

CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT, FLORIDA



WATER AND WASTEWATER REVENUE SUFFICIENCY AND RATE DESIGN ANALYSIS

March 2, 2015



Public Resources Management Group, Inc.

Utility, Rate, Financial and Management Consultants



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The Utility Special District Board
City of Riviera Beach Utility Special District
600 West Blue Heron Blvd.
Riviera Beach, FL 33404

Subject: Water and Wastewater Revenue Sufficiency and Rate Design Analysis

Ladies and Gentlemen:

Public Resources Management Group, Inc. ("PRMG") is pleased to submit this report for your review and consideration regarding the preparation of the water and wastewater revenue sufficiency and rate design analysis (the "Report") for the City of Riviera Beach Utility Special District (the "District") water and wastewater utility system (the "System"). The primary purposes of the Report were to develop a financial analysis for the fiscal years ending September 30, 2014 through 2019 (the "Forecast Period") regarding the ability of the System operating revenues (derived primarily from monthly rates for service) to adequately fund the identified expenditure and funding requirements, including the capital improvement plan prepared by the District (the "Net Revenue Requirements") and to design rates to equitably recover the cost of providing service. Specifically, the Report evaluated for each system the ability of the existing rate revenues to: i) fund day-to-day operations and the capital improvements of the System; ii) meet anticipated rate covenant requirements delineated in the authorizing resolution and loan agreements associated with the issuance of utility bonds/loans; and iii) promote the overall financial sustainability of the System to limit financial risk and stabilize long-term rates. This Report includes for the System: i) a discussion of the significant assumptions used in the development of the Net Revenue Requirements; ii) an analysis of the ability of System revenues to fund such requirements; and iii) the presentation of the identified financial plan and proposed rate adjustments for the Forecast Period. This analysis was critical since the District plans to issue additional indebtedness in the future to fund a portion of the identified capital needs of the System and rates should be established in support of the capital plan as well as meet the overall cost of providing service.

The attached Report provides a discussion of the analyses and assumptions utilized in the determination of the Net Revenue Requirements estimated during the Forecast Period for the System. The analysis was based on detailed financial information provided by the District staff, including but not limited to, customer statistical data, annual financial and budgetary data, information regarding the potential development of the System service area, as well as other information provided by the District relative to the development of the capital program. Based on the assumptions and analyses reflected in this Report, which should be read in its entirety, we are of the opinion that the current and adopted rates for monthly utility service will not be sufficient to meet the identified Net Revenue Requirements and will need to be adjusted during the

Forecast Period. Specifically, we have identified the need to increase the System revenues as shown below:

Recommended Average System Annual Percent Rate Revenue Adjustments					
	Fiscal Year Ending September 30, [1]				
	2015	2016	2017	2018	2019
Water System					
Adopted	1.94%	2.11%	1.96%	2.03%	2.03%
Additional	0.00%	0.00%	0.00%	0.00%	0.00%
Total Water System	1.94%	2.11%	1.96%	2.03%	2.03%
Wastewater System					
Adopted	2.05%	5.17%	1.99%	3.69%	3.61%
Additional	16.00%	12.00%	9.00%	6.00%	6.00%
Total Wastewater System	18.38%	17.79%	11.17%	9.91%	9.82%
Average Increase –Combined System	<u>10.16%</u>	<u>9.65%</u>	<u>6.57%</u>	<u>5.97%</u>	<u>5.93%</u>

[1] Reference is made to the Report for a discussion of the recommended rate increases. Rates assumed to become effective with service rendered on October 1st of each respective fiscal year.

As can be seen above, the recommended average System rate adjustments rates for the Forecast Period range from approximately 3.00% to 10.00% expressed on a combined utility system basis. The identified rate adjustments for each utility system are different since each was evaluated separately in order to set rates which recover the specific cost of providing service. The primary reason for the increase in rates is due to:

1. Increased costs of wastewater treatment and disposal associated with the financing of significant capital improvements at the East Central Regional Wastewater Treatment Facility (ECRWF);
2. Increased Operating Expenses associated with the continued impacts of general inflation and increased energy increases and the residual effects on the cost of doing business (chemicals, repairs, transportation, etc.);
3. Increased debt service requirements associated with the issuance of additional debt during the Forecast Period which is necessary to fund a portion of the District's anticipated capital improvement program;
4. Providing dedicated annual transfers to fund capital expenditures for the renewal, replacement, betterment and upgrade of System assets in order to limit the amount of debt financing and long-term costs to the System which will promote ongoing rate stability;

5. Providing sufficient funds necessary to meet the rate covenant requirements as delineated in the Bond Resolution; and
6. Maintain the creditworthiness of the System and bond credit rating, which included maintaining working cash (fund balance) reserves to limit the risk to the utility due to unforeseen changes in revenues, the incurrence of unexpected operating or capital expenditures to provide a plan to achieve the lowest cost of borrowers (interest rates) for capital financing and to promote the long term financial stability of the System.

The recommended rates are projected to remain competitive when compared to the rates charged by other neighboring public utilities. A comparison of the District existing and proposed rates (to become effective in Fiscal Year 2015) to the other public utility rates (which rates are as of today and do not reflect any changes that may occur after the issuance of this report and during Fiscal Year 2015) is shown on Tables 14 through 16 at the end of this Report.

The proposed monthly rates and charges are based on the recovery of the total costs anticipated for the District's water and wastewater utility systems and the capacity needs of the System. As such, the proposed rates and charges are considered to be reasonable and reflect the cost of providing service.

We appreciate the opportunity to be of service to the District.

Very truly yours,

Public Resources Management Group, Inc.



Robert J. Ori
President



Michael P. Francis
Senior Analyst

RJO/dlc
Attachments



CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT

Water and Wastewater Revenue Sufficiency and Rate Design Analysis

TABLE OF CONTENTS

Title	Page No.
Letter of Transmittal	
Table of Contents	i
List of Tables and Figures.....	iii
 Introduction.....	 1
Financial Forecast and Rate Analysis approach	2
Water and Wastewater System Rates and Charges.....	3
Historical and Projected System Sales and Customer Usage Statistics and Demands	6
General	6
Water System	6
Wastewater System	9
Financial Forecast and Sufficiency of Existing Rate Revenues	10
General	10
Principal Considerations and Assumptions Regarding Projected Operating Results	11
Net Revenue Requirements – Water System	18
Net Revenue Requirements – Wastewater System	19
Debt Service Coverage and Covenant Compliance	22
Debt Service Covenant Compliance	22



CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT

Water and Wastewater Revenue Sufficiency and Rate Design Analysis

TABLE OF CONTENTS (cont'd.)

Other Financial Considerations and Performance	23
Projected Net Revenue Margin Ratio	23
All-In Debt Service Coverage	24
Operating Fund (Working Capital) Balance	25
Proposed Rate Design	26
Proposed Rate Design – General Criteria	27
Principal Rate Issues Identified.....	28
Rate Design Recommendations	29
Proposed Rates, Customer Impacts, and Rate Comparison.....	33
Customer Impact – Affordability of Rates.....	36
Conclusions and Recommendations	41



CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT

Water and Wastewater Revenue Sufficiency and Rate Design Analysis

LIST OF TABLES

Table No.	Title
1	Summary of Historical Customer Statistics – Water System
2	Summary of Projected Customer Statistics – Water System
3	Summary of Historical Customer Statistics – Wastewater System
4	Summary of Projected Customer Statistics – Wastewater System
5	Summary of Projected Revenues
6	Summary of Projected Escalation Factors
7	Summary of Projected Operating Expenses
8	Summary of Projected Water Operating Expenses
9	Summary of Projected Wastewater Operating Expenses
10	Five (5) Year Projected Capital Improvement Program
11	Projected Water System Net Revenue Requirements and Rate Adjustments
12	Projected Wastewater System Net Revenue Requirements and Rate Adjustments
13	Projected Water and WW System Net Revenue Requirements and Rate Adjustments
14	Projected Debt Service Coverage and Covenant Requirements
15	Comparison of Typical Monthly Residential Bills for Water Service
16	Comparison of Typical Monthly Residential Bills for Wastewater Service
17	Comparison of Typical Monthly Residential Bills for Water and Wastewater Service

CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT
WATER AND WASTEWATER REVENUE SUFFICIENCY
AND RATE DESIGN ANALYSIS

INTRODUCTION

Public Resources Management Group, Inc. ("PRMG") has completed the Water and Wastewater Revenue Sufficiency and Rate Design Analysis (the "Report") for consideration by the City of Riviera Beach Utility Special District (the "District"). The purpose of the analysis was to: i) analyze the sufficiency of the existing rates for service as it relates to funding the identified revenue requirements or expenditure needs of the water and wastewater system (the "System"); ii) identify any potential changes in rates that are considered necessary to meet the expenditure needs and promote the financial creditworthiness of the System for the Fiscal Years 2014 through 2019 (the "Forecast Period"), including compliance with the bond covenants as delineated in the Bond Resolution No. 11-14 adopted by the Utility Special District Board on July 2, 2014, as amended and supplemented from time to time; iii) ensure, for the Wastewater System, that it adequately funds the capital needs and capital cost recovery practices consistent with the financial requirements for the East Central Regional Water Reclamation Facility ("ECRWRF") of which the District is a participant; iv) design of water and wastewater utility rates that reflect industry norms, promote water conservation, and are based on the cost of providing service; and v) present to the Utility Special District Board the identified financing plan and proposed rate adjustments for the Forecast Period.

The District has established and accounts for the System as a utility enterprise fund (the "Utility Fund"). In general, the Utility Fund must have revenues equal to the costs of the services provided by the System and the District must establish monthly user charges or rates sufficient to cover the cost of operating, maintaining, repairing and financing of the System. According to the Governmental Accounting Standards Board, "Enterprise Funds should be used to account for operations that are financed and operated in a manner similar to private business enterprises where the intent of the governing body is that costs of providing services to the general public on a continuing basis be financed or recovered primarily through user charges."

The District has historically generally maintained, on behalf of its Utility Fund, a positive financial position as a result of prudent management policies and proper planning. However since the Fiscal Year 2008, the District has experienced a decline in customer growth, reflecting a larger overall trend occurring within the State of Florida (the "State") and other areas of the Nation as a direct result of the continued negative conditions in the economy. Furthermore water sales (use per customer) have also declined as result of the sluggish economy and continued water conservation efforts of its customer base. These events have had a direct negative impact upon the System's water sales and billed wastewater flow and ultimately its revenues received from monthly utility service (which accounts for over 96% of the total System revenues). Also, the cost of doing business continues to increase due to inflation, higher costs of insurance, and increased energy and oil costs. These increases have affected labor, power, chemical, transportation, and repair costs which represent the majority of the operating expenses of the System. Finally, the operation of a utility system is a capital intensive business which requires

dedicated funds to repair, replace and upgrade the System and must also have sufficient capacity available (constructed) to serve future growth in the District.

One of the single largest operating expenses of the System is associated with the contracted wastewater treatment services through the East Central Regional Wastewater Reclamation Facility (the "ECRWRF"). This expense accounts for approximately 16% of the total operating expenses of the System and is an uncontrollable cost of the District. The operation of the ECRWRF is governed by the East Central Regional Operations Board (the "ECR Board") whose members include the City of West Palm Beach, the City of Lake Worth, the City of Riviera Beach, the Town of Palm Beach, and Palm Beach County (the "Entities"). The mission of the ECR Board is to operate and maintain the wastewater treatment and disposal facility in a cost-effective, reliable, and safe manner which meets all Federal, State and local permits and regulations.

As a result of these pressures and the need to continue to fund the identified capital needs of the System and the associated operational expenditure requirements which are anticipated to result from the implementation of these capital requirements, PRMG was retained to prepare a financial forecast of System operations and develop recommended rates to fully recover the cost of providing service on an equitable basis. Specifically, PRMG was tasked with analyzing the revenue requirements (expenditure needs) of the System, update the capital expenditure financing analysis to reflect the funding requirements associated with the capital plan, evaluate the ability of the System to meet the financial objectives of the District, determine the potential need for rate adjustments during the Forecast Period in order to strategically evaluate the System's overall financial position, and develop recommended water and wastewater rates for consideration by the Utility Special (District Board).

The remainder of this Report provides a discussion of the financial forecast analysis approach, the existing System rates and charges, historical and projected customer statistics and demand requirements, identification of the revenue requirements and estimated sufficiency of the existing rates to meet such requirements. The Report also presents for the Forecast Period a summary of the financial trends and projected financial position of the System, and the proposed rates for monthly utility service, including the estimated impact to the District customers.

FINANCIAL FORECAST AND RATE ANALYSIS APPROACH

In order to develop the financial forecast of the System the following approach was recognized:

1. An evaluation of the service area requirements for the individual Water (including irrigation) and Wastewater Systems was performed. This included a review of recent historical customers served and corresponding usage requirements such that: i) a representative forecast of the District System needs from a financial standpoint could be prepared; and ii) a projection of rate revenues consistent with the projected service area needs could be developed.
2. The expenditures and funding requirements of a utility is referred to as the Net Revenue Requirements and equates to the amount of expenditures that is to be funded, amount of

revenues that must be produced from monthly user charges. A summary of the derivation of the Net Revenue Requirements is summarized below:

- + Cost of Operation and Maintenance
- + Debt Service Payments (Senior and Subordinate)
- + Transfers to Renewal and Replacement Fund / Capital Funds
- + Capital Project Financing (Pay-As-You-Go and Additional Bonds)

- + Working Capital Reserves / Financial Compliance
- Other Operating Revenue / Interest Income
- Any Other Sources of Income (e.g., Grants or Contributions)
- = Net Revenue Requirements (Expenditures Funded from Rates)

Each component of the Net Revenue Requirements, as delineated above, was separately evaluated for the Forecast Period to identify the amount of expenditures required to be funded from monthly user charges.

3. Included as a component of Net Revenue Requirements was the development of a funding plan for the System capital improvements. The funding of these improvements recognized the following parameters: i) the use of available operating reserves or other available cash balances as a first priority (above targeted reserve balances); ii) the recognition of a pay-as-you-go (PAYGO) capital funding program (funded by deposits to a Renewal and Replacement Fund from rates) to finance capital projects that primarily benefit existing rate payers; and iii) the use of additional debt/loans to fund large expenditures (leveraging of System revenues to reduce annual expenditure funded from rates) to the extent other funding sources were not readily or reasonably available.
4. The availability of funds and the cash (liquidity) position of the System were evaluated in order to adequately maintain operating reserve and capital-related fund balances to limit financial risk and provide for the anticipated capital funding needs of the System.
5. An evaluation of compliance with Bond Covenant requirements as outlined in the Bond Resolution No. 11-14 (the "Bond Resolution") which authorized the issuance of the outstanding Water and Sewer Revenue Refunding Bonds, Series 2014 (the "Series 2014 Bonds") and the loan service requirements required by the purchase of the Consolidated Utility Company (the "Utility"), as delineated in the Agreement of Purchase and Sale of the Utility dated September 16, 1987, was performed for the Forecast Period.
6. The determination of the annual individual utility system rate adjustments considered by PRMG to be necessary to fund the Net Revenue Requirements and meet the overall financial needs of the System was then made.

WATER AND WASTEWATER SYSTEM RATES AND CHARGES

The sales revenues derived from the monthly rates or user charges, Capital Fees, and other operating revenues, all as reflected on Table 5 at the end of this Report associated with the projected operating results for the System, were developed based on rates and charges that were

initially approved by the District. The District previously approved a series of rate adjustments through the Fiscal Year 2019 which were developed pursuant to a rate study prepared during the Fiscal Year 2008 (the "Approved Rates"). The Approved Rates expressed on a percentage change basis are summarized below.

Approved Rates – Percentage Increase						
Description	2014	Projected Fiscal Year Ending September 30, [1]				
		2015	2016	2017	2018	2019
Water System	2.03%	1.94%	2.11%	1.96%	2.03%	2.03%
Wastewater System	4.17%	2.05%	5.17%	1.99%	3.69%	3.61%

[1] Reference is made to the Study for a discussion of the recommended rate increases. Rates assumed to become effective with service rendered on October 1st of each respective fiscal year.

The user rates for monthly service (referred to as the "Monthly Utility Rates") include the following components:

1. Water and Wastewater Base Charges which also serves as the minimum bill (does not vary by consumption or premise usage);
2. Water Consumption Charge, which includes an inclining or increasing block pricing structure to encourage water conservation (per 1,000 gallons of metered water consumption); and
3. Wastewater Consumption Charge and which includes a monthly maximum billing threshold for individually-metered residential accounts at 10,000 gallons (per 1,000 gallons of metered water consumption which serves as the basis for billed wastewater flow).

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A summary of the existing and adopted Water System Monthly User Charges as reflected in the Rate Resolution is summarized below:

Existing and Adopted Water Monthly User Rates		
	Existing FY14 Rates	Adopted FY15 Rates
Monthly Base Charge:		
Residential Single-Family, Multi-Family, and Commercial Water Service, and Residential Multi-Family Irrigation Service:		
Base Charge All Meter Sizes	\$12.98	\$13.24
Commercial Irrigation Service:		
Base Charge All Meter Sizes	\$17.54	\$17.89
Consumption Charge Per 1,000 Gallons:		
Residential Single-Family Service:		
0 – 9,000 Gallons	\$2.67	\$2.72
9,001 – 14,000 Gallons	3.34	3.40
14,001 – 19,000 Gallons	4.00	4.08
Above 19,000 Gallons	4.67	4.76
Commercial Service:		
0 – 10,000 Gallons	\$4.89	\$4.98
10,001 – 40,000 Gallons	5.67	5.79
Above 40,000 Gallons	6.45	6.57
Residential Single-Family and Multi-Family Irrigation Service:		
0 – 9,000 Gallons	\$2.67	\$2.72
9,001 – 14,000 Gallons	3.34	3.40
14,001 – 19,000 Gallons	4.00	4.08
Above 19,000 Gallons	4.67	4.76
Commercial Irrigation Service:		
0 – 10,000 Gallons	\$5.51	\$5.62
10,001 – 40,000 Gallons	6.29	6.42
Above 40,000 Gallons	7.07	7.21

[1] Outside City Customers are currently charged based on their location (bill type) within the service area of the District. Bill Type 1 customers are charged a 25% surcharge, Bill Type 2 customers are charged a 35% surcharge and Bill Type 3 customers are charged a 25% surcharge plus \$1.00.

