529)	(1,527)
Interest Income on 2011 Bond Construction Fund (431)	(158)	(343)	(640)	(822)	(1,511)
Interest Income on 2015 Bond Construction Fund (432)	-	-	(3,082)	(5,686)	(388,232)
Interest Income Recognized:	\$ 344,743	\$ 220,480	\$ 61,205	\$ 334,377	\$ 187,125

(a) Interest Income Reported on Funds held for customer's deposits includes both the interest income earned by the City and interest expense associated with interest paid to customers. For the purposes of the debt service coverage calculation such amounts have been excluded

- [4] Based on the definition of Revenues as set forth in the Bond Resolution the following Nonoperating Revenues and Capital Contributions as shown in each year's respective CAFR, as well as the preliminary results for Fiscal Year 2017 as provided by City Staff, have been excluded from the calculation of Revenues. The following has been assumed for Other Operating Revenues in the Calculation of Debt Service Coverage:

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Nonoperating Revenues and Capital Contributions:					
Gain(Loss) on Disposal of Capital Assets	\$ 4,184	\$ 23,284	\$ 36,889	\$ 37,388	\$ -
Unrealized Gains (Losses) on Investments	(171,778)	(81,605)	69,807	84,835	-
Capital Contributions	2,678	-	311	-	(420)
Total Nonoperating Revenues and Capital Contributions:	\$ (164,916)	\$ (58,321)	\$ 107,007	\$ 122,223	\$ (420)
Excluded Nonoperating Revenues and Capital Contributions:					
Gain(Loss) on Disposal of Capital Assets	\$ (4,184)	\$ (23,284)	\$ (36,889)	\$ (37,388)	\$ -
Unrealized Gains (Losses) on Investments	171,778	81,605	(69,807)	(84,835)	-
Capital Contributions	(2,678)	-	(311)	-	420
Other Operating Revenues Recognized:	\$ -	\$ -	\$ -	\$ -	\$ -

- [5] The following adjustments have been made to personal services as reported in each respective year's CAFR, as well as preliminary results for Fiscal Year 2017 as provided by City Staff:
- i) a contra-expense was recorded in Fiscal Year 2015, 2016, and 2017 to report the change in the long term pension liability to meet reporting requirements for Governmental Accounting Standards Board ("GASB") Statement 68, this contra-expense has been removed for the calculation of Current Expenses; and ii) to reclassify transfers out pension funds. The Bond Resolution's definition of Current Expenses states "any reasonable payments to pension or retirement funds properly chargeable to the Stormwater Utility" shall be included as Current Expenses.

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Personal Expenses	\$ 1,703,961	\$ 2,290,564	\$ 2,418,608	\$ 2,435,996	\$ 3,511,472
Adjustments:					
Change in Long Term Pension Liability (GASB 68 Actuarial Expense)	-	-	130,741	385,001	(298,335)
Transfer Out - Pension Obligations	5,371	6,224	10,000	11,000	11,000
Total Personal Expenses	\$ 1,709,332	\$ 2,296,788	\$ 2,559,349	\$ 2,831,997	\$ 3,224,137

- [6] The City began outsourcing outfall pipe cleaning and repair services in July 2014 (Fiscal Year 2014), and has continued to use the same contractor (Envirowaster Services Group) for this service for Fiscal Year 2015, 2016, and 2017. This operational change accounted for the majority of the increases to Contractual Services as compared to the prior historical fiscal years.

- [7] During Fiscal Year 2015 the City incurred non-recurring operating expenses associated with the expansion and additional construction of the System's pumping infrastructure.