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A summary of the current Wastewater System Monthly User Charges as reflected in the Rate Resolution is summarized below:

Existing Wastewater Monthly User Rates [1]		
	Existing FY2014 Rates	Adopted FY2015 Rates
Monthly Base Charge:		
Residential Single-Family, Multi-Family, Commercial, and		
Hotel/Motel Sewer Service:		
Base Charge All Meter Sizes	\$8.55	\$8.73
Consumption Charge (per 1,000 Gallons of Metered Water):		
Residential Single-Family and Multi-Family Service [1]	\$1.92	\$1.96
Commercial Service	4.14	4.22
Hotel/Motel Service	2.98	3.04

[1] Outside City Customers are currently charged based on their location (bill type) within the service area of the District. Bill Type 1 customers are charged a 25% surcharge, Bill Type 2 customers are charged a 35% surcharge and Bill Type 3 customers are charged a 25% surcharge plus \$1.00.

[2] Residential single-family monthly consumption charge limited to 10,000 gallons per month; there is no billing threshold for commercial, residential multi-family accounts.

HISTORICAL AND PROJECTED SYSTEM SALES AND CUSTOMER USAGE STATISTICS AND DEMANDS

General

A major component in the preparation of a financial forecast of a utility system and the identification of the corresponding utility rate impacts is the evaluation of customer usage (or sales) requirements and the development of a forecast of water and wastewater customers and sales. This is necessary in order to have a proper matching of rate revenues anticipated to be received under existing fee schedules with the projected operating and capital expenditure requirements of the System. This is significant since revenues derived from the application of the rates for Monthly User Charges currently account for over 96% of the total System revenues. For purposes of this financial analysis and in order to assist the District in its continuing long-term financing efforts, a financial projection period encompassing the current Fiscal Year 2014 and the subsequent five (5) fiscal years 2015 through 2019 (previously defined as the "Forecast Period") was recognized. This length of analysis was undertaken in order to examine the estimated near term financial effects of funding the District's capital program through its estimated implementation schedule. In order to evaluate rates, each utility system was viewed independently to promote the full cost recovery on a stand-alone basis by each respective utility system.

Water System

In order to evaluate trends in Water System customer growth and sales (monthly use per customer), an evaluation of the four years ended September 30, 2013 (the "Historical Period") statistics was evaluated. A review of the recent trends in change in customers served and the corresponding sales growth / average use per customer indicated that the Water System has experienced marginal decreases in customers and sales as a result of a continued negative economic conditions, which has been further compromised in terms of water sales due to water

use restrictions that were implemented by the City pursuant to Ordinance No. 3085 Sec. 20-124, dealing with landscape irrigation which is the primary source of discretionary water use. Regarding the effects of water restrictions, our experience has indicated that once customers become acclimated to new usage patterns, for example using less water due to mandated watering restrictions, the usage patterns rarely return to those levels in effect prior to the water use restrictions.

As previously mentioned, the continued sluggish economy is considered to be directly affecting customer growth and water sales. The marginal trends are due to a depressed housing market, which has affected water use by active customers, water use associated with new construction / re-development (which effects annual water use), as well as the potential water use by seasonal customers that annually return to the District and the length of time that the seasonal customers may stay. Additionally, the City of Riviera Beach, which in the past used large amounts of water to irrigate City property, is considered one of the larger users of the District's Water System. The City, based on recommendations of the District staff, have installed raw water wells throughout the District in continuing efforts to reduce the amount of "finished" water that has been used to irrigate City property. All of these issues have had a direct effect on utility sales and revenues.

The historical and projected customer accounts for the Water System are summarized as follows:

Historical and Projected Customer Accounts and Statistics – Water System [1]				
Fiscal Year Ended September 30, (Historical) [1]	Average Annual Water Accounts	Average Annual ERCs [2]	Water Sales (000s of Gallons)	Average Monthly Water Use per Account
2010	13,743	18,184	2,096,041	9,606
2011	13,788	18,148	2,068,836	9,500
2012	13,726	18,118	2,032,439	9,348
2013	13,378	17,674	2,092,186	9,865
Average Annual Historical Growth Rate	<u>(0.89%)</u>	<u>(0.94%)</u>	<u>(0.06%)</u>	<u>0.94%</u>
Fiscal Year Ending September 30, (Projected) [3]				
2014	13,380	17,676	2,195,664	10,351
2015	13,386	17,682	2,283,519	10,762
2016	13,409	17,705	2,285,606	10,758
2017	13,437	17,733	2,288,219	10,753
2018	13,470	17,766	2,291,431	10,748
2019	13,503	17,799	2,294,644	10,743
Average Annual Projected Growth Rate [4]	<u>0.16%</u>	<u>0.14%</u>	<u>1.55%</u>	<u>0.76%</u>

ERC = Equivalent Residential Connection and equates to the average capacity allocated to / associated with serving a single-family residential customer.

[1] Amounts shown derived from Table 1; Water and Irrigation statistics are combined.

[2] For purposes of this presentation, ERCs were determined based on information published by American Water Works Association (AWWA) which is used by utilities, including the District, for the determination of rates among customer class (by meter size).

[3] Amounts shown derived from Table 2.

[4] Projected growth rate from Fiscal Year 2013 to Fiscal Year 2019.

The Water System customer base consists primarily of single-family residential customers being serviced through a 3/4-inch meter service. As shown in the following table, this class accounted for approximately 88% of the total estimated accounts and 67% of the estimated ERCs served by the Water System during the most recently completed Fiscal Year 2013.

Water Accounts and ERCs – Annual Average for Fiscal Year 2013				
	Average Annual No. of Accounts	Percent to Total	Equivalent Residential Connections [1]	Percent to Total
Residential Single-Family and Multi-Family	11,797	88.18%	11,797	66.75%
Commercial	1,174	8.78%	4,646	26.29%
Irrigation	407	3.04%	1,231	6.96%
Total	13,378	100.00%	17,674	100.00%

[1] For purposes of this representation, ERCs were determined based on information published by the American Water Works Association (AWWA) which is used by utilities, including the District, in the establishment of rate relationships among customers (meter equivalent factors), which was applied to the individual meter sizes served by the System for each class of customers.

As summarized on the table above, the Water System during the Fiscal Year 2013 provided service to approximately 17,674 ERCs, which is greater than the number of accounts (bills) served. An ERC represents the equivalent usage requirements of a single-family residential customer. Since commercial and multi-family customers are generally served by larger sized meters than the standard residential customer, it is useful to equate such customers on a basis equivalent to the residential class for a more consistent presentation of the total customer base served.

As can be seen in the previous tables, the Water System has incurred essentially no growth during the Historical Period. The current customer statistics were relied upon in the development of the customer and demand forecast since this represented the best available information to PRMG.

It should be noted that the water sales forecast is projected to be significantly higher than the anticipated growth in customers served. This is due primarily to the increase in water-only sales to Florida Power & Light Company (FP&L), which increased 112% in 2014 as a result of the addition of a new electric power production facility. Without this significant customer addition, the projected water sales during the Forecast Period would have mirrored the anticipated growth in new customers served.

The development of the Water System customer forecast for the projected period reflected in this Report was based on: i) a review of recent historical trends; ii) the level of historical accounts being served at the end of the Fiscal Year 2013; and iii) discussions and other information provided by the District. As shown on Table 2 and for the purposes of this Report, it was assumed that the average annual customers served (active accounts) for the Water System would increase at an average compound rate of growth of approximately 0.16% per year (with a similar growth rate for the ERCs served by the Water System since the majority of the projected growth is anticipated to be single-family residential). This rate of growth is higher than the historical four year growth rate due to the anticipation on a moderate improvement in the economy.

Wastewater System

The historical and projected customer (account) statistics for the Wastewater System are shown on Tables 3 and 4, respectively at the end of this Report and are summarized below:

Historical and Projected Customer Accounts and Statistics – Wastewater System

Fiscal Year Ended September 30, (Historical) [1]	Average Annual Wastewater Accounts	Average Annual ERCs [2]	Billed Flow (000s of Gallons)	Average Monthly Wastewater Gallons Billed per ERC
2010	13,289	15,873	1,455,572	7,642
2011	13,339	15,875	1,545,329	8,112
2012	13,274	15,828	1,529,734	8,054
2013	12,901	15,437	1,432,671	7,734
Average Annual Historical Growth Rate	<u>(0.91%)</u>	<u>(0.72%)</u>	<u>(4.15%)</u>	<u>(3.45%)</u>
Fiscal Year Ending September 30, (Projected) [3]	Average Annual Wastewater Accounts	Average Annual ERCs [2]	Billed Flow (000s of Gallons)	Average Monthly Wastewater Gallons Billed per ERC
2014	12,901	15,437	1,432,582	7,734
2015	12,906	15,442	1,432,051	7,728
2016	12,930	15,466	1,433,990	7,727
2017	12,960	15,496	1,436,515	7,725
2018	12,995	15,530	1,439,567	7,724
2019	13,030	15,565	1,442,618	7,724
Average Annual Projected Growth Rate [4]	<u>0.17%</u>	<u>0.14%</u>	<u>0.12%</u>	<u>(0.02%)</u>

ERC = Equivalent Residential Connection and equates to the average capacity allocated to / associated with serving a single-family residential customer.

[1] Amounts shown derived from Table 3.

[2] For purposes of this presentation, ERCs were determined based on information published by American Water Works Association (AWWA) which is used by utilities including the District, in the establishment of rate relationships among customers (equivalent meter factors) applied to the individual meter sizes served by the System for each class of customers.

[3] Amounts shown derived from Table 4.

[4] Projected growth rate from Fiscal Year 2013 to Fiscal Year 2019.

Wastewater billed flow (sometimes referred to as revenue gallons) as shown in the above table represent the metered water consumption for which the District's wastewater flow or usage charge is billed. As subsequently discussed in the section of this Report regarding the rates for monthly service, water consumption provides the basis for the billing of wastewater usage charges and not all metered water use is billed a wastewater charge (e.g., water-only service associated with separately metered irrigation service and there is a billing threshold on the amount of wastewater flow can be billed to a single-family residential account because not all water used is assumed to be returned to the Wastewater System). Projections of wastewater gallons billed per ERC are anticipated to remain relatively constant during the Forecast Period as a result of continued water conservation efforts being implemented by the District (e.g., imposition of water conservation rates) and general downward trends in indoor water use.

As shown above, the wastewater customers of the Wastewater System during the Historical Period have experienced a declining trend in customers served, which is consistent with the trends experienced by the Water System. As shown below, the amount of active wastewater customers approximated 96% of the number of water customers during the most recently completed Fiscal Year 2013:

	Active Customers – For Fiscal Year 2013 [1]		
	Water	Wastewater	Percent to Water Accounts
Residential Single-Family and Multi-Family	11,797	11,751	99.61%
Commercial	1,174	1,150	97.96%
Irrigation	407	0	0.00%
Totals	13,378	12,901	96.43%

[1] Based on information provided by the District regarding the historical customers served; Reference Tables 1 and 3 at end of this Report.

With respect to customer growth and for the purposes of this Report, the increase in average annual wastewater customers or accounts has been assumed to increase at an annual compound rate of approximately 0.17% annually for the Forecast Period. As with the Water System, this projection is based on data provided by the District regarding historical trends and is consistent with the forecast trends of customer account growth projected for the Water System.

FINANCIAL FORECAST AND SUFFICIENCY OF EXISTING RATE REVENUES

General

The various components of cost associated with operating and maintaining a utility system, as well as the cost of financing the renewal and replacement of facilities and capital improvements for upgrades and expansion, are generally referred to as the utility revenue requirements. The sum of these cost components, after adjusting for other income and miscellaneous utility revenues, represents the Net Revenue Requirements; the level of expenditures and utility funding needs that must be recovered from rates. The forecast of the revenue requirements of the System encompassed the six fiscal year period ending September 30, 2019 (previously defined as the "Forecast Period"). The revenue requirements for the first year of the Forecast Period were based primarily on the adopted Fiscal Year 2014 Budget, which was adjusted to reflect changes due to known or anticipated events since the preparation of such budget. The projected revenue requirements included the various generalized cost components described below:

- **Operating Expenditures** – These expenditures include the cost of utilities labor, materials, supplies, and other items necessary for the operation and maintenance of the System. These costs also include indirect allocated costs from other supporting departments for administration and customer service.
- **Bond Service** – Bond service includes the principal and interest on the System's current and any future debt obligations (both senior and subordinate lien) payable from the net operating revenues of the System.

- Capital Funding from Rates – Includes capital expenditures funded annually from the operations (rates) of the System which is in addition to capital expenditures funded from external sources such as bonds, grants, Impact Fees, and other sources. This would include deposits to the Renewal and Replacement Fund and the Capital Fund.
- Other Revenue Requirements – This component of need includes, in general, any other expenditures funded annually from rates, including the funding of deposits to working capital and rate stabilization reserves, funding of any other loans or capital leases, and other transfers to other accounts established by the District that may require funding from the System revenues.

Principal Considerations and Assumptions Regarding Projected Operating Results

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. The adopted Fiscal Year 2014 Budget as provided by the District served as the baseline for the expenditure projections and the underlying projections included therein by the District appear reasonable and have been assumed to reflect anticipated operations. The Budget recognizes anticipated changes by System management in operations and costs based on known events, trends, and actual historical financial results. The projections, as adjusted for known or anticipated changes, are considered as being reasonable based on comparisons to recent historical operating results and overall System financial needs. Such amounts were incorporated into the Fiscal Year 2014 component of the Forecast Period.
2. Projected revenues from current rates and charges for the District's System have been based on the schedule of rates and charges currently in effect as adopted by the District pursuant to the Rate Resolution. Such rates and charges were applied to the forecast of water, irrigation, and wastewater customers and sales forecast for the individual utility systems as previously discussed.
3. Capital Fee revenues for the Forecast Period, which are based on new growth or development paying for their pro rata share of the System cost of water and/or wastewater capacity allocable to their property and as a condition for development, have been recognized in the financial forecast. The estimate of the Capital Fee revenue was based on: i) the projection of accounts and ERCs as shown on Tables 3 and 4 at the end of the Report; and ii) the current fees as adopted by the District. For the purposes of this Report, all Capital Fee income was deposited into a separate fund (to account for the fee receipts separately) and used to fund expansion-related expenditures.
4. Included in the financial projections are other operating revenues associated with service initiation and discontinuance fees, meter installation charges, late payment fees, and other related customer-requested services revenues. For the purposes of this Report, other operating revenues were based on: i) the Fiscal Year 2014 budgeted revenues; ii) a review of recent historical trends received from such charges; and iii) discussions with the District. Based on a review of such sources, it was assumed that such revenues would remain

generally constant during the Forecast Period or in relation to anticipated new connections to the System based on the nature of the revenue.

5. Projected operations and maintenance expenses associated with operation of the System have been escalated above estimated Fiscal Year 2014 levels based upon several assumptions and the nature of the expense. Such amounts were projected based on a variety of escalation parameters respective of the specific cost to provide service. These projected operation and maintenance expenses shown in more detail on Tables 6 and 7 were escalated for the Forecast Period as follows:
 - a. Based on discussions with the District, the escalation of wages and salaries above Fiscal Year 2014 amounts was increased by approximately 3.0% annually to reflect increases due to inflation and allowances for salary adjustments such as merit increases and cost of living adjustments. No additional personnel were assumed to be added above the budgeted Fiscal Year 2014 personnel requirements during the Forecast Period, based on discussions with the District.
 - b. 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 1.4 to 5.0% based on the nature of the expenditure. These escalation factors were based on the Consumer Price Index forecast prepared by the Congressional Budget Office as contained in the Economic and Budget Outlook dated January 2014 and discussions with the District.
 - c. Current period Water System electrical expenses and chemical expenses (the "variable expense") were increased during the Forecast Period by a general inflation allowance of 4% based on recent cost increases reported by the District and historical trends in energy costs as published by the *Bureau of Labor Statistics* plus an allowance for System growth. The composite annual compound growth rate in water produced at the District-owned facilities is assumed to be equal to approximately 1% to 2% per year (primarily due to increased sales to FP&L). Based on these assumptions, the increase in variable expenses was projected to average approximately 4% annual after Fiscal Year 2014 for the Forecast Period.
 - d. A contingency allowance of five percent (5.00%) of total operating expenses was recognized in each fiscal year of the Forecast Period beginning in Fiscal Year 2014. The allowance has been included in order to recognize unknown or unplanned expenditures that may occur throughout the fiscal year and to recognize potential changes in the revenues that may occur due to weather, conservation, and other factors. There was approximately \$1.5 million in budgeted contingency expenses in the Fiscal Year 2014 budget. The adjusted contingency amount of \$717,249 for Fiscal Year 2014 represents 5.00% of the total operating expenses as stated above.
 - e. An allowance for bad debt expense has been made to recognize a certain amount of revenues that will be considered as uncollectible and written off throughout the year. A bad debt ratio estimated at 1.50% of sales revenues was subsequently applied to the

level of sales revenues projected for the Forecast Period in the Analysis to estimate the amount of expense to recognize. The projected level of bad debt expense is estimated to average \$364,000 annually over the Forecast Period.

- f. Although considered a System operating expense for financial reporting purposes, depreciation and amortization expenses have not been recognized as an operation and maintenance expense consistent with the provisions of the Bond Resolution since such amounts represent non-cash expenses.
6. The District currently receives all of its wastewater treatment capacity and needs from the ECRWRF pursuant to an Interlocal Agreement Establishing Duties and Responsibilities among the Entities for the Operation of the East Central Regional Wastewater Treatment Facilities dated September 9, 1992 (the "Interlocal Agreement"). Currently the City on behalf of the District has a capacity entitlement in the 70.0 million gallon per day (MGD) facility of 12.5 MGD. For the Fiscal Year 2014, the operating expenses billed by the ECR Board currently accounts for 16% of the total operating expenses of the District.