- [8] The Bond Resolution's definition of Current expenses states the Current Expenses shall not include "any administrative expenses payable to the City's General Fund. The following administrative expenses have been identified as being paid from the Stormwater Utility during the Historical Period. In accordance with the Bond Resolution such amounts that have been paid to the City's General Fund have been excluded from the calculation of Current Expenses. The Stormwater Utility has incurred transfers out to the Sanitation Fund (Fund 435) for administration of the Stormwater Utility, these transfers have been reclassified to Current Expenses. The following summarizes the Administrative Fees recognized in the calculation of Current Expenses:

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Administrative Fees (to General Fund)	\$ 433,000	\$ 435,000	\$ 631,000	\$ 612,996	\$ 667,000
Transfers Out (to Sanitation Fund) for Administrative Fees	584,000	637,000	658,000	798,000	798,000
Total Administrative Fees	\$ 1,017,000	\$ 1,072,000	\$ 1,289,000	\$ 1,410,996	\$ 1,465,000
Less Administrative Fees Paid to General Fund	(433,000)	(435,000)	(631,000)	(612,996)	(667,000)
Administrative Fees Recognized as Current Expenses:	\$ 584,000	\$ 637,000	\$ 658,000	\$ 798,000	\$ 798,000

- [9] Other required transfers as defined in the Bond Resolution include any required transfers to the Reserve Account, Rate Stabilization Account, and Subordinate Indebtedness Account.

**City of Miami Beach, Florida
Financial Feasibility Report**

Calculation of Projected Operating Results and Debt Service Coverage

Line No	Description	Fiscal Year Ending September 30,				
		2018	2019	2020	2021	2022
	Calculation of Net Revenues					
	Revenues					
1	Charges for Services [1]	\$ 30,133,813	\$ 36,924,310	\$ 38,542,934	\$ 40,229,272	\$ 41,985,435
2	Interest Income [2]	160,456	203,848	261,477	290,731	263,787
3	Other Operating Revenues	-	-	-	-	-
4	Total Revenues	\$ 30,294,269	\$ 37,128,158	\$ 38,804,411	\$ 40,520,004	\$ 42,249,222
	Current (Operating) Expenses [3]					
5	Personal Services	\$ 3,440,000	\$ 3,560,400	\$ 3,685,014	\$ 3,813,989	\$ 3,947,479
6	Operating Supplies	31,000	31,929	32,914	33,933	34,988
7	Contractual Services	2,994,000	2,876,970	2,954,913	3,035,045	3,117,430
8	Utilities	443,000	456,523	470,458	484,820	499,620
9	Insurance	-	-	-	-	-
10	Internal Charges	452,000	462,396	473,494	484,857	496,494
11	Claims and Judgements	-	-	-	-	-
12	Other Operating	511,835	529,733	543,458	557,538	571,979
13	Administrative Fees [4]	798,000	816,354	835,946	856,009	876,553
14	Total Current (Operating) Expenses	\$ 8,669,835	\$ 8,734,305	\$ 8,996,197	\$ 9,266,191	\$ 9,544,544
15	Net Revenues	<u>\$ 21,624,434</u>	<u>\$ 28,393,854</u>	<u>\$ 29,808,214</u>	<u>\$ 31,253,812</u>	<u>\$ 32,704,677</u>
	Principal and Interest Requirements					
16	Stormwater Revenue Refunding Bonds, Taxable Series 2009J-2	\$ 1,965,916	\$ 1,962,141	\$ 1,962,463	\$ 1,958,088	\$ -
17	Stormwater Revenue Bonds, Series 2011A [5]	3,494,496	3,493,996	3,495,746	3,494,496	3,495,246
18	Stormwater Revenue Refunding Bonds, Series 2011B [5]	1,358,700	1,356,700	1,357,350	1,354,850	3,487,100
19	Stormwater Revenue Bonds, Series 2015	4,547,019	4,548,669	4,549,869	4,555,619	4,380,719
20	Stormwater Revenue Bonds, Series 2017 [6]	3,543,403	4,857,500	4,832,500	5,457,500	5,460,000
21	Stormwater Revenue Bonds, Series 2022 [7]	0	0	0	0	484,600
22	Total Principal and Interest Requirements	\$ 14,909,534	\$ 16,219,005	\$ 16,197,927	\$ 16,820,552	\$ 17,307,665
	Principal and Interest Requirement					
23	Coverage Ratio - Calculated	145%	175%	184%	186%	189%
24	Coverage Ratio - Required	110%	110%	110%	110%	110%
25	Net Revenues After Principal and Interest Requirement [8]	\$ 5,223,947	\$ 10,552,948	\$ 11,990,494	\$ 12,751,205	\$ 13,666,246
	Other Required Transfers					
26	Payment for Equipment Loan	\$ 37,834	\$ 695	\$ 695	\$ 256	\$ 256
27	Clean Water State Revolving Loan - SW131300	458,002	458,002	458,002	458,002	458,002
28	Administration Fee - Payable to General Fund	673,000	688,479	705,002	721,923	739,249
29	Total Other Required Transfers	\$ 1,168,836	\$ 1,147,176	\$ 1,163,700	\$ 1,180,180	\$ 1,197,506
30	Net Amount Available for Other System Purposes	<u>\$ 5,546,065</u>	<u>\$ 11,027,672</u>	<u>\$ 12,446,586</u>	<u>\$ 13,253,080</u>	<u>\$ 14,199,506</u>