The forecast of the operating expenditures for the ECRWRF was based on the following assumptions:

- a. The charges for service at the ECRWRF are based primarily on wastewater flow. The cost components included in the charges for service include primarily operations and maintenance expenses and debt service on bonds issued by the ECR Board associated with the funding of capital improvements at the facility. The forecast of wastewater flow delivered to the facility by the District was based on historical trends in delivered flows, the projection of wastewater service area growth, and an evaluation of other entity flows in the facility (since costs are allocated based on proportionate use at the facility which is based on flows). For the Forecast Period, it was assumed that the wastewater flows derived from the District Wastewater System area would approximate 12% annually.
- b. The estimate in operations and maintenance expenses for the ECRWRF were based on the Fiscal Year 2014 and 2015 budgets as approved by the ECR Board, including a change in the re-allocation of costs as a result of certain ECRWRF assets being removed from service. Specifically, the City of West Palm Beach removed from service the advanced wastewater treatment facility designed to treat effluent for reuse and groundwater recharge which resulted in an increase in costs being apportioned to the District as a result of the change in methodology in such allocation.
- c. During the Forecast Period, the ECR Board entered into a contract with the Solid Waste Authority of Palm Beach County (the "SWA") for the disposal of wastewater residuals or biosolids which will increase the cost of service over such period. The disposal of biosolids generated from the wastewater treatment process from the ECRWRF has been calculated based on the provisions of the SWA Biosolids Agreement in which the ECR Board has contracted with the Solid Waste Authority to acquire a 35.88% ownership capacity in the biosolids processing facility owned and operated by the SWA. The SWA Agreement governs the charges that the ECRWRF

will pay for the disposal of biosolids based on its pro rata share of the capital and operating expenses of the biosolids processing facility. The estimate of the biosolids disposal cost for the ECRWRF was based on i) the amount of wastewater flow delivered to the ECRWRF and the corresponding allocable share to the District; ii) the associated dry tons of residuals to be delivered to the SWA biosolids processing facility based on recent trends in wastewater treatment efficiency and discussions with the ECR Board consulting engineers responsible of the design of the 2014 Project; and iii) the terms of the SWA Biosolids Agreement as it relates to the rates and fees charged for the receipt and processing of the ECRWRF biosolids.

- d. The cost of the repayment of debt on financed facilities is also included as a component of the cost of wastewater treatment and billed on the basis of wastewater flow. The ECR Board has issued utility system revenue bonds to finance capital improvements to the System. It is anticipated that as of October 1, 2014, the beginning of the next Fiscal Year, an aggregate principal amount of \$23,460,000 in ECRWRF bonds will be outstanding.

In addition, the ECR Board plans to issue additional bonds in an aggregate principal amount of approximately \$111,980,000 to: i) fund capital improvements to the ECRWRF ii) fund a deposit to the debt service Reserve Account equal to the Reserve Account Requirement for the Series 2014 Bonds; and iii) pay certain expenses related to the issuance and sale of the Series 2014 Bonds. The payments of the Annual Debt Service Requirement for the Series 2014 Bonds were provided by the ECR Board's Municipal Financial Advisor and recognizes and it is anticipated that the debt service payments will significantly increase. Based on discussions with the ECR Board and the Municipal Financial Advisor and the estimated timing associated with the need for funds required to be appropriated for the 2014 Project funding as presented in the capital financing plan, the issuance date for the Series 2014 Bonds is planned to be during November 2014.

Based on existing and anticipated debt to be issued by the ECR Board and recognizing the District flow contribution percent to the ECRWRF, the following is a summary of the anticipated operating and maintenance and debt service charges included in the cost of wastewater treatment service to be billed by the ECR Board during the Forecast Period:

Estimated ECRWRF Wastewater Treatment Charges to the District				
Fiscal Year	R&R Fund Deposit	Debt Service Requirements	Contingency	Total Wastewater Service Charges
2014 (Est.)	\$381,841	\$2,076,148	\$0	\$2,457,989
2015	461,244	2,862,954	250,000	3,574,198
2106	479,434	3,017,158	257,500	3,754,092
2017	508,027	3,195,493	265,225	3,968,745
2018	542,539	3,264,875	273,182	4,080,596
2019	595,073	3,400,966	281,377	4,277,417

7. The District is estimated to have outstanding as of October 1, 2014 in the principal amount \$22,645,000 of senior lien utility revenue bonds issued pursuant to the Bond Resolution and were originally issued in order to acquire the all of the assets and assume all of the liabilities of the City's water supply, treatment and distribution system and wastewater collection, treatment and disposal system. On July 24, 2014 the District issued the Water and Sewer Revenue Refunding Bonds, Series 2014 in order to achieve interest rate savings. The Series 2014 Bonds were issued for the purpose of providing moneys to be used to (i) currently refund and defease all of the District's then outstanding Water and Sewer Revenue Bonds, Series 2004 and (ii) pay the costs of issuance of the Series 2014 Bonds (the "Senior Lien Bonds") as shown below:

Issue	Principal Outstanding [1]
Water and Sewer Revenue Refunding Bonds Series 2014	<u>\$22,645,000</u>

[1] Amount outstanding at October 1, 2014.

The debt service requirements included in this Report for the Senior Lien Bonds were based on the actual debt service schedules for each 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 monthly funding requirements to the various sinking funds as required by the Bond Resolution, which authorized the issuance of the debt (essentially an accrual basis) as opposed to when the debt service requirements are actually paid.

8. The District entered into an "Agreement of Purchase and Sale" on September 16, 1987 with Consolidated Utility Company. The acquisition of this Utility System was determined by the City to be desirable and in the best interest of the City. The District is estimated to have outstanding as of October 1, 2014 in the principal amount \$881,189 of subordinate lien debt for the acquisition of the utility. The payment amount is based on water and sewage usage, which may be updated from time to time based on reassessing the water and sewer usage amount.
9. In addition to the Series 2014 Bonds mentioned above, it was assumed that the District would issue Utility System Revenue Bonds, Series 2015 (the "Series 2015 Bonds") on or around April 1, 2015 to finance a portion of the identified capital improvement program. The Series 2015 Bonds are summarized below:

Proposed Additional Bonds	Total Principal Amount of Bonds	Projected Issuance Date	Projected Average Annual Interest Rate	Estimated Annual Bond Service Requirement [1]	Maturity Date
Series 2015 Bonds	\$40,635,000	April 1, 2015	5.25%	\$2,512,119	April 2045

[1] Assumes interest-only payments for the Fiscal Years 2017 through 2019.

In the development of the estimated additional debt service payments, the capital improvement funding plan assumes that the District will issue Series 2015 Bonds on parity

to the Series 2014 Bonds in an aggregate principal amount of approximately \$40,635,000 to: i) provide a deposit to the Construction Fund to finance certain System capital improvements \$34,077,676; ii) fully fund the Debt Service Reserve Requirement for the Series 2015 Bonds; and iii) a term of approximately 30 years of essentially level Annual Debt Service payments beginning after the Fiscal Year 2019 (interest-only payments for the first four years of the issue to allow for rate phasing opportunities). The resulting Annual Debt Service payments for the Series 2015 Bonds are estimated to be on average \$2.3 million through Fiscal Year 2019 and \$2.51 million annually thereafter.

10. No Subordinated Indebtedness has been assumed to be issued or secured by the District during the Forecast Period in order to provide funds for financing the System capital improvement plan.
11. Pursuant to the terms and conditions of the Bond Resolution, the District must establish and maintain a Renewal and Replacement Fund (the "R&R Fund"). With respect to the R&R Fund, such amounts shall be used by the District for the purpose of paying the costs of major repairs, extensions, improvements or additions to, or the replacement or renewal of capital assets of the System, or extraordinary repairs to the System. The minimum provisions for the transfer to such fund is delineated in the Bond Resolution which provides that the District shall transfer monies to the R&R Fund annually in an amount equal to the Renewal and Replacement Fund Requirement or the amount necessary to have on deposit as a balance equal to such requirement. The Bond Resolution defines the Renewal and Replacement Fund Requirement as the amount equal to five percent (5%) of the Gross Revenues for the preceding Fiscal Year or such other amount as may be designated by certificate of the Consultant from time to time which was considered as being a minimum funding level for capital planning purposes.

In order to meet the capital needs of the District, provide for the increased equity funding from rates consistent with the nature of the identified capital improvements, and maintain the overall financial creditworthiness of the District, we have recognized an annual deposit to the R&R Fund in excess of the minimum requirement reflected in the Bond Resolution. The projected annual R&R Fund transfer for each year of the Forecast Period is as follows:

Fiscal Year	R&R Fund Required Transfer Amount	R&R Fund Additional Transfer Amount	Total Transfer Recognized
2014	\$912,181	\$0	\$912,181
2015	1,015,028	0	1,015,028
2016	1,092,180	546,090	1,638,270
2017	1,188,980	1,188,980	2,377,960
2018	1,252,491	1,252,491	2,504,981
2019	1,319,657	1,319,657	2,639,315

12. Investment income on funds and accounts created by the Bond Resolution and by the District (e.g., customer deposits) has been estimated utilizing average annual interest rates ranging from 0.10% to 0.35% during the Forecast Period. The interest rates have been applied to estimated balances, if any, in the Operating Fund (Fund 411), Customer Deposit Account (Fund 411), the R&R Fund (Fund 412), the Debt Service Reserve Fund (Fund

414), the Capital Fee (Fund 413) Funds (both Water and Sewer), the Capital Fund (Fund 413), and the Sinking Fund (Fund 414). We have also assumed that any interest earnings on the Capital Fee Funds, if any, will be deposited in the respective funds and not be available for operating expense or debt service requirements consistent with the provisions of the Bond Resolution. Table 13 provides a summary of the transfers in and out of each fund / account and corresponding ending cash balances for each fund/account maintained by the District on behalf of the System.

13. The capital improvement program for the System was based on data derived from the District's most recent capital improvement. The capital funding plan was based on i) the purpose of the expenditures (e.g., expansion-related); ii) available balances in the funds and accounts established by the District which are available for capital projects; iii) anticipated Capital Fees receipts derived from new development; and iv) the use of additional bonds to finance water and wastewater projects. Also included in the capital improvement program is the use of the R&R Fund and the Capital Improvement Fund to finance recurring capital projects (i.e., essentially the betterment or replacement of assets). The recognition of these revenue requirements is necessary in order to allow the District an annual funding mechanism to continue to provide high quality service (i.e., maintain same level of service) to its customers as the System ages. The capital improvement plan, as provided by District staff is reflected in today's dollar value for all years of the program; such estimate amounts were escalated for purposes of this analysis based on an average inflationary factor of approximately 3.0%, beginning in Fiscal Year 2016, annually predicated on the average change in the last 20 years of the Construction Cost Index as published by the Engineering News Record (the "ENR Index"). The timing, priority, and funding of such capital needs were developed with the guidance of District staff. The following is a summary of capital expenditures and the corresponding estimated funding sources assumed in the development of the Financial Forecast:

Six-Year Capital Improvement Program Summary of Projects and Funding Sources							
Fiscal Year Ending September 30, [1]							
	2014	2015	2016	2017	2018	2019	Total
Capital Projects:							
Water System	\$1,832,028	\$13,224,199	\$8,376,293	\$6,559,445	\$2,549,229	\$4,821,896	\$37,363,089
Wastewater System	1,324,283	4,829,008	1,137,128	3,081,152	8,584,431	2,087,613	21,043,616
Total System Capital Projects	<u>\$3,156,311</u>	<u>\$18,053,207</u>	<u>\$9,513,421</u>	<u>\$9,640,597</u>	<u>\$11,133,660</u>	<u>\$6,909,509</u>	<u>\$58,406,705</u>
Funding Sources:							
Operating Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Renewal and Replacement Fund	2,089,480	625,000	1,158,750	2,307,675	2,814,475	6,221,150	15,216,530
Capital Fees Fund	0	0	0	0	0	0	0
Rate Revenue	661,331	611,331	629,671	648,622	668,185	688,359	3,907,499
Capital Funds	405,500	1,600,000	515,000	1,591,500	1,093,000	0	5,205,000
Series 2015 Bonds	0	15,216,876	7,210,000	5,092,800	6,558,000	0	34,077,676
Total Funding Sources	<u>\$3,156,311</u>	<u>\$18,053,207</u>	<u>\$9,513,421</u>	<u>\$9,640,597</u>	<u>\$11,133,660</u>	<u>\$6,909,509</u>	<u>\$58,406,705</u>

[1] Amounts shown derived from Table 10 at end of Report and reflect when funding projected to be required and may be different from when funds are actually expended through project completion. Amounts include current available funds on deposit in such funds, as well as future anticipated deposits to such funds.

14. All contracts, agreements, statutes, rules, and regulations which have been relied upon by us in preparing this Report and the projected operating results contained herein will be fully enforceable and remain in effect in accordance with their terms and conditions, and such terms and conditions will be compiled with by the parties involved throughout the study period. We make no representations or warranties and provide no opinion concerning the enforceability or legal interpretation of such contractual and legal requirements.

Net Revenue Requirements – Water System

The Net Revenue Requirements of the Water System are presented on Table 11 and are shown below and were based upon: i) the customer forecast identified herein; ii) the existing rates for service; iii) the operating expense assumptions as delineated above; iv) the capital improvement plan as identified by the District and funding analysis assumed herein; and v) the rate covenants as defined in the Bond Resolution, all as discussed throughout this Report.

The purpose of the development of the Net Revenue Requirements is to determine the required level of revenue from monthly user rates necessary to meet the financial obligations of the Water System.

Summarized below are the projected Net Revenue Requirements and overall recommended rate adjustments for the Water System:

Projected Water System Net Revenue Requirements					
Description	Fiscal Year Ending September 30,				
	2015	2016	2017	2018	2019
Total Operating and Maintenance Expenses	\$9,522,213	\$9,877,590	\$10,208,394	\$10,550,770	\$10,906,552
Debt Service					
Existing	\$1,282,560	\$1,279,344	\$1,277,669	\$1,280,483	\$1,279,009
Proposed	0	714,668	1,653,367	1,877,398	1,877,397
Total Debt Service	\$1,282,560	\$1,994,012	\$2,931,036	\$3,157,881	\$3,156,406
Other Revenue Requirements					
Capital Funded From Rate Revenues	\$407,323	\$419,543	\$432,170	\$445,204	\$458,646
Transfers to R&R Fund	730,637	1,150,051	1,645,544	1,727,164	1,818,473
Transfers to Capital Fund	0	0	0	0	0
Total Other Revenue Requirements	\$2,420,520	\$3,563,606	\$5,008,749	\$5,330,248	\$5,433,525
Gross Water Revenue Requirements	\$11,942,733	\$13,441,196	\$15,217,143	\$15,881,018	\$16,340,077
Less Income from Other Sources					
Other Revenues	\$503,905	\$506,343	\$508,809	\$511,425	\$514,084
Interest Income	24,958	35,552	42,234	46,801	48,618
Transfer from Operating Reserves	0	0	0	0	0
Net Revenue Requirements	\$11,413,870	\$12,899,301	\$14,666,100	\$15,322,793	\$15,777,376

Table continued on following page.

Projected Water System Net Revenue Requirements (cont'd.)

Description	Fiscal Year Ending September 30,				
	2015	2016	2017	2018	2019
Approved Rate Adjustments					
Projected Increase Water	1.94%	2.11%	1.96%	2.03%	2.03%
Projected Increase Irrigation	1.94%	2.11%	1.96%	2.03%	2.03%
Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
Water Rate Revenue with Effective Increase	\$12,325,802	\$12,595,361	\$12,856,413	\$13,140,424	\$13,424,569
Irrigation Rate Rev. with Effective Increase	1,742,998	1,778,912	1,814,767	1,851,529	1,888,483
Total Adopted Rate Revenues	14,068,800	14,374,272	14,671,180	14,991,953	15,313,052
Net Surplus / (Deficiency)	\$2,654,931	\$1,474,971	\$5,081	(\$330,840)	(\$464,324)
Percent of Total Water Rate Revenues	18.87%	10.26%	0.03%	-2.21%	-3.03%
Recommended Rate Adjustments					
Projected Increase Water	0.00%	0.00%	0.00%	0.00%	0.00%
Projected Increase Irrigation	0.00%	0.00%	0.00%	0.00%	0.00%
Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
Water Rate Revenue with Effective Increase	\$12,325,802	\$12,595,361	\$12,856,413	\$13,140,424	\$13,424,569
Irrigation Rate Rev. with Effective Increase	1,742,998	1,778,912	1,814,767	1,851,529	1,888,483
Total Adjusted Rate Revenue	14,068,800	14,374,272	14,671,180	14,991,953	15,313,052
Net Surplus / (Deficiency)	\$2,654,931	\$1,474,971	\$5,081	(\$330,840)	(\$464,324)
Percent of Total Water Rate Revenues	18.87%	10.26%	0.03%	-2.21%	-3.03%

As can be seen above and shown in more detail on Table 10, the existing water rate revenues (i.e., without the recognition of the proposed rate adjustments) beginning in Fiscal Year 2014 are not anticipated to be sufficient to adequately fund the identified Net Revenue Requirements of the Water System during the Forecast Period and provide funds to maintain operating reserves to maintain a strong utility credit.

Net Revenue Requirements – Wastewater System

The Net Revenue Requirements of the Wastewater System are presented on Table 12 and are shown below and were based upon: i) the customer forecast identified herein; ii) the existing rates for service; iii) the operating expense assumptions as delineated above; iv) the capital improvement plan as identified by the District and funding analysis assumed herein; and v) the rate covenants as defined in the Bond Resolution, all as discussed throughout this Report.