Footnotes:

[1] Amounts shown includes rate increases from the City's Rate Indexing section of the Rate Ordinance and an additional adjustment in Fiscal Year 2019 to fund the Series 2022 Bonds and other capital needs. As shown on Table 2.

[2] Amounts shown from information provided on Table 10.

[3] Amounts shown from information provided on Table 3.

Footnotes continued on page 2 of 2.

City of Miami Beach, Florida
Financial Feasibility Report

Calculation of Projected Operating Results and Debt Service Coverage

Footnotes: (cont'd.)

- [4] The Bond Resolution's definition of Current expenses states the Current Expenses shall not include "any administrative expenses payable to the City's General Fund. The following administrative expenses have been identified as being paid from the Stormwater Utility from the Operating Budget of the City. In accordance with the Bond Resolution such amounts that have been paid to the City's General Fund have been excluded from the calculation of Current Expenses. The Stormwater Utility has incurred transfers out to the Sanitation Fund (Fund 435) for administration of the Stormwater Utility, these transfers have been reclassified to Current Expenses. The following summarizes the Administrative Fees recognized in the calculation of Current Expenses:
- | | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Budget - Administrative Fees (to General Fund) | \$ 673,000 | \$ 688,479 | \$ 705,002 | \$ 721,923 | \$ 739,249 |
| Budget - Transfers Out (to Sanitation Fund) for Administrative Fees | 798,000 | 816,354 | 835,946 | 856,009 | 876,553 |
| Total Administrative Fees | <u>\$ 1,471,000</u> | <u>\$ 1,504,833</u> | <u>\$ 1,540,949</u> | <u>\$ 1,577,932</u> | <u>\$ 1,615,802</u> |
| Less Administrative Fees Paid to General Fund | <u>(673,000)</u> | <u>(688,479)</u> | <u>(705,002)</u> | <u>(721,923)</u> | <u>(739,249)</u> |
| Administrative Fees Recognized as Current Expenses: | <u>\$ 798,000</u> | <u>\$ 816,354</u> | <u>\$ 835,946</u> | <u>\$ 856,009</u> | <u>\$ 876,553</u> |
- [5] The City is expected to use a portion of the proceeds from the Series 2017 Bonds to: advance refund and defease approximately \$44,270,000 of the Stormwater Revenue Bonds, Series 2011A and approximately \$25,265,000 of the Stormwater Revenue Refunding Bonds, Series 2011B.
- [6] Amount shown associated with the debt service payments for the proposed Series 2017 Revenue Bonds provided by the City's Municipal Financial Advisor and recognize:
i) estimated delivery date of December 21, 2017; ii) All-In true interest cost ("TIC") of approximately 3.985500%; iii) par amount of bonds of approximately \$87,650,000; and iv) a thirty (30) year repayment schedule. This amount only recognizes the effects of the portion of the Series 2017 Bonds associated with the financing of the Series 2017 Project.
- [7] Amount shown associated with the debt service payments for the proposed Series 2022 Bonds provided by the City's Municipal Financial Advisor and recognize:
i) estimated delivery date of August 1, 2022; ii) All-In true interest cost ("TIC") of approximately 6.03798%; iii) par amount of bonds of approximately \$96,920,000; and iv) a thirty (30) year repayment schedule. It should be noted that the total Principal and Interest Requirement projected for the Series 2022 Bonds is approximately \$5,840,000 in Fiscal Year 2023.
- [8] Amount shown represents the Net Revenues remaining after the payment of the Principal and Interest Requirement and an allowance of ten percent (10%) for debt service coverage compliance, which is in compliance with the provisions of the Bond Resolution.

**City of Miami Beach, Florida
Financial Feasibility Report**

Calculation of Projected Fund Balances and Interest Income

Line No.	Description	Fiscal Year Ending September 30,				
		2018	2019	2020	2021	2022
	<u>Year End Cash Balances Roll-Up</u>					
1	Enterprise Fund	\$ 27,048,541	\$ 37,812,696	\$ 50,121,250	\$ 48,892,458	\$ 38,856,261
2	Stormwater Revenue Bonds Debt Service Account	7,454,767	8,109,503	8,098,964	8,410,276	8,653,832
3	Redemption Account	0	0	0	0	0
4	Reserve Account	0	0	0	0	0
5	Rate Stabilization Account	8,889,419	8,889,419	8,889,419	8,889,419	8,889,419
6	Subordinate Indebtedness Account	247,918	229,349	229,349	229,129	229,129
7	Construction Account - Prior Construction	0	0	0	0	0
8	Construction Account - Series 2017 Revenue Bonds	59,180,505	17,068,424	0	0	0
9	Construction Account - Series 2022 Bonds	0	0	0	0	58,644,047
10	Total Ending Cash Balance	\$ 102,821,150	\$ 72,109,390	\$ 67,338,981	\$ 66,421,282	\$ 115,272,689
	<u>Enterprise Fund</u>					
11	Beginning Balance	\$ 21,728,348	\$ 27,048,541	\$ 37,812,696	\$ 50,121,250	\$ 48,892,458
12	Transfer In - Revenue Requirements	5,546,065	11,027,672	12,446,586	13,253,080	14,199,506
13	Transfers Out - Capital Improvements	225,872	263,517	138,033	14,481,872	24,235,703
14	Interest Rate	0.50%	0.50%	0.50%	0.50%	0.50%
15	Interest Income	121,942	162,153	219,835	247,534	219,372
16	Ending Balance	27,048,541	37,812,696	50,121,250	48,892,458	38,856,261
17	Minimum Requirement: 60 Days of Current Expenses	1,425,178	1,435,776	1,478,827	1,523,210	1,568,966
18	Calculated Days of Available Cash (Current Expenses)	1,139	1,580	2,034	1,926	1,486
	<u>Stormwater Revenue Bonds Debt Service Account</u>					
19	Annual Deposit to Account	\$ 14,909,534	\$ 16,219,005	\$ 16,197,927	\$ 16,820,552	\$ 17,307,665
20	Average Annual Balance	7,454,767	8,109,503	8,098,964	8,410,276	8,653,832
21	Interest Rate	0.50%	0.50%	0.50%	0.50%	0.50%
22	Interest Income	37,274	40,548	40,495	42,051	43,269
23	Recognition of Interest Earnings in Revenue Requirements	37,274	40,548	40,495	42,051	43,269
	<u>Redemption Account</u>					
24	Beginning Balance [1]	\$ -	\$ -	\$ -	\$ -	\$ -
25	Transfers In - Enterprise Fund	0	0	0	0	0
26	Transfers In - R&R Fund	0	0	0	0	0
27	Transfers Out - Operating Reserves	0	0	0	0	0
28	Transfers Out - R&R Fund	0	0	0	0	0
29	Transfers In (Out)	0	0	0	0	0
30	Interest Rate	0.00%	0.00%	0.00%	0.00%	0.00%
31	Interest Income	0	0	0	0	0
32	Ending Balance	0	0	0	0	0
	<u>Reserve Account</u>					
33	Beginning Balance [1]	\$ -	\$ -	\$ -	\$ -	\$ -
34	Transfers In - Operating Reserves	0	0	0	0	0
35	Transfers In - Stormwater Capital Fund	0	0	0	0	0
36	Transfers Out - Operating Reserves	0	0	0	0	0
37	Transfers Out - Stormwater Capital Fund	0	0	0	0	0
38	Transfers Out - Capital Improvements	0	0	0	0	0
39	Interest Rate	0.00%	0.00%	0.00%	0.00%	0.00%
40	Interest Income	0	0	0	0	0
41	Ending Balance	0	0	0	0	0