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The purpose of the development of the Net Revenue Requirements is to determine the level of revenue from monthly user rates necessary to meet the financial obligations of the Wastewater System. Summarized below are the projected Net Revenue Requirements and overall recommended rate adjustments for the Wastewater System:

Projected Wastewater System Net Revenue Requirements					
Description	Fiscal Year Ending September 30,				
	2015	2016	2017	2018	2019
Total Operating and Maintenance Expenses	\$7,520,088	\$7,856,683	\$8,215,621	\$8,476,426	\$8,827,957
Debt Service					
Existing	\$631,709	\$630,125	\$629,300	\$630,686	\$629,960
Proposed	0	352,001	814,345	924,688	924,688
Total Debt Service	\$631,709	\$982,125	\$1,443,645	\$1,555,374	\$1,554,648
Other Revenue Requirements					
Capital Funded From Rate Revenues	\$304,008	\$313,128	\$322,552	\$332,281	\$342,313
Transfers to R&R Fund	359,866	566,443	810,492	850,693	895,666
Transfers to Capital Fund	0	0	0	0	0
Total Other Revenue Requirements	\$1,295,582	\$1,861,697	\$2,576,689	\$2,738,347	\$2,792,627
Gross Wastewater Revenue Requirements	\$8,815,671	\$9,718,380	\$10,792,310	\$11,214,773	\$11,620,584
Less Income from Other Sources					
Other Revenues	\$135,178	\$135,178	\$135,178	\$135,178	\$135,178
Interest Income	24,958	35,552	42,234	46,801	48,618
Transfer from Operating Reserves	0	0	0	0	0
Net Revenue Requirements	\$8,655,534	\$9,547,649	\$10,614,897	\$11,032,794	\$11,436,788
Approved Rate Adjustments					
Projected Increase Wastewater	2.05%	5.17%	1.99%	3.69%	3.61%
Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
Total Adopted Revenues	\$6,480,909	\$6,817,809	\$6,965,373	\$7,234,517	\$7,508,977
Net Surplus / (Deficiency)	(\$2,174,625)	(\$2,729,840)	(\$3,649,524)	(\$2,874,820)	(\$3,124,899)
Percent of Total WW Rate Revenues	<u>-33.55%</u>	<u>-40.04%</u>	<u>-52.40%</u>	<u>-39.74%</u>	<u>-41.62%</u>
Recommended Rate Adjustments					
Projected Increase Wastewater	16.00%	12.00%	9.00%	6.00%	6.00%
Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
Total Adjusted Rate Revenue	\$7,085,794	\$8,692,706	\$9,650,176	\$10,660,987	\$11,703,460
Net Surplus / (Deficiency)	(\$1,569,740)	(\$854,943)	(\$964,721)	(\$371,807)	\$266,672
Percent of Total Wastewater Rate Revenues	<u>-22.15%</u>	<u>-9.84%</u>	<u>-10.00%</u>	<u>-3.49%</u>	<u>2.28%</u>

The primary reasons for the additional increase in water and wastewater rates above the increases previously approved by the District Board are as follows:

1. The System has experienced negative to no growth in the past several years coupled with declining water sales per customer (reduced revenue contribution margins) which has dampened the effects of the approved rates (less billing units result in a lower effective

change in revenues earned from the adopted rate adjustments) and has lowered net operating revenues.

2. Continued inflation on the cost of operations and maintenance and the cost of capital construction which results in increased costs over time.
3. Increases in the payments to the ECR Board for wastewater treatment expenses from the ECRWRF. Such payments include both increases in operating expenses, including sludge disposal, and debt service payments associated with the recent and anticipated bonded indebtedness which totals approximately \$137 million and which the District is responsible for approximately 12% of the corresponding debt service payments.
4. The need to fund the identified capital plan totaling in excess of \$50 million over the Forecast Period based primarily on the Utility Master Plan findings identified during Fiscal Year 2013. The funding plan includes;
 - a. The issuance of \$40,635,000 in additional utility revenue bonds which results in an increase in debt payments of \$1,066,669 and \$2,467,712 for the Fiscal Years 2016 and 2017 respectfully (interest-only payments) and \$2,802,086 beginning in Fiscal Year 2018 (principal and interest payments); and
 - b. Recognition of an annually recurring Pay-as-you-go capital funding from rate revenues averaging approximately 7% of total rate revenues to provide additional funds for capital needs and to limit the amount of debt exposure.
5. As a result of the issuance of additional bonds (see Item No. 4a above), the District will need to have rates in place to allow for the issuance of the bonds as required by the credit rating agencies and the market. This deals with the need to meet the rate covenant (debt coverage ratio) and the flow of funds (required fund deposits for expenses, debt, capital, etc.) as defined in the Bond Resolution, adequate reserves to limit financial risk and to maintain the current A+ credit rating, and to promote the overall financial sustainability of the System.
6. The current wastewater rates are below market when compared to other utilities, especially those entities that receive wastewater service from the ECRWRF (i.e., Palm Beach County, Town of Palm Beach, and the Cities of West Palm Beach and Lake Worth). This results in an under-recovery of operating margins for wastewater expenditures which is a significant driver of the rate increase (e.g., for the Fiscal Year 2014 the ECRWRF currently represents 16% of the total operating expenses of the System and by the end of the Forecast Period, the expense relationship is projected to approach 22%).

Because of these rate increase drivers or reasons, many which were not known or anticipated at the time of the District's last rate analysis conducted in Fiscal Year 2008, the approved rates for water and wastewater service are being recommended to be further increased for the remainder of the Forecast Period.

As can be seen above and shown in more detail on Table 12, the existing wastewater rate revenues (i.e., without the recognition of the proposed rate adjustments) are not anticipated to be

sufficient to adequately fund the identified Net Revenue Requirements of the Wastewater System.

During the course of the Forecast Period, the recommended rate adjustments are anticipated to produce additional revenues within the initial years of the Forecast Period, which were transferred to the Operating Fund. These reserves are necessary in order to: i) provide funds to maintain adequate working capital target levels to allow for external attraction of funds at lower interest rates and to provide funds in case of extraordinary events (e.g., floods, hurricanes) in order to limit the financial risks to the System; ii) provide additional funding for future capital improvements (PAYGO funding); and iii) to assist in the overall rate phasing process and provide future funds for rate stabilization purposes.

DEBT SERVICE COVERAGE AND COVENANT COMPLIANCE

Debt Service Covenant Compliance

The Bond Resolution includes a provision requiring the District to establish and maintain rates which will always provide in each Fiscal Year, Net Revenues to satisfy the following debt coverage requirements:

"...(a) Net Revenues which shall be at least equal to one hundred twenty percent (120%) of the Annual Debt Service Requirement for the Bonds, and (b) Net Revenues plus Impact Fees available to pay debt service on Bonds which shall be at least equal to one hundred twenty-five percent (125%) of the Annual Debt Service Requirement for the Bonds; provided that such Net Revenues shall be sufficient to make all of the payments required by the terms of the Resolution."

The Bond Resolution established these minimum debt coverage requirements for the protection of the holders of the Bonds.

Table 14 at the end of this Report summarizes the ability of the System Pledged and Net Revenues to meet the rate covenant provisions of the Bond Resolution for the Forecast Period. Based on the results of the financial forecast, it is expected that funds generated from System operations during the Forecast Period, which recognizes the imposition of the proposed rate adjustments, is projected to provide sufficient resources to meeting the operation and maintenance requirements of the System as well as fund the projected capital needs as identified in the District's capital improvement program.

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As can be seen on Table 14 and as shown below, it is anticipated that the Pledged Revenues derived from System operations will be sufficient to meet the rate covenant requirements as defined in the Bond Resolution.

Fiscal Year	Calculated Senior Lien Coverage (Required 1.2)	Calculated All-In Coverage (Target 1.50) [1][2]
2014	3.68	3.33
2015 [3]	2.70	2.51
2016	2.13	1.78
2017 [4]	1.56	1.33
2018	1.61	1.56
2019	1.76	1.70

[1] Represents targets recommended by PRMG to maintain or promote a favorable bond credit rating.

[2] All-in debt coverage includes all debt allocable to the System including Senior Lien Bonds and Subordinate Lien Debt, if any. Target reflects rating agency median ratio for an "A" – rated utility credit.

[3] Includes issuance of Additional Parity Bonds (Series 2015 Bonds) and reflects interest-only payments on such bonds.

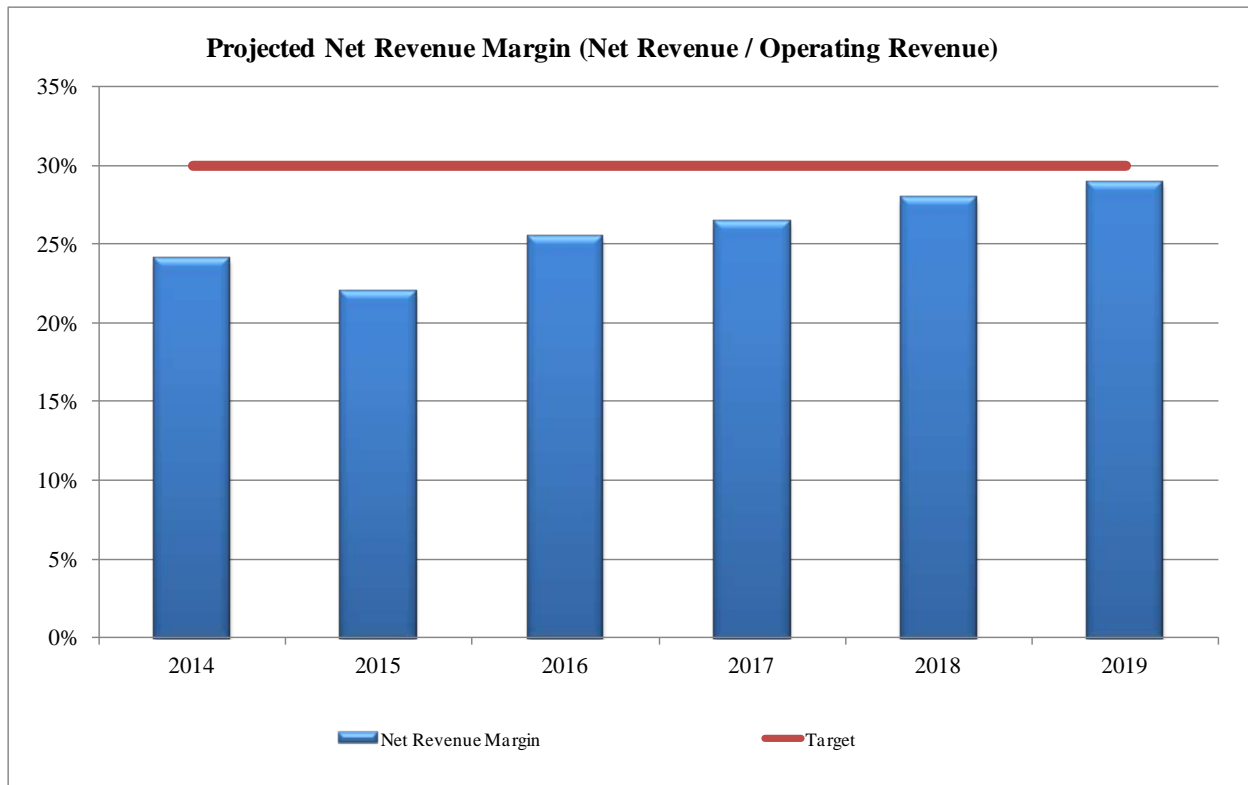
[4] Reflects year in which full amortization of debt repayment in the Series 2015 Bonds begins.

OTHER FINANCIAL CONSIDERATIONS AND PERFORMANCE

Included, as part of the development of the financial forecast and the review of the overall sufficiency of System revenues, is an evaluation of the projected financial position of the System. This evaluation includes the development of certain ratios and the review of financial performance indicators to evaluate "where the System is anticipated to be financially." The analysis includes a series of charts and figures prepared to provide the District a visual representation of the financial and statistical trends in the selected financial ratios or benchmarks anticipated for the System over the Forecast Period. The following is a brief description of financial ratio evaluated by PRMG on behalf of the System.

Projected Net Revenue Margin Ratio

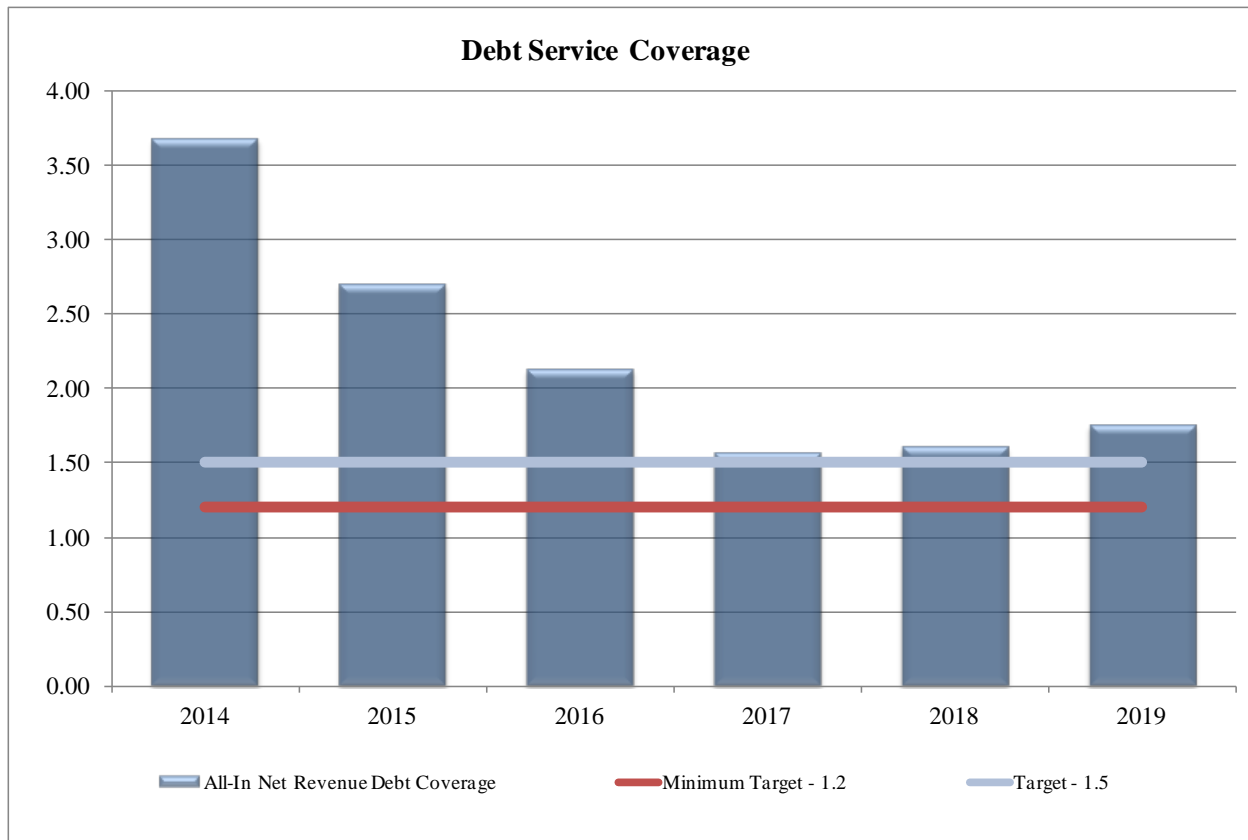
The Net Revenue Margin Ratio is a measure of a utility system's ability to meet its operating expenses and indicates the net contribution margin estimated to be earned by the System. The contribution margin represents the amount of net revenues that are available to meet the other expenditure requirements of the System after the payment of the operating expenses (e.g., debt service, deposits to the R&R Fund, etc.). A relatively low Net Revenue Ratio (say, 25 percent) indicates that a large portion of operating revenue is used to pay operating expenses. A high Net Revenue Ratio (say, 45 percent) indicates a significant portion of operating revenues is available for purposes other than the payment of operating expenses. We are of the opinion that the District should target a minimum Net Revenue Ratio of 30% to promote the System's financial health over the Forecast Period. This target level is lower than the Moody's median (industry average) of approximately 35%. Since the District purchases all of its wastewater treatment requirements from the ECRWRF, which includes the payment of debt service issued to finance improvements on such facilities and which would normally be "below the line" in the flow of funds hierarchy, a lower ratio was considered reasonable by PRMG. As can be seen below, it is projected the District will improve their Net Revenue Ratio over the Forecast Period reach a more favorable Net Revenue Ratio.



All-In Debt Service Coverage

This ratio illustrates the ability to cover the debt service payments which is a primary ratio used by credit rating agencies in the evaluation of utility credits. For the purpose of this analysis, the debt service coverage is for the aggregate of all System debt and loans pledged for payment from System revenues, which more accurately reflects the ability to fund the debt requirements from rates. The ratio only includes the Net Revenues (gross revenues less operating and maintenance expenses) of the System since Impact Fees (although considered as a pledged revenue) are one-time fees and not considered as a recurring revenue for ongoing debt repayment purposes. Additionally, the credit rating agencies rely on this ratio in the review of utility credits since it links to the total ability to pay debt from ongoing revenues of the utility and presents the overall leveraging capability of such utility. The All-In Debt Service Coverage ratio is presented on the following figure:

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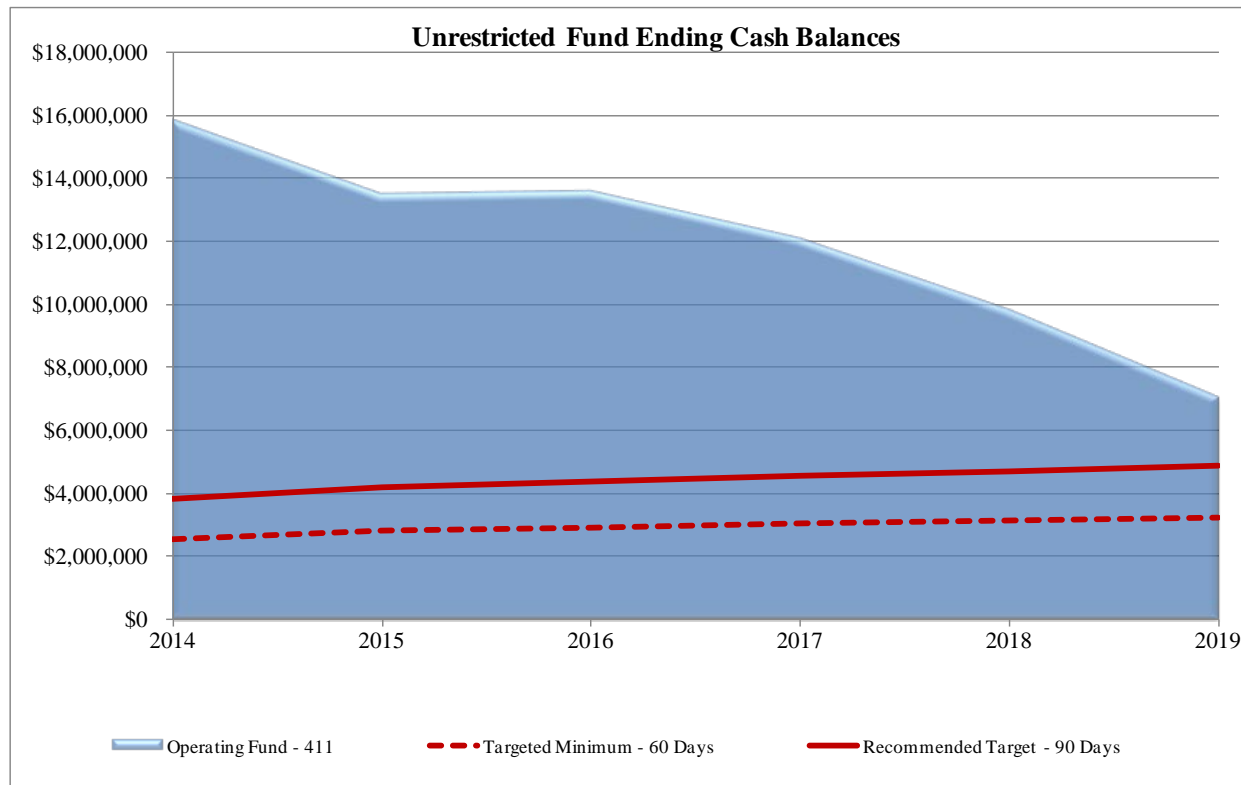
The median debt service coverage ratio is 2.00 as reported by Moody's Investor Service, Inc. (for AA – rated credit) and the minimum debt service coverage ratio target was set at 1.50 which is representative of an "A" – rated credit. As can be seen above, the All-In debt service coverage ratio, assuming the implementation of the proposed rate increases, is anticipated to meet or exceed the minimum target of 1.5-times debt coverage ratio over the Forecast Period which is considered to be favorable. The reason for the decline in the ratios due to the recognition and phase-in of the debt service requirements for the Additional Parity Bonds (Series 2015 Bonds) assumed to be issue during the Forecast Period.

Operating Fund (Working Capital) Balance

An important component of the evaluation of the System is the resulting ending Working Capital / Operating Reserves cash or liquidity position of the District since it indicates the ability of the utility to fund short-term unforeseen expenditures or revenue shortfalls and reduces the overall financial risk of the utility. The estimated cash flow (deposits and withdrawals) to all the accounts maintained by the District are shown in detail on Table 15 at the end of this report.

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Below is a graphical representation of the unrestricted cash (working capital) and targeted ending balance:



As can be seen above and assuming the implementation of the recommended rate adjustments, the Working Capital / Operating Reserve cash balances for the System are anticipated to meet the minimum targeted ending cash balance over the Forecast Period which was set at 90 days of operating expenses for the purposes of this evaluation. A minimum target operating reserve cash balance at 90 days of operating expenses is considered favorable by credit rating agencies and will serve to reduce the future cost of borrowing due to the stronger credit rating. Any unrestricted funds above the minimum target level would be available for any System purpose, including increased capital project funding that may periodically occur, and also serves as a hedge in case of any extraordinary event that may occur that would affect operations or rate revenue collectability.

PROPOSED RATE DESIGN

This section sets forth the derivation of the recommended rates for water and wastewater services, including a discussion of general rate design criteria and the methods used to classify and allocate costs in order to design rate structures. The proposed rates are predicated on the Net Revenue Requirements and the customer and sales forecast summarized as discussed in earlier sections of this report. Based on discussions with District staff, the general goals or changes to the existing System rate design were to provide supportable and reasonable allocation of costs with consideration for increasing revenue stability, improving cost recovery relationships among

customers while recognizing historical cost recovery relationships, and minimizing impacts to low use customers, where possible.

Proposed Rate Design – General Criteria

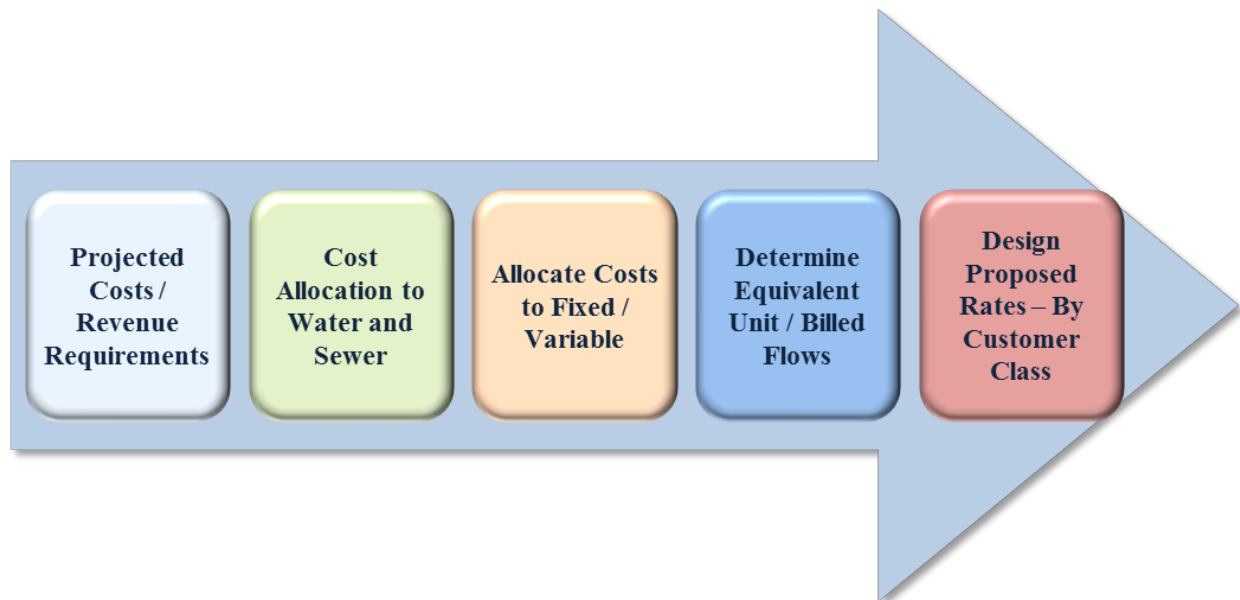
Rate design typically involves the development of a rate structure and calculation of rates and charges for each customer classification and/or rate structure component. The goal of this task was to establish a pricing structure or formula to recover the total revenue requirements of the System in a reasonable manner, consistent with the cost of providing service, overall revenue stability, and the fiscal and pricing policies of the District. Generally, proposed utility rates, to the extent practical, should meet the following criteria for service provided by publicly owned utilities:

- Utility rates should be based on a policy that calls for the lowest possible prices consistent with the requirements of providing quality service on an ongoing basis;
- Utility rates should be equitable among customers, taking into consideration the cost of providing service to the various users of the System;
- Utility Rates and cost recovery strategies should recognize the current financial needs of the System and when rates were last adjusted and, where possible, recognize approaches to avoid "rate shock" in the future;
- Utility rates should be designed to encourage the most efficient use of the District's investment and discourage unnecessary or wasteful use of resources (promote water conservation); and
- Utility rates should comply with applicable orders and requirements of state and federal regulatory authorities, if any, that may have jurisdiction.

Prior to the specific development of the water and wastewater rate structure the Net Revenue Requirements were allocated to the fixed rate component and the volumetric or usage components in order to determine the "per unit cost" of providing service. The allocation recognized the nature of expenditure being incurred; general cost allocation parameters used by the Florida Public Service Commission in the regulation of private utilities, and other factors. Once the costs were allocated to the costs recovery classifications (fixed, variable, etc.), then the costs were allocated to the rate structure components.

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The following diagram outlines the general rate design methodology:



Principal Rate Issues Identified

Based on discussions with District staff the following rate issues and objectives were identified concerning the existing rates and proposed rate design plan:

- The District's existing and adopted water and wastewater rates are not adequate to fund the identified Net Revenue Requirements of the System.
- Current rate structure does not incorporate a structure that recognizes differences in capacity allocations / relationships. Currently, the same rate is charged for all meter sizes; however, the District Rate Resolution provides for a "readiness-to-serve charge per Equivalent Residential Unit ["ERU"]" for the application of the base charge).
- The current wastewater rates, including the final amount recovered in the base charge, are low. For example, the commercial customer class wastewater base (readiness-to-serve) charge is \$8.22 per ERU; this is low when compared to the 19 utilities as shown on Table 16, which averages \$16.93 per ERU per month. Furthermore, for those utilities receiving wastewater treatment service from the ECRWRF, the average base charge of \$12.08, which is approximately 50% higher than the District's current base charge.
- Current rate structure has multiple bill types that represent inside and outside city customers with surcharges ranging from 25% to 35%. According to the Florida Statutes §180.191, a municipality is allowed to charge up to an additional 25% surcharge for outside city customers without justification and it is recommended that all outside customers be charged the same surcharge factor.

Rate Design Recommendations

The proposed rates reflect modifications to the current rate structure to: i) meet the objectives of the District; ii) increase the revenue stability of the rates by increasing fixed cost recovery; iii) reflect industry norms relative to the application of base charge average accounts within a customer class; iv) increase water conservation pricing for the residential class on a more consistent basis with essential, discretionary, and excessive water use relationships; v) price water use for larger customers recognizing the service in place to serve such customers; and vi) meet the overall financial needs of the System. Recognizing these rate structure parameters, the following is a summary of the rate structure or design recommendations.

1. The District adopted a rate phasing plan which currently has five (5) years remaining. It is proposed that the rates as adopted by the District be increased for the remaining five (5) years to maintain a rate phasing plan but fully recover the increased Net Revenue Requirements identified for the Forecast Period. As part of this proposed rate phasing plan, it is recommended that the fixed cost recovery from rates be increased from 30% to 34% which will move the utility towards a more predictable revenue recovery (limits financial risk).
2. The proposed rates were designed to include three fixed-cost components to promote equity in cost recovery among the customer classes. The recommended fixed charges include:
 - a. An account charge (billing charge) to recover the cost of meter reading and customer billing assigned to all customers for each bill rendered. This would be a single charge for all customers that receive service from the District (water and wastewater, water-only or wastewater-only service) and is to be applied on a "per bill rendered" basis.
 - b. A readiness-to-serve charge to recover certain costs based on the implied capacity relationships of the customer classes which is based on the size of the meter serving the account and meter flow (demand) information based on information published by the American Water Works Association (AWWA) and which is used by the Florida Public Service Commission and other public utilities in the development of rates among customers.
 - c. For customers receiving potable water service, a fixed charge to recover the cost of amortizing (replacing) the meter used to serve the account. This fee varies by meter size and allows the District a funding mechanism to replace the meter on a periodic (15 years) basis and recognizes the differences in service as a result of a customer requiring a larger meter to meet its individual demand requirements.
3. For the single-family (individually metered) residential class, all customers are considered as one (1) ERU and the readiness-to-serve component of the fixed cost application will be the same for all customers; the only difference in fixed cost rates will be the meter amortization charge component which does recognize the differences in meter cost installation (larger the meter size, the higher the cost).

For the master metered residential class, the readiness-to-serve component of the fixed cost application will be the same for all customers and will continue to be applied on a "per dwelling unit" basis which is consistent with the current rate structure employed by the District. The ERU rate will be the same as that developed for the single-family residential class (i.e., 1 ERU) based on the peak month demand relationships of the dwelling units served for the two customer classes; this is also consistent with the current rate structure of the District.

For commercial and individually metered irrigation accounts the readiness-to-serve component of the fixed cost application will be based on the size of the meter serving the premise to recognize the demand diversity between the customers of this class. The readiness-to-serve rates will recognize the following factors based on meter demand information as published by AWWA:

Meter Equivalent Factors – Readiness-to-Serve Cost Recovery for Commercial / Irrigation Class	
Meter Size	Equivalent Factor
3/4-inch	1.0
1-inch	2.0
1-1/2-inch	3.0
2-inch	5.0
3-inch	10.0
4-inch	17.0
6-inch	33.0
8-inch	53.0
10-inch	77.0

4. The proposed water rates will include an inverted block rate structure to promote water conservation and to comply with the water use permit requirements dictated by the South Florida Water Management District. The proposed conservation (usage) rates were separately developed for the residential and non-residential classes and were based on the following rate development assumptions:
 - a. A residential block threshold that reflects a four (4) tiered block structure that links closer to indoor use parameters (matches the wastewater billing threshold which assumes indoor use) and recognizes discretionary and excess use parameters. In order to phase-in the increased base charges, the first block for the residential class usage rates include a life-line (reduced cost) rate. The following summarizes the proposed blocks for the residential class which will be applied to all residential customers on a per dwelling unit basis which promotes consistency among the customers in these classes:
 - i. Tier 1 = 0 – 5,000 gallons a month (per dwelling unit);
 - ii. Tier 2 = 5,001 – 10,000 gallons a month (per dwelling unit);
 - iii. Tier 3 = 10,001 – 20,000 gallons a month (per dwelling unit); and

- iv. Tier 4 = Above 20,000 gallons (per dwelling unit) targeting customers who utilize water above their reserved water capacity (i.e., the level of service implied when assigning treatment capacity and capital costs as part of the capacity reservation process for the determination of Impact Fees when the premise initially connects to the System) including higher excessive outdoor uses.
- b. A commercial block threshold that reflects a three (3) tiered block structure that links to the reservation of capacity per ERU and considers the expansion of the blocks to match the ERU factors developed for the readiness-to-serve charge which promotes consistency among all customers of the class is recommended as follows:
 - i. Tier 1 = 0 – 10,000 gallons a month (per ERU);
 - ii. Tier 2 = 10,001 – 30,000 gallons a month (per ERU); and
 - iii. Tier 3 = Above 30,000 gallons (per ERU) targeting customers who utilize water above their reserved water capacity (i.e., the level of service implied when assigning treatment capacity and capital costs as part of the capacity reservation process for the determination of Impact Fees when the premise initially connects to the System).
- c. Irrigation meters are assumed to be installed solely for the benefit of being a wastewater deduct meter whereby the metered water use at the irrigation meter is not subject to the billing of the wastewater flow charges; only the domestic water use would be billed the wastewater flow charges. Recognizing this rate availability assumption; a multi-family and commercial individually metered irrigation block threshold that reflects a two (2) tiered irrigation rate structure that also links to the domestic use tiers which promotes uniformity among water-only use (i.e., the irrigation flows generally are priced the same when adding the domestic flows of the premise) is recommended as follows:
 - i. Tier 1 = 0 – 40,000 Gallons per Month (per ERU); and
 - ii. Tier 2 = Above 40,000 Gallons per Month (per ERU).
- d. Due to the need to significantly increase the wastewater rates above the approved rates based on the estimated revenue requirements, it is recommended for the wastewater residential class that the monthly maximum billing cap or threshold for the billing of the wastewater flow charges be maintained at 10,000 gallons per month. This threshold is common and will levelize the rate impacts to the class of customers.
- e. With respect to the commercial class, it is proposed that the current pricing differential for water use and wastewater flow be continued to limit the rate shock of a change in rate structure. It should be noted that this rate effect on the commercial class is mitigated since the water consumption blocks are proposed to be expanded based on the size of the meter serving the premise. Additionally, all metered water use for the commercial class is recommended to be billed the wastewater consumption charge

unless a specific deduct or irrigation (water-only) meter is in service or if the customer is classified as a water-only account.

- f. The District currently charges an outside City surcharge that varies by location. To promote rate consistency with the provisions the Florida Statutes, Chapter 180.191 yet maintain an outside city surcharge, which is the policy of the District, it is recommended that all outside city customers be charged a consistent surcharge equal to twenty-five percent (25%) of the then inside City rates.

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PROPOSED RATES, CUSTOMER IMPACTS, AND RATE COMPARISON

Based on the assumptions, objectives and recommendations of this Report the following residential, multi-family and commercial rates for the Water System are proposed:

Summary of Existing, Adopted, and Recommended Monthly Water Rates

Description	Existing 10/1/2013	Adopted 10/1/2014	Recommended					
			1/1/2015	10/1/2016	10/1/2017	10/1/2018	10/1/2019	
Single-Family [1]								
Monthly Base Charge								
3/4-inch	\$12.98	\$13.24	\$14.26	\$14.55	\$14.84	\$15.14	\$15.44	
1-inch	12.98	13.24	14.54	14.84	15.13	15.44	15.75	
1.5-inch	12.98	13.24	15.24	15.55	15.86	16.18	16.51	
2-inch	12.98	13.24	16.02	16.35	16.67	17.01	17.35	
Commodity Charge (per Thousand Gallons)								
Existing	Recommended							
0 – 9	0 – 5	\$2.67	\$2.72	\$2.52	\$2.58	\$2.62	\$2.68	\$2.73
9 – 14	5 – 10	3.34	3.40	3.43	3.50	3.57	3.64	3.72
14 – 19	10 – 20	4.00	4.08	4.36	4.46	4.54	4.64	4.72
Above 19	Above 20	4.67	4.76	5.46	5.57	5.69	5.81	5.92
Multi-Family								
Monthly Billing Fee per Account	\$0.00	\$0.00	\$3.37	\$3.44	\$3.51	\$3.58	\$3.65	
Monthly Readiness-to-Serve Charge per Unit – All Units	\$12.98	\$13.24	\$10.17	\$10.38	\$10.59	\$10.80	\$11.01	
Commodity Charge (per Thousand Gallons)								
Existing	Recommended							
0 – 9	0 – 5	\$2.67	\$2.72	\$2.52	\$2.58	\$2.62	\$2.68	\$2.73
9 – 14	5 – 10	3.34	3.40	3.43	3.50	3.57	3.64	3.72
14 – 19	10 – 20	4.00	4.08	4.36	4.46	4.54	4.64	4.72
Above 19	Above 20	4.67	4.76	5.46	5.57	5.69	5.81	5.92
Commercial [1][2]								
Monthly Base Charge								
3/4-inch	\$12.98	\$13.24	\$14.26	\$14.55	\$14.84	\$15.14	\$15.44	
1-inch	12.98	13.24	21.14	21.57	22.00	22.45	22.90	
1.5-inch	12.98	13.24	38.21	38.99	39.77	40.58	41.38	
2-inch	12.98	13.24	59.44	60.65	61.87	63.12	64.38	
3-inch	12.98	13.24	106.98	109.16	111.35	113.61	115.87	
4-inch	12.98	13.24	175.06	178.63	182.20	185.90	189.60	
6-inch	12.98	13.24	344.80	351.83	358.87	366.16	373.44	
8-inch	12.98	13.24	546.01	557.15	568.29	579.83	591.37	
10-inch	12.98	13.24	780.31	796.23	812.15	828.64	845.13	
Commodity Charge (per Thousand Gallons)								
Existing	Recommended							
0 – 10	0 – 10	\$4.89	\$4.98	\$4.51	\$4.61	\$4.69	\$4.79	\$4.89
10 – 40	10 – 30	5.67	5.79	5.43	5.54	5.65	5.76	5.88
Above 40	Above 30	6.45	6.57	6.53	6.67	6.80	6.94	7.08

[1] Includes a Billing Charge of \$3.37 per account per month.

[2] Consumption Blocks are scaled by Meter Size.

Summary of Existing, Adopted, and Recommended Monthly Irrigation Rates

Description	Existing	Adopted	Recommended					
	10/1/2013	10/1/2014	1/1/2015	10/1/2016	10/1/2017	10/1/2018	10/1/2019	
Irrigation Service – All Customers								
Monthly Base Charge (per Account)								
3/4-inch	\$12.98	\$13.24	\$14.26	\$14.55	\$14.84	\$15.14	\$15.44	
1-inch	12.98	13.24	21.14	21.57	22.00	22.45	22.90	
1.5-inch	12.98	13.24	38.21	38.99	39.77	40.58	41.38	
2-inch	12.98	13.24	58.70	59.90	61.10	62.34	63.58	
3-inch	12.98	13.24	106.98	109.16	111.35	113.61	115.87	
4-inch	12.98	13.24	175.06	178.63	182.20	185.90	189.60	
6-inch	12.98	13.24	344.80	351.83	358.87	366.16	373.44	
8-inch	12.98	13.24	546.01	557.15	568.29	579.83	591.37	
10-inch	12.98	13.24	780.31	796.23	812.15	828.64	845.13	
Single-Family Commodity Charge (per Thousand Gallons)								
Existing	Recommended							
0 – 9	0 – 5	\$2.67	\$2.72	\$2.65	\$2.71	\$2.76	\$2.81	\$2.87
9 – 14	5 – 10	3.34	3.40	2.65	2.71	2.76	2.81	2.88
14 – 19	10 – 20	4.00	4.08	3.84	3.92	4.00	4.08	4.16
Above 19	Above 20	4.67	4.76	5.30	5.41	5.52	5.64	5.75
Multi-Family Commodity Charge (per Thousand Gallons)								
Existing	Recommended							
0 – 9	0 – 40	\$2.67	\$2.72	\$5.43	\$5.55	\$5.65	\$5.77	\$5.89
9 – 14	Above 40	3.34	3.40	6.53	6.67	6.80	6.94	7.09
14 – 19		4.00	4.08					
Above 19		4.67	4.76					
Commodity Charge (per Thousand Gallons)								
Existing	Recommended							
0 – 10	0 – 40	\$5.51	\$5.62	\$5.43	\$5.55	\$5.65	\$5.77	\$5.89
10 – 40	Above 40	6.29	6.42	6.53	6.66	6.79	6.92	7.07
Above 40		7.07	7.21					

The following table provides a summary of the recommended water consumption blocks by tier and meter size for the commercial class. The proposed tiers link to the readiness-to-serve ERU factors to promote consistency in rate application among the various customers of this class.

Commercial Class - Water Consumption Blocks Scaled by Meter Size			
Meter Size	Block 1	Block 2	Block 3
3/4-inch	0 – 10,000	10,001 – 20,000	30,000+
1-inch	0 – 20,000	20,001 – 40,000	60,000+
1.5-inch	0 – 30,000	30,001 – 60,000	90,000+
2-inch	0 – 50,000	50,001 – 100,000	150,000+
3-inch	0 – 100,000	100,001 – 200,000	300,000+
4-inch	0 – 170,000	170,001 – 340,000	510,000+
6-inch	0 – 330,000	330,001 – 660,000	990,000+
8-inch	0 – 530,000	530,001 – 1,060,000	1,590,000+
10-inch	0 – 770,000	770,001 – 1,540,000	2,310,000+

The following table provides a summary of the recommended water consumption blocks by tier and meter size for the individually-metered irrigation class. The proposed tiers link to the

readiness-to-serve ERU factors to promote consistency in rate application among the various customers of this class.

Irrigation Consumption Blocks Scaled by Meter Size

Meter Size	Block 1	Block 2
3/4-inch	0 – 40,000	40,000+
1-inch	0 – 80,000	80,000+
1.5-inch	0 – 120,000	120,000+
2-inch	0 – 200,000	200,000+
3-inch	0 – 400,000	400,000+
4-inch	0 – 680,000	680,000+
6-inch	0 – 1,320,000	1,320,000+
8-inch	0 – 2,120,000	2,120,000+
10-inch	0 – 3,080,000	3,080,000+

Based on the assumptions, objectives, and recommendations of this report the following residential, multi-family, and commercial rates for the Wastewater System are proposed:

Summary of Existing, Adopted, and Recommended Wastewater Rates

Description	Existing	Adopted	Recommended				
	10/1/2013	10/1/2014	1/1/2015	10/1/2016	10/1/2017	10/1/2018	10/1/2019
Monthly Base Charges							
Single-Family Charges [1][2]							
All Meters	\$8.56	\$8.73	\$12.02	\$14.16	\$15.75	\$17.30	\$19.00
Multi-Family Charges [2]							
Monthly Billing Fee per Account	\$0.00	\$0.00	\$1.59	\$1.87	\$2.08	\$2.28	\$2.51
Monthly Readiness-to-Serve per Unit							
All Units	\$8.56	\$8.73	\$10.43	\$12.28	\$13.67	\$15.01	\$16.49
Commercial [1]							
3/4-inch	\$8.55	\$8.73	\$12.02	\$14.16	\$15.75	\$17.30	\$19.00
1-inch	8.55	8.73	19.00	22.38	24.89	27.35	30.03
1.5-inch	8.55	8.73	36.32	42.77	47.59	52.27	57.41
2-inch	8.55	8.73	57.17	67.33	74.91	82.28	90.36
3-inch	8.55	8.73	105.88	124.69	138.73	152.39	167.35
4-inch	8.55	8.73	175.44	206.61	229.87	252.51	277.29
6-inch	8.55	8.73	349.19	411.23	457.52	502.58	551.91
8-inch	8.55	8.73	557.77	656.87	730.81	802.78	881.58
10-inch	8.55	8.73	801.18	943.53	1,049.74	1,153.12	1,266.31
Commodity Charges							
Residential Single-Family / Multi-Family [2]	\$1.92	\$1.96	\$2.15	\$2.53	\$2.81	\$3.09	\$3.40
Commercial	\$4.14	\$4.22	\$3.87	\$4.56	\$5.06	\$5.57	\$6.12

[1] Includes a Billing Charge of \$1.59 per account per month.

[2] Capped at 10,000 gallons per unit.

Customer Impact – Affordability of Rates

In order to provide additional information to the District regarding the effects of the recommended change in monthly rates for service, an analysis to illustrate the impact for the standard 3/4" meter customer was prepared. The effect of the recommended rate adjustments over the Forecast Period for a typical water and wastewater residential customer (which represents the majority of customers served), recognizing the average monthly use per account for the individually metered residential class which is approximately 5,000 gallons per month; the typical or average residential customer will receive an increase in the monthly bills as follows:

Monthly Residential Bill Impact at 5,000 Gallons of Usage [1]							
	Existing	Adopted	Proposed				
Fiscal Year=====>	2014	2015	2015	2016	2017	2018	2019
Effective Date =====>	10/1/2013	10/1/2014	1/1/2015	10/1/2016	10/1/2017	10/1/2018	10/1/2019
Residential – Inside City							
Water Bill	\$26.33	\$26.84	\$26.84	\$27.43	\$27.97	\$28.53	\$29.11
Wastewater Bill	\$18.15	\$18.52	\$22.77	\$26.82	\$29.81	\$32.76	\$35.98
Total Combined Bill	\$44.48	\$45.36	\$49.61	\$54.24	\$57.78	\$61.30	\$65.10
Water Change – Amount		\$0.51	\$0.00	\$0.57	\$0.54	\$0.57	\$0.58
Sewer Change – Amount		\$0.37	\$4.25	\$4.05	\$2.99	\$2.95	\$3.22
Combined – Amount		\$0.88	\$4.25	\$4.62	\$3.53	\$3.52	\$3.80
Combined – Amount (Cents per Day)		\$2.9 cents	\$14.2 cents	\$15.4 cents	\$11.7 cents	\$11.7 cents	\$12.6 cents

[1] Note sample residential bill example assumes proposed rate structure adjustments; recommended rate increases for Fiscal Years 2015 and 2016 are greater for Wastewater System rates primarily due to increases in wastewater treatment costs associated with the ECRWRF. 94% of Residential Customers are located inside the City.

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The customers included in the commercial class are extremely diverse in terms of size of the customer which is predicated both on the size of the meter serving the customer and the amount of water used. The following table summarizes the number of commercial water customers by meter size to illustrate the diversity of this class of customers:

**Commercial Customer Class Demographics –
Fiscal Year 2014 Statistics [1]**

Meter Size	Average Accounts	Water Sales (Gallons)	Average Monthly Use / Account
3/4-inch	542	34,032,644	5,233
1-inch	259	45,461,000	14,627
1-1/2-inch	128	39,365,000	25,628
2-inch	163	180,689,000	92,377
3-inch	21	70,276,000	278,873
4-inch	30	89,719,000	249,219
6-inch	10	232,713,000	1,939,275
8-inch	18	27,969,000	129,486
10-inch	5	65,714,000	1,095,233

[1] Includes both inside and outside City customers.

In the development of the proposed rates, a significant change in the recovery of the base charge is being recommended. Currently all commercial customers pay the same charge regardless of the size of the customer or the meter serving the premise. Based on our review of historical information regarding the rates to be billed as provided by the District, it appears that the base charges to be applied to the commercial customers should have been expanded based on the number of ERUs that were attributable to the customers which was not the case; all customers were charged the same base fee which appears to be a billing inconsistency. The proposed rates correct this issue and more appropriately recovers the readiness-to-serve component of the base charge on an ERU or "capacity" basis. This base charge rate application is typical in and reflects industry norms as well. The net effect of this base charge billing correction results in very low water use commercial customers served by a large meter size to potentially incur a substantial percentage rate increase. There are very few customers that are served by a large meter (say 3-inches and above) that have very low water use – these customers should be receiving service through a small water meter such that the flows can be registered.

As can be seen on the commercial customer summary above, the majority of the commercial customers served by the District receive service through 3/4-inch to 2-inch meter. The following tables summarize the estimated rate impacts to for these commercial customers; the highlighted area represents the average use for all the customers being served by the particular meter.

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The following is a summary of the customer bill impacts for only the Fiscal Year 2015 for commercial customers located inside the City receiving service through a 3/4-inch meter.

**Bill Comparison for Existing to Recommended Commercial (Inside) Water and Wastewater Rates –
3/4" Meter (Fiscal Year 2015)**

Monthly Use (Gallons)	Existing Rates	Adopted			Recommended		
		Total Combined Bill			Total Combined Bill		
	Total Bill Amount	Amount	Increase	Percent	Amount	Increase	Percent
0	\$21.53	\$21.96	\$0.43	2.0%	\$26.28	\$4.32	19.7%
1,000	30.56	31.16	0.60	2.0%	34.66	3.50	11.2%
2,000	39.59	40.37	0.78	2.0%	43.04	2.67	6.6%
3,000	48.62	49.57	0.95	2.0%	51.42	1.85	3.7%
4,000	57.65	58.77	1.12	1.9%	59.80	1.03	1.7%
5,000	66.68	67.98	1.30	1.9%	68.18	0.20	0.3%
6,000	75.71	77.18	1.47	1.9%	76.56	(0.62)	(0.8%)
7,000	84.74	86.38	1.64	1.9%	84.94	(1.44)	(1.7%)
8,000	93.77	95.59	1.82	1.9%	93.32	(2.27)	(2.4%)
9,000	102.80	104.79	1.99	1.9%	101.70	(3.09)	(2.9%)
10,000	111.83	113.99	2.16	1.9%	110.08	(3.91)	(3.4%)

☐ – Denotes average or typical bill for commercial customers served by this meter size.

The following is a summary of the customer bill impacts for only the Fiscal Year 2015 for commercial customers located inside the City receiving service through a 1-inch meter.

**Bill Comparison for Existing to Recommended Commercial (Inside) Water and Wastewater Rates –
1" Meter (Fiscal Year 2015)**

Monthly Use (Gallons)	Existing Rates	Adopted			Recommended		
		Total Combined Bill			Total Combined Bill		
	Total Bill Amount	Amount	Increase	%	Amount	Increase	%
0	\$21.53	\$21.96	\$0.43	2.0%	\$40.14	\$18.18	82.8%
5,000	66.68	67.98	1.30	1.9%	82.04	14.06	20.7%
10,000	111.83	113.99	2.16	1.9%	123.94	9.95	8.7%
14,000	151.07	154.02	2.95	2.0%	157.46	3.44	2.2%
20,000	209.93	214.05	4.12	2.0%	207.74	(6.31)	(2.9%)
30,000	308.03	314.11	6.08	2.0%	300.74	(13.37)	(4.3%)
40,000	406.13	414.17	8.04	2.0%	393.74	(20.43)	(4.9%)
50,000	512.03	522.10	10.07	2.0%	486.74	(35.36)	(6.8%)

☐ – Denotes average or typical bill for commercial customers served by this meter size.

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The following is a summary of the customer bill impacts for only the Fiscal Year 2015 for commercial customers located inside the City receiving service through a 2-inch meter.

**Bill Comparison for Existing to Recommended Commercial (Inside) Water and Wastewater Rates –
2" Meter (Fiscal Year 2015)**

Monthly Use (Gallons)	Existing Rates	Adopted			Recommended		
		Total Combined Bill			Total Combined Bill		
	Total Bill Amount	Amount	Increase	%	Amount	Increase	%
0	\$21.53	\$21.96	\$0.43	2.0%	\$116.61	\$94.65	431.0%
10,000	111.83	113.99	2.16	1.9%	200.41	86.42	75.8%
30,000	308.03	314.11	6.08	2.0%	368.01	53.90	17.2%
60,000	617.93	630.03	12.10	2.0%	628.61	(1.42)	(0.2%)
80,000	829.73	845.90	16.17	1.9%	814.61	(31.29)	(3.7%)
100,000	1,041.53	1,061.77	20.24	1.9%	1,000.61	(61.16)	(5.8%)
109,000	1,136.84	1,158.91	22.07	1.9%	1,084.31	(74.60)	(6.4%)
120,000	1,253.33	1,277.63	24.30	1.9%	1,186.61	(91.02)	(7.1%)
130,000	1,359.23	1,385.57	26.34	1.9%	1,279.61	(105.96)	(7.6%)
140,000	1,465.13	1,493.50	28.37	1.9%	1,372.61	(120.89)	(8.1%)

☐ – Denotes average or typical bill for commercial customers served by this meter size.

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In addition, a survey of other neighboring utilities levels of monthly user rates charged to residential single-family 3/4" metered customers for water and wastewater service was compiled within Tables 15 through 17 and is summarized below:

	Residential Service Assuming 5,000 Gallons of Utility Service [1]		
	Water	Wastewater	Total
<u>City of Riviera Beach District</u>			
Existing Rates – Fiscal Year 2014	\$26.33	\$18.15	\$44.48
Approved Rates – Fiscal Year 2015	26.84	18.52	45.36
Proposed Fiscal Year 2015	26.84	22.77	49.61
<u>Other Neighboring/Surveyed Utilities</u>			
City of Boca Raton [2]	\$17.18	\$16.81	433.59
Broward County	24.48	35.76	60.24
City of Boynton Beach [2]	19.99	28.56	48.55
City of Cooper City [2]	25.94	40.15	66.09
City of Coral Springs [2]	19.89	37.85	57.74
City of Dania Beach	35.00	58.82	93.82
City of Delray Beach	18.22	35.00	53.22
City of Fort Lauderdale	20.36	34.12	54.48
City of Hollywood	26.93	42.23	69.16
Town of Jupiter	23.98	21.13	45.11
City of Lake Worth [2]	34.29	28.57	62.86
Town of Lantana [2]	26.23	36.15	62.38
Martin County [2]	27.22	38.13	65.35
Palm Beach County [2]	20.78	25.38	46.16
City of West Palm Beach [2]	37.09	29.12	66.21
Seacoast Utility Authority	23.98	31.19	55.17
City of Tamarac	21.80	42.75	64.55
Village of Tequesta [2]	26.13	21.13	47.26
Village of Wellington	28.52	26.98	55.50
Other Florida Utilities' – Average	\$25.25	\$33.15	\$58.29

[1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2014 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

[2] Utilities are currently involved in or contemplating a rate study, or are expecting a change in the rates charged during the next twelve months; the proposed rate adjustments, if any, are not reflected in the current rate above.

Rates for water and wastewater utility service greater than 2% of median household income may present an affordability concern based on industry standards and may be considered a financial burden to certain utility customers. Based on the 2012 medium household income of \$37,609 as reported by the U.S. Census Bureau for the City of Riviera Beach, Florida and the average utility use of 5,000 gallons per month, the District's average water and wastewater bill (based on Fiscal Year 2015 recommended rates) currently approximates 1.58%, of the median income and is considered to be within the affordability levels generally recognized by the industry.

As can be seen above, the average bills produced from the rates that are being recommended for the Fiscal Year 2015 are generally lower on average than other neighboring utilities; and are

considered reasonable and comparable. It should be noted that several of the utilities surveyed are anticipating a rate change in the next twelve months (pursuant to a rate evaluation that is underway, an adopted rate-phasing program, or through the application of a price [inflationary] index), which should maintain the competitive position of the System from what is indicated above.

CONCLUSIONS AND RECOMMENDATIONS

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 current monthly user charges are not adequate to meet the System Net Revenue Requirements during the Forecast Period. The District should consider: i) the adoption of the proposed Monthly User Rates for Fiscal Years 2015 through 2019; ii) adopt a rate resolution incorporating all five years of the projected increases; and iii) make the proposed adjustments effective on October 1st of each fiscal year or as close to the beginning of each fiscal year. The proposed System adjustments identified in this Report are necessary to:
 - a. Recover increased operating expenses associated with the impacts of general inflation and estimated energy increases and the residual effects on the cost of doing business (chemicals, repairs, transportation, etc.);
 - b. Recover increased costs associated to wastewater treatment (at the ECRWRF);
 - c. Provide dedicated annual transfers to fund capital expenditures for the renewal, replacement, betterment and upgrade of System assets in order to limit the amount of debt financing and long-term costs to the System which will promote ongoing rate stability;
 - d. Provide sufficient funds necessary to meet the rate covenant requirements as delineated in the Bond Resolution as well as provide sufficient funds to meet the additional bonds test as required for the issuance of additional parity bonds;
 - e. Maintain targeted unrestricted working cash (fund balance) reserves within the System to limit the risk to the utility due to unforeseen changes in revenues, the incurrence of unexpected operating or capital expenditures and to promote the financial stability of the System; and
 - f. Maintain the overall creditworthiness of the System and to maintain a strong bond rating which is necessary to obtain financing for capital project funding at the lowest possible cost.

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2. It is recommended that the District adopt the following rate revenue adjustments to be applied uniformly to the then existing Monthly User Rates:

Recommended Average System Annual Percent Rate Adjustments					
	Fiscal Year Ending September 30, [1]				
	2015	2016	2017	2018	2019
Water System					
Adopted	1.94%	2.11%	1.96%	2.03%	2.03%
Additional	0.00%	0.00%	0.00%	0.00%	0.00%
Total Water System	1.94%	2.11%	1.96%	2.03%	2.03%
Wastewater System					
Adopted	2.05%	5.17%	1.99%	3.69%	3.61%
Additional	16.00%	12.00%	9.00%	6.00%	6.00%
Total Wastewater System	18.38%	17.79%	11.17%	9.91%	9.82%
Average Increase –Combined System	<u>10.16%</u>	<u>9.95%</u>	<u>6.57%</u>	<u>5.97%</u>	<u>5.93%</u>

[1] Reference is made to the Report for a discussion of the recommended rate revenue increases. Rates assumed to become effective with service rendered on October 1st of each respective fiscal year.

It is recommended that the rates to be adopted by the District should not be on a "percentage charge" basis but should be based on the identified rates (per rate component) as identified in this report.

3. The proposed rates for the Fiscal Year 2015 are competitive and are considered as being reasonable and affordable.
4. This analysis should be updated within (3) years to re-evaluate System needs, including the capital funding program and the need to issue additional bonds for future capital expenditure financing.

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CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT

Water and Wastewater Revenue Sufficiency and Rate Design Analysis

LIST OF TABLES

Table No.	Title
1	Summary of Historical Customer Statistics – Water System
2	Summary of Projected Customer Statistics – Water System
3	Summary of Historical Customer Statistics – Wastewater System
4	Summary of Projected Customer Statistics – Wastewater System
5	Summary of Projected Revenues
6	Summary of Projected Escalation Factors
7	Summary of Projected Operating Expenses
8	Summary of Projected Water Operating Expenses
9	Summary of Projected Wastewater Operating Expenses
10	Five (5) Year Projected Capital Improvement Program
11	Projected Water System Net Revenue Requirements and Rate Adjustments
12	Projected Wastewater System Net Revenue Requirements and Rate Adjustments
13	Projected Water and WW System Net Revenue Requirements and Rate Adjustments
14	Projected Debt Service Coverage and Covenant Requirements
15	Comparison of Typical Monthly Residential Bills for Water Service
16	Comparison of Typical Monthly Residential Bills for Wastewater Service
17	Comparison of Typical Monthly Residential Bills for Water and Wastewater Service

Table 1
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Historical Customer Statistics - Water System

Line No.	Description	Fiscal Year Ending September 30,			
		2010	2011	2012	2013
	<u>Water System [1]</u>				
	Residential Single Family				
1	Normal Account Growth		70	(74)	(298)
2	Average Accounts Served	11,493	11,563	11,489	11,191
3	Average Annual ERCs	11,493	11,563	11,489	11,191
4	Water Sales (000's)	763,376	762,617	715,786	668,798
5	Average Monthly Flow per Account (Gal.)	5,535	5,496	5,192	4,980
	Residential Multi-Family				
6	Normal Account Growth		2	2	(18)
7	Average Accounts Served	620	622	624	606
8	Average Annual ERCs	620	622	624	606
9	Water Sales (000's) [2]	490,622	497,234	488,019	484,741
10	Average Monthly Flow per Account (Gal.)	65,944	66,618	65,173	66,659
	Commercial				
11	Normal Account Growth		(23)	8	(39)
12	Average Accounts Served (Billed Accounts)	1,228	1,205	1,213	1,174
13	Average Annual ERCs	4,859	4,769	4,802	4,646
14	Water Sales (000's)	555,000	530,035	514,886	662,968
15	Average Monthly Flow per Account (Gal.)	37,668	36,655	35,363	47,059
	Total Water System				
16	Average Annual Accounts	13,341	13,390	13,326	12,971
17	Average Annual ERCs	16,972	16,954	16,915	16,443
18	Total Water Sales (000's)	1,808,998	1,789,886	1,718,691	1,816,507
19	Average Monthly Flow per Account (Gal.)	11,300	11,139	10,747	11,670
20	Estimated Water Production (000's)	2,128,233	2,105,748	2,021,989	2,137,067
	Unaccounted for/ Unbilled Water:				
21	Amount	319,235	315,862	303,298	320,560
22	Percent of Production	15.00%	15.00%	15.00%	15.00%
23	Average Daily Flow (MGD)	5.83	5.77	5.54	5.85
	<u>Irrigation</u>				
	Residential Single Family				
24	Normal Account Growth		2	(1)	(2)
25	Average Accounts Served (Billed Accounts)	3	5	4	2
26	Average Annual ERCs	3	5	4	2
27	Res Irrigation Water Sales (000's)	236	488	91	91
28	Average Monthly Flow per Account (Gallons)	6,556	8,133	1,896	3,792

Table 1
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Historical Customer Statistics - Water System

Line No.	Description	Fiscal Year Ending September 30,			
		2010	2011	2012	2013
	Multi-Family				
29	Normal Account Growth		(8)	(1)	2
30	Average Accounts Served (Billed Accounts)	386	379	378	380
31	Average Annual ERCs	1,167	1,143	1,141	1,148
32	Multi-Family Irrigation Water Sales (000's)	275,291	268,322	300,324	263,605
33	Average Monthly Flow per Account (Gallons)	59,394	59,076	66,282	57,808
	Commercial				
34	Normal Account Growth		1	4	7
35	Average Accounts Served (Billed Accounts)	13	14	18	25
36	Average Annual ERCs	42	45	58	81
37	Commercial Irrigation Sales (000's)	11,516	10,140	13,333	11,983
38	Average Monthly Flow per Account (Gallons)	73,821	60,357	61,727	39,943
	Total Irrigation System				
39	Average Annual Accounts (Billed Accounts)	402	398	400	407
40	Average Annual ERCs	1,212	1,194	1,203	1,231
41	Total Irrigation Sales (000's)	287,043	278,950	313,748	275,679
42	Average Monthly Flow per Account (Gal.)	59,466	58,480	65,432	56,445
43	Estimated Water Production (000's)	337,698	328,176	369,115	324,328
	Unaccounted for/ Unbilled Water:				
44	Amount	50,655	49,226	55,367	48,649
45	Percent of Production	15.00%	15.00%	15.00%	15.00%
46	Average Daily Flow (MGD)	0.925	0.899	1.011	0.889

Footnotes:

1. Single Family and Multi-Family Residential Customers are billed on a per unit basis; Commercial customers are billed by a per account basis.

Table 2
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Customer Statistics - Water System

Line No.	Description	Historical	Fiscal Year Ending September 30,					
		2013	2014	2015	2016	2017	2018	2019
<u>Water System [1]</u>								
Residential Single Family								
1	Normal Account Growth		0	0	17	22	28	28
2	Average Accounts Served	11,191	11,191	11,191	11,207	11,228	11,254	11,280
3	Average Annual ERCs	11,191	11,191	11,191	11,207	11,228	11,254	11,280
4	Normal Unit Growth		0	0	17	23	29	29
5	Average Units Served (Billed Units)	11,657	11,657	11,657	11,674	11,697	11,726	11,755
6	Water Sales (000's)	668,798	669,002	668,706	669,666	670,986	672,630	674,275
7	Average Monthly Flow per Unit (Gallons)	4,781	4,783	4,780	4,780	4,780	4,780	4,780
Residential Multi-Family								
8	Normal Account Growth		0	0	1	1	1	1
9	Average Accounts Served	606	606	606	607	608	609	610
10	Average Annual ERCs	606	606	606	607	608	609	610
11	Normal Unit Growth		0	0	13	17	22	22
12	Average Units Served (Billed Units)	9,422	9,422	9,422	9,435	9,452	9,474	9,496
13	Water Sales (000's) [2]	484,741	484,652	484,337	485,037	485,901	487,041	488,181
14	Average Monthly Flow per Unit (Gallons)	4,287	4,287	4,284	4,284	4,284	4,284	4,284
Commercial								
15	Normal Account Growth		2	6	6	6	6	6
16	Average Accounts Served (Billed Accounts)	1,174	1,176	1,182	1,188	1,194	1,200	1,206
17	Average Annual ERCs	4,646	4,648	4,654	4,660	4,666	4,672	4,678
18	Normal Unit Growth		0	0	0	0	0	0
19	Average Units Served	3,711	3,711	3,711	3,711	3,711	3,711	3,711
20	Water Sales (000's)	662,968	785,939	874,408	874,835	875,263	875,691	876,119
21	Average Monthly Flow per Unit (Gallons)	47,059	55,693	61,647	61,366	61,088	60,812	60,539
Total Water System								
22	Average Annual Accounts	12,971	12,973	12,979	13,002	13,030	13,063	13,096
23	Average Annual ERCs	16,443	16,445	16,451	16,474	16,502	16,535	16,568
24	Average Annual Units	24,790	24,790	24,790	24,820	24,860	24,911	24,962
25	Average Annual Billed (Units/Accounts)	22,253	22,255	22,261	22,297	22,343	22,400	22,457
26	Total Water Sales (000's)	1,816,507	1,939,592	2,027,451	2,029,538	2,032,150	2,035,363	2,038,576
27	Average Monthly Flow per Account (Gal.)	11,670	12,459	13,018	13,008	12,997	12,984	12,972
28	Average Monthly Flow per Billed Unit/Account (Gal.)	6,802	7,263	7,590	7,585	7,579	7,572	7,565
29	Estimated Water Production (000's)	2,137,067	2,281,873	2,385,236	2,387,691	2,390,765	2,394,545	2,398,324
Unaccounted for/ Unbilled Water:								
30	Amount	320,560	342,281	357,785	358,154	358,615	359,182	359,749
31	Percent of Production	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
32	Average Daily Flow (MGD)	5.85	6.25	6.53	6.54	6.55	6.56	6.57
<u>Irrigation [2]</u>								
Residential Single Family								
33	Normal Account Growth		0	0	0	0	0	0
34	Average Accounts Served (Billed Accounts)	2	2	2	2	2	2	2
35	Average Annual ERCs	2	2	2	2	2	2	2
36	Normal Unit Growth		0	0	0	0	0	0
37	Average Units Served	2	2	2	2	2	2	2
38	Res Irrigation Water Sales (000's)	91	91	91	91	91	91	91
39	Average Monthly Flow per Account (Gallons)	3,792	3,792	3,790	3,790	3,790	3,790	3,790
Multi-Family								
40	Normal Account Growth		0	0	0	0	0	0
41	Average Accounts Served (Billed Accounts)	380	380	380	380	380	380	380
42	Average Annual ERCs	1,148	1,148	1,148	1,148	1,148	1,148	1,148
43	Normal Unit Growth		0	0	0	0	0	0
44	Average Units Served	1,559	1,558	1,558	1,558	1,558	1,558	1,558

Table 2
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Customer Statistics - Water System

Line No.	Description	Historical	Fiscal Year Ending September 30,					
		2013	2014	2015	2016	2017	2018	2019
45	Multi-Family Irrigation Water Sales (000's)	263,605	243,997	243,998	243,998	243,998	243,998	243,998
46	Average Monthly Flow per Account (Gallons)	57,808	53,508	53,508	53,508	53,508	53,508	53,508
	Commercial							
47	Normal Account Growth		0	0	0	0	0	0
48	Average Accounts Served (Billed Accounts)	25	25	25	25	25	25	25
49	Average Annual ERCs	81	81	81	81	81	81	81
50	Normal Unit Growth		0	0	0	0	0	0
51	Average Units Served	285	285	285	285	285	285	285
52	Commercial Irrigation Sales (000's)	11,983	11,983	11,980	11,980	11,980	11,980	11,980
53	Average Monthly Flow per Account (Gallons)	39,943	39,943	39,933	39,933	39,933	39,933	39,933
	Total Irrigation System							
54	Average Annual Accounts (Billed Accounts)	407	407	407	407	407	407	407
55	Average Annual ERCs	1,231	1,231	1,231	1,231	1,231	1,231	1,231
56	Average Annual Units	1,846	1,845	1,845	1,845	1,845	1,845	1,845
57	Total Irrigation Sales (000's)	275,679	256,071	256,068	256,068	256,068	256,068	256,068
58	Average Monthly Flow per Account (Gal.)	56,445	52,431	52,430	52,430	52,430	52,430	52,430
59	Estimated Water Production (000's)	324,328	301,260	301,257	301,257	301,257	301,257	301,257
	Unaccounted for/ Unbilled Water:							
60	Amount	48,649	45,189	45,189	45,189	45,189	45,189	45,189
61	Percent of Production	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
62	Average Daily Flow (MGD)	0.889	0.825	0.825	0.825	0.825	0.825	0.825

Footnotes:

1. Single Family and Multi-Family Residential Customers and are billed on a per unit basis; Commercial customers are billed by a per account basis.
2. All customer classes are billed by a per account basis.

Table 3
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Historical Customer Statistics - Wastewater System

Line No.	Description	Fiscal Year Ending September 30,			
		2010	2011	2012	2013
	<u>Wastewater System: [1]</u>				
	Residential Single Family				
1	Normal Growth		69	(74)	(349)
2	Average Accounts Served	11,497	11,566	11,492	11,143
3	Billed Flow (000's) [2]	521,720	625,417	608,007	500,415
4	Average Monthly Gallons per Unit	3,782	4,506	4,409	3,742
	Residential Multi-Family				
5	Normal Growth		2	1	(15)
6	Average Accounts Served	620	622	623	608
7	Billed Flow (000's) [2]	486,773	493,807	483,155	481,534
8	Average Monthly Gallons per Unit	65,426	66,158	64,627	66,000
	Commercial				
9	Normal Growth		(21)	8	(9)
10	Average Accounts Served (Billed Accounts)	1,172	1,151	1,159	1,150
11	Billed Flow (000's)	447,079	426,105	438,572	450,722
12	Average Monthly Revenue Gallons per Account	31,789	30,850	31,534	32,661
	Total Wastewater System				
13	Average Accounts Served	13,289	13,339	13,274	12,901
	Average Annual ERCs	15,873	15,875	15,828	15,437
14	Total Metered / Billed Flow Gallons (000's)	1,455,572	1,545,329	1,529,734	1,432,671
15	Average Monthly Flow per Account (Gal.)	9,128	9,654	9,604	9,254

Footnotes:

1. Single Family and Multi-Family Residential Customers and are billed on a per unit basis; Commercial customers are billed by a per account basis.
2. Single Family and Multi-Family Customers are capped at 10k per billing unit.

Table 4
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Customer Statistics - Wastewater System

Line No.	Description	Historical	Fiscal Year Ending September 30,					
		2013	2014	2015	2016	2017	2018	2019
	Wastewater System: [1]							
	Residential Single Family							
1	Normal Growth		0	0	17	23	28	28
2	Average Accounts Served	11,143	11,143	11,143	11,160	11,183	11,211	11,239
3	Average Annual ERCs	11,143	11,143	11,143	11,160	11,183	11,211	11,239
4	Normal Unit Growth		0	0	18	24	29	29
5	Average Units Served (Billed Units)	11,609	11,609	11,609	11,627	11,651	11,680	11,709
6	Billed Flow (000's) [2]	500,415	500,415	499,837	500,611	501,649	502,899	504,148
7	Average Monthly Gallons per Unit	3,592	3,592	3,588	3,588	3,588	3,588	3,588
	Residential Multi-Family							
8	Normal Growth		0	0	1	1	1	1
9	Average Accounts Served	608	608	608	609	610	611	612
10	Average Annual ERCs	517	517	517	518	519	519	520
11	Normal Unit Growth		0	0	12	18	24	24
12	Average Units Served (Billed Units)	9,426	9,426	9,426	9,438	9,456	9,480	9,504
13	Billed Flow (000's) [2]	481,534	481,445	481,486	482,098	483,031	484,279	485,527
14	Average Monthly Gallons per Unit	4,257	4,256	4,257	4,257	4,257	4,257	4,257
	Commercial							
15	Normal Growth		0	5	6	6	6	6
16	Average Accounts Served (Billed Accounts)	1,150	1,150	1,155	1,161	1,167	1,173	1,179
17	Average Annual ERCs	3,777	3,777	3,782	3,788	3,794	3,800	3,806
18	Normal Unit Growth	0	0	0	0	0	0	0
19	Average Units Served	3,323	3,323	3,323	3,323	3,323	3,323	3,323
20	Billed Flow (000's)	450,722	450,722	450,727	451,281	451,835	452,389	452,943
21	Average Monthly Revenue Gallons per Account	32,661	32,661	32,520	32,392	32,265	32,139	32,015
	Total Wastewater System							
22	Average Accounts Served	12,901	12,901	12,906	12,930	12,960	12,995	13,030
23	Average Annual ERCs	15,437	15,437	15,442	15,466	15,496	15,530	15,565
24	Average Annual Units	24,358	24,358	24,358	24,388	24,430	24,483	24,536
25	Average Annual Billed (Units/Accounts)	22,185	22,185	22,190	22,226	22,274	22,333	22,392
26	Total Metered / Billed Flow Gallons (000's)	1,432,671	1,432,582	1,432,051	1,433,990	1,436,515	1,439,567	1,442,618
27	Average Monthly Flow per Account (Gal.)	9,254	9,254	9,247	9,242	9,237	9,232	9,226
28	Average Monthly Flow per Billed Unit/Account (Gal.)	5,382	5,381	5,378	5,377	5,374	5,372	5,369
29	Estimated Wastewater Treatment (000's)	0	1,630,126	1,630,654	1,633,173	1,636,325	1,640,005	1,643,685
30	Monthly Treatment per Unit Served (Gallons)	0	8,800	8,800	8,800	8,800	8,800	8,800

Footnotes:

1. Single Family and Multi-Family Residential Customers are billed on a per unit basis; Commercial customers are billed by a per account basis.
2. Single Family and Multi-Family Customers are capped at 10k per billing unit.

Table 5

**City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design**

Summary of Projected Revenues

Sewer Rate Revenue [1]							
Line No.	Description	2014	2015	2016	2017	2018	2019
Rate Revenue:							
1	Water Rate Revenue [1]	\$ 11,571,285	\$ 12,325,802	\$ 12,595,361	\$ 12,856,413	\$ 13,140,424	\$ 13,424,569
2	Irrigation Rate Revenue [1]	1,709,297	1,742,998	1,778,912	1,814,767	1,851,529	1,888,483
3	Sewer Rate Revenue [1]	6,353,360	7,085,794	8,692,706	9,650,176	10,660,987	11,703,460
4	Total Rate Revenues	\$ 19,633,942	\$ 21,154,594	\$ 23,066,978	\$ 24,321,356	\$ 25,652,941	\$ 27,016,512
Other Revenues							
5	Water Meter Connect Fe	\$ 20,000	\$ 20,383	\$ 20,801	\$ 21,227	\$ 21,783	\$ 22,360
6	Hydrant Rental/Fire Lines	200,000	202,000	204,020	206,060	208,121	210,202
7	Sewer Connection Fees	500	500	500	500	500	500
8	Penalty & Interest On A/R	300,000	300,000	300,000	300,000	300,000	300,000
9	Miscellaneous Revenues	116,200	116,200	116,200	116,200	116,200	116,200
10	Total Other Revenues	\$ 636,700	\$ 639,083	\$ 641,521	\$ 643,988	\$ 646,603	\$ 649,262
11	Total Revenues	\$ 20,270,642	\$ 21,793,677	\$ 23,708,499	\$ 24,965,344	\$ 26,299,544	\$ 27,665,774

Footnotes:

[1] Derived from Table 13.

Table 6
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Escalation Factors [1]

Line No.	Description	Escalation Reference	Fiscal Year Ending September 30,				
			2015	2016	2017	2018	2019
1	Constant	Constant	1.000	1.000	1.000	1.000	1.000
2	General Inflation	Inflation	1.019	1.021	1.022	1.024	1.024
3	Professional Services	ProfSvc	1.030	1.030	1.030	1.030	1.030
4	Labor Escalator	Labor	1.030	1.030	1.030	1.030	1.030
5	General Fund Transfer	GFT	1.020	1.020	1.020	1.020	1.020
6	Repair and Maintenance	Repair	1.040	1.040	1.040	1.040	1.040
7	Capital Escalator	Capital	1.000	1.000	1.000	1.000	1.000
8	Gas & Oil	Gas	1.070	1.070	1.070	1.070	1.070
9	Rate Revenue - Water	Water Rev	1.021	1.020	1.020	1.020	1.000
10	Rate Revenue - Sewer	Sewer Rev	1.052	1.020	1.037	1.036	1.000
11	Electric	Electric	1.040	1.040	1.040	1.040	1.040
12	Insurance Escalator	Insurance	1.050	1.050	1.050	1.050	1.050
13	Marginal Escalator	Margin	1.010	1.010	1.010	1.010	1.010
14	Declining Revenue (Penalty Fees)	Misc Rev	0.500	0.500	0.500	0.500	0.500
15	Elimination Factor	Eliminate	0.000	0.000	0.000	0.000	0.000
16	TRN Fund 412	TRN Fund 412	1.050	1.050	1.050	1.050	1.050
17	TRN Fund 413	TRN Fund 413	1.050	1.050	1.050	1.050	1.050
18	TRN Fund 414	TRN Fund 414	1.050	1.050	1.050	1.050	1.050
19	General Utility	Gen Utility	1.006	1.006	1.006	1.006	1.006
20	Inflation plus Assets	Infl + Assets	1.006	1.006	1.006	1.006	1.006
21	Water Account Growth	Grth-Water	1.000	1.003	1.003	1.002	1.003
22	Wastewater Account Growth	Grth-Sewer	1.000	1.002	1.002	1.002	1.003
23	Water Account Growth and General Inflation	Cust-Water	1.019	1.021	1.021	1.026	1.027
24	Wastewater Account Growth and General Inflation	Cust-Sewer	1.019	1.020	1.020	1.026	1.027
25	Water Flow Growth and General Inflation	Water Flow	1.019	1.019	1.019	1.019	1.019
26	Wastewater Flow Growth and General Inflation	Sewer Flow	1.019	1.019	1.019	1.019	1.019

Footnotes:

- [1] For purposes of this analysis and in order to provide detail regarding the development of projected financial operations, escalation factors above were developed based on recent historical trends and discussions with Utility District staff.

Table 7
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Operating Expenses

Line No.	G/L Code	Description	Escalation Factor	Fiscal Year Ending September 30,				
				2015	2016	2017	2018	2019
Administration - 1417								
1	411-1417-536-0-2600	OPEB Liability Expense	Insurance	\$ 165,895	\$ 174,190	\$ 182,899	\$ 192,044	\$ 201,646
2	411-1417-536-0-3102	Prof. Serv. Med. Dental	Inflation	306	312	319	327	334
3	411-1417-536-0-3103	Prof. Serv.-Engineerin	Inflation	45,626	46,584	47,609	48,751	49,921
4	411-1417-536-0-3106	Prof.Serv.-Other	Labor	2,448,493	2,521,948	2,597,607	2,675,535	2,755,801
5	411-1417-536-0-3106.2	PILOT	Calculated	1,269,276	1,384,019	1,459,281	1,539,176	1,620,991
6	411-1417-536-0-3110	CRB Direct Labor	Labor	4,842,032	4,987,293	5,136,912	5,291,019	5,449,750
7	411-1417-536-0-3201	Accting And Auditing	Inflation	5,095	5,202	5,316	5,444	5,575
8	411-1417-536-0-3401	Cont. Serv.-Janitorial	Labor	15,450	15,914	16,391	16,883	17,389
9	411-1417-536-0-3402	Cont. Serv.-Pest Contr	Labor	515	530	546	563	580
10	411-1417-536-0-3405	Merchant Services Fee'S	Inflation	25,475	26,010	26,582	27,220	27,873
11	411-1417-536-0-3406	Cont. Serv.-Other	Labor	51,500	53,045	54,636	56,275	57,964
12	411-1417-536-0-4001	Travel	Inflation	3,057	3,121	3,190	3,266	3,345
13	411-1417-536-0-4101	Commun. Serv.-Telephon	Inflation	30,570	31,212	31,899	32,664	33,448
14	411-1417-536-0-4201	Postage & Freight Chgs	Inflation	510	520	532	544	557
15	411-1417-536-0-4501	Ins.-Gen. Liab.-Self I	Insurance	88,682	93,116	97,772	102,660	107,793
16	411-1417-536-0-4601	Repair & Mant.-Contrac	Repair	2,080	2,163	2,250	2,340	2,433
17	411-1417-536-0-4602	Repair & Maint. - Buildin	Repair	2,080	2,163	2,250	2,340	2,433
18	411-1417-536-0-4605	Repair & Maint. - Motor V	Repair	2,080	2,163	2,250	2,340	2,433
19	411-1417-536-0-4701	Printing & Binding	Inflation	1,019	1,040	1,063	1,089	1,115
20	411-1417-536-0-4703	Printing & Bind.-Copie	Inflation	1,019	1,040	1,063	1,089	1,115
21	411-1417-536-0-4801	Promotional Activities	Inflation	30,976	31,626	32,322	33,098	33,892
22	411-1417-536-0-4907	Others-Surveillance	Inflation	15,285	15,606	15,949	16,332	16,724
23	411-1417-536-0-4910	Bad Debt Expense	Calculated	317,319	346,005	364,820	384,794	405,248
24	411-1417-536-0-5101	Office Supplies-Statio	Inflation	3,057	3,121	3,190	3,266	3,345
25	411-1417-536-0-5201	Office Supplies-General	Inflation	12,992	13,265	13,557	13,882	14,215
26	411-1417-536-0-5202	Operating Supplies-Software	Inflation	35,665	36,414	37,215	38,108	39,023
27	411-1417-536-0-5204	Oper. Supplies-Janitor	Inflation	1,019	1,040	1,063	1,089	1,115
28	411-1417-536-0-5205	Oper. Supplies-Clothin	Inflation	1,223	1,248	1,276	1,307	1,338
29	411-1417-536-0-5206	Oper. Supplies-Other	Inflation	6,114	6,242	6,380	6,533	6,690
30	411-1417-536-0-5250	Operating Small Equip	Inflation	2,038	2,081	2,127	2,178	2,230
31	411-1417-536-0-5401	Books and Periodicals	Inflation	1,019	1,040	1,063	1,089	1,115
32	411-1417-536-0-5402	Subscriptions & Member	Inflation	5,095	5,202	5,316	5,444	5,575
33	411-1417-536-0-5403	Employee Development	Inflation	5,095	5,202	5,316	5,444	5,575
34	411-1417-536-0-5404	Tuition Reimbursement	Inflation	10,190	10,404	10,633	10,888	11,149
35	Total Administration - 1417			\$ 9,447,845	\$ 9,830,084	\$ 10,170,594	\$ 10,525,021	\$ 10,889,730
Water Distribution - 1430								
36	411-1430-533-0-3102	Prof. Serv. Med. Dental	Inflation	\$ 153	\$ 156	\$ 159	\$ 163	\$ 167
37	411-1430-533-0-3401	Cont. Serv.-Janitorial	Inflation	3,057	3,121	3,190	3,266	3,345
38	411-1430-533-0-3406	Cont. Serv.-Other	Inflation	105,984	108,210	110,590	113,245	115,962
39	411-1430-533-0-4001	Travel	Inflation	2,038	2,081	2,127	2,178	2,230
40	411-1430-533-0-4306	Utilities-Other	Inflation	3,057	3,121	3,190	3,266	3,345
41	411-1430-533-0-4501	Ins.-Gen. Liab.-Self I	Infl + Assets	294,291	296,080	297,881	299,692	301,514
42	411-1430-533-0-4602	Repair & Maint. - Buildin	Repair	1,040	1,082	1,125	1,170	1,217
43	411-1430-533-0-4603	Repair & Maint. Grounds	Repair	1,040	1,082	1,125	1,170	1,217
44	411-1430-533-0-4604	Repair & Maint.-Contract	Repair	31,200	32,448	33,746	35,096	36,500
45	411-1430-533-0-4605	Repair & Maint. - Motor V	Repair	15,600	16,224	16,873	17,548	18,250
46	411-1430-533-0-4606	Repair & Maint.-Lines	Repair	26,000	27,040	28,122	29,246	30,416
47	411-1430-533-0-4607	Repair & Maint. Other	Repair	20,800	21,632	22,497	23,397	24,333
48	411-1430-533-0-4618	Repair & Maint. Easements	Repair	5,200	5,408	5,624	5,849	6,083
49	411-1430-533-0-4702	Printing & Bind - Photo	Inflation	510	520	532	544	557
50	411-1430-533-0-4906	Other Chgs. -Others	Inflation	1,019	1,040	1,063	1,089	1,115
51	411-1430-533-0-4907	Others-Surveillance	Inflation	1,019	1,040	1,063	1,089	1,115
52	411-1430-533-0-5101	Office Supplies-Statio	Inflation	510	520	532	544	557
53	411-1430-533-0-5201	Office Supplies-General	Inflation	5,095	5,202	5,316	5,444	5,575
54	411-1430-533-0-5202	Operating Supplies-Software	Gas	5,350	5,725	6,125	6,554	7,013
55	411-1430-533-0-5203	Oper. Supplies-Chemicals	Inflation	1,529	1,561	1,595	1,633	1,672
56	411-1430-533-0-5204	Oper. Supplies-Janitor	Inflation	1,019	1,040	1,063	1,089	1,115
57	411-1430-533-0-5205	Oper. Supplies-Clothin	Inflation	5,095	5,202	5,316	5,444	5,575
58	411-1430-533-0-5206	Oper. Supplies-Other	Inflation	10,190	10,404	10,633	10,888	11,149
59	411-1430-533-0-5207	Oper. Supplies-Water	Inflation	2,548	2,601	2,658	2,722	2,787
60	411-1430-533-0-5401	Books and Periodicals	Inflation	255	260	266	272	279
61	411-1430-533-0-5402	Subscriptions & Member	Inflation	510	520	532	544	557
62	411-1430-533-0-5403	Employee Development	Inflation	1,019	1,040	1,063	1,089	1,115
63	Total Water Distribution - 1430			\$ 545,125	\$ 554,361	\$ 564,007	\$ 574,233	\$ 584,761

Table 7
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Operating Expenses

Line No.	G/L Code	Description	Escalation Factor	Fiscal Year Ending September 30,				
				2015	2016	2017	2018	2019
Water Treatment - 1437								
64	411-1437-533-0-3102	Prof. Serv. Med. Dental	Insurance	\$ 105	\$ 110	\$ 116	\$ 122	\$ 128
65	411-1437-533-0-3103	Prof. Serv.-Engineerin	Inflation	10,190	10,404	10,633	10,888	11,149
66	411-1437-533-0-3401	Cont. Serv.-Janitorial	Labor	1,030	1,061	1,093	1,126	1,159
67	411-1437-533-0-3406	Cont. Serv.-Other	Labor	51,500	53,045	54,636	56,275	57,964
68	411-1437-533-0-4001	Travel	Inflation	2,038	2,081	2,127	2,178	2,230
69	411-1437-533-0-4301	Utilities-Electricity	Electric	457,608	475,913	494,949	514,747	535,337
70	411-1437-533-0-4306	Utilities-Other	Gen Utility	6,036	6,073	6,110	6,147	6,185
71	411-1437-533-0-4401	Rent And Leases-Land	Inflation	10,190	10,404	10,633	10,888	11,149
72	411-1437-533-0-4501	Ins.-Gen. Liab.-Self I	Insurance	286,452	300,774	315,813	331,603	348,184
73	411-1437-533-0-4602	Repair & Maint. - Buildin	Repair	10,400	10,816	11,249	11,699	12,167
74	411-1437-533-0-4603	Repair & Maint. Grounds	Repair	1,040	1,082	1,125	1,170	1,217
75	411-1437-533-0-4604	Repair & Maint.-Contract	Repair	109,200	113,568	118,111	122,835	127,749
76	411-1437-533-0-4605	Repair & Maint. - Motor V	Repair	15,600	16,224	16,873	17,548	18,250
77	411-1437-533-0-4606	Repair & Maint.-Lines	Repair	10,400	10,816	11,249	11,699	12,167
78	411-1437-533-0-4607	Repair & Maint. Other	Repair	114,400	118,976	123,735	128,684	133,832
79	411-1437-533-0-4702	Printing & Bind - Photo	Inflation	7,643	7,803	7,975	8,166	8,362
80	411-1437-533-0-4906	Other Chgs. -Others	Inflation	5,095	5,202	5,316	5,444	5,575
81	411-1437-533-0-4907	Others-Surveillance	Inflation	2,038	2,081	2,127	2,178	2,230
82	411-1437-533-0-5101	Office Supplies-Statio	Inflation	510	520	532	544	557
83	411-1437-533-0-5201	Office Supplies-General	Inflation	7,897	8,063	8,240	8,438	8,641
84	411-1437-533-0-5202	Operating Supplies-Software	Inflation	76,425	78,030	79,747	81,661	83,620
85	411-1437-533-0-5203	Oper. Supplies-Chemicals	Inflation	499,310	509,796	521,011	533,515	546,320
86	411-1437-533-0-5204	Oper. Supplies-Janitor	Inflation	2,038	2,081	2,127	2,178	2,230
87	411-1437-533-0-5205	Oper. Supplies-Clothin	Inflation	13,247	13,525	13,823	14,154	14,494
88	411-1437-533-0-5206	Oper. Supplies-Other	Inflation	6,624	6,763	6,911	7,077	7,247
89	411-1437-533-0-5207	Oper. Supplies-Water	Inflation	10,190	10,404	10,633	10,888	11,149
90	411-1437-533-0-5208	Operating Lime Sludge Removal	Inflation	101,900	104,040	106,329	108,881	111,494
91	411-1437-533-0-5401	Books and Periodicals	Inflation	255	260	266	272	279
92	411-1437-533-0-5402	Subscriptions & Member	Inflation	510	520	532	544	557
93	411-1437-533-0-5403	Employee Development	Inflation	2,038	2,081	2,127	2,178	2,230
94	Total Water Treatment - 1437			\$ 1,821,907	\$ 1,882,515	\$ 1,946,144	\$ 2,013,727	\$ 2,083,850
Sewage Collection -1438								
95	411-1438-535-0-3102	Prof. Serv. Med. Dental	Inflation	\$ 102	\$ 104	\$ 106	\$ 109	\$ 111
96	411-1438-535-0-3106	Prof.Serv.-Other	Inflation	5,095	5,202	5,316	5,444	5,575
97	411-1438-535-0-3201	Accting And Auditing	Inflation	5,095	5,202	5,316	5,444	5,575
98	411-1438-535-0-3405	Merchant Services Fee'S	Calculated	3,574,198	3,754,092	3,968,745	4,080,596	4,277,417
99	411-1438-535-0-4001	Travel	Inflation	2,038	2,081	2,127	2,178	2,230
100	411-1438-535-0-4102	Commun. Serv.-Radio	Inflation	510	520	532	544	557
101	411-1438-535-0-4201	Postage & Freight Chgs	Inflation	102	104	106	109	111
102	411-1438-535-0-4301	Utilities-Electricity	Electric	182,000	189,280	196,851	204,725	212,914
103	411-1438-535-0-4305	Utilities-Water	Water Rev	2,042	2,082	2,125	2,168	2,168
104	411-1438-535-0-4501	Ins.-Gen. Liab.-Self I	Insurance	137,871	144,765	152,003	159,603	167,583
105	411-1438-535-0-4602	Repair & Maint. - Buildin	Repair	10,400	10,816	11,249	11,699	12,167
106	411-1438-535-0-4604	Repair & Maint.-Contract	Repair	52,000	54,080	56,243	58,493	60,833
107	411-1438-535-0-4605	Repair & Maint. - Motor V	Repair	12,480	12,979	13,498	14,038	14,600
108	411-1438-535-0-4606	Repair & Maint.-Lines	Repair	26,000	27,040	28,122	29,246	30,416
109	411-1438-535-0-4702	Printing & Bind - Photo	Inflation	510	520	532	544	557
110	411-1438-535-0-5201	Office Supplies-General	Inflation	1,529	1,561	1,595	1,633	1,672
111	411-1438-535-0-5202	Operating Supplies-Software	Inflation	17,833	18,207	18,608	19,054	19,511
112	411-1438-535-0-5203	Oper