**City of Miami Beach, Florida
Financial Feasibility Report**

Calculation of Projected Fund Balances and Interest Income

Line No.	Description	Fiscal Year Ending September 30,				
		2018	2019	2020	2021	2022
Rate Stabilization Account						
42	Beginning Balance [1]	\$ 8,889,419	\$ 8,889,419	\$ 8,889,419	\$ 8,889,419	\$ 8,889,419
43	Transfers In - Operating Reserves	0	0	0	0	0
44	Transfers Out - Capital Improvements	0	0	0	0	0
45	Transfers Out - Operating Reserves	0	0	0	0	0
46	Transfers Out	0	0	0	0	0
47	Interest Rate	0.00%	0.00%	0.00%	0.00%	0.00%
48	Interest Income	0	0	0	0	0
49	Ending Balance	8,889,419	8,889,419	8,889,419	8,889,419	8,889,419
Subordinate Indebtedness Account						
50	Annual Deposit to Account	\$ 495,836	\$ 458,697	\$ 458,697	\$ 458,258	\$ 458,258
51	Average Annual Balance	247,918	229,349	229,349	229,129	229,129
52	Interest Rate	0.50%	0.50%	0.50%	0.50%	0.50%
53	Interest Income	1,240	1,147	1,147	1,146	1,146
Construction Account - Prior Construction						
54	Beginning Balance	\$ 28,206,833	\$ -	\$ -	\$ -	\$ -
55	Transfers In	0	0	0	0	0
56	Transfers Out	28,206,833	0	0	0	0
57	Interest Rate	0.00%	0.00%	0.00%	0.00%	0.00%
58	Interest Income	0	0	0	0	0
59	Ending Balance	0	0	0	0	0
Construction Account - Series 2017 Revenue Bonds						
60	Beginning Balance	\$ -	\$ 59,180,505	\$ 17,068,424	\$ -	\$ -
61	Transfers In	100,000,000	0	0	0	0
62	Transfers Out	40,819,495	42,112,081	17,068,424	0	0
63	Interest Rate	0.00%	0.00%	0.00%	0.00%	0.00%
64	Interest Income	0	0	0	0	0
65	Ending Balance	59,180,505	17,068,424	0	0	0
Construction Account - Series 2022 Bonds						
66	Beginning Balance	\$ -	\$ -	\$ -	\$ -	\$ -
67	Transfers In	0	0	0	0	96,095,403
68	Transfers Out	0	0	0	0	37,451,356
69	Interest Rate	0.00%	0.00%	0.00%	0.00%	0.00%
70	Interest Income	0	0	0	0	0
71	Ending Balance	0	0	0	0	58,644,047
Interest Income						
72	Unrestricted Interest Income	160,456	203,848	261,477	290,731	263,787
73	Restricted Interest Income	0	0	0	0	0
74	Total Interest Income	\$ 160,456	\$ 203,848	\$ 261,477	\$ 290,731	\$ 263,787

Table 11

**City of Miami Beach, Florida
Financial Feasibility Report**

Page 1 of 1

Comparison of Monthly Residential Stormwater Service Charges [1]

Line No.	Description	Monthly Stormwater Rate per ERU	Impervious Surface per ERU
City of Miami Beach			
1	Existing Rates as of October 1, 2017	\$23.30	791
<u>Other Florida Utilities</u>			
2	City of Aventura	\$2.50	1,548
3	City of Boca Raton	3.22	2,837
4	City of Coral Gables	8.80	2,346
5	City of Delray Beach	5.33	2,502
6	City of Fort Lauderdale	10.00	N/A
7	City of Hollywood	3.22	2,250
8	City of Homestead	3.37	N/A
9	City of Miami	3.50	1,191
10	Miami Dade County	4.00	1,548
11	City of North Miami	6.19	1,760
12	Village of Pinecrest	10.00	1,548
13	City of Pompano Beach	4.21	2,880
14	City of West Palm Beach	13.57	2,171
15	Other Utilities' Average	\$5.99	2,053

Footnotes:

- [1] Unless otherwise noted, amounts shown reflect rates in effect August 2017 and are exclusive of taxes or franchise fees, if any. All rates are as reported by the respective local government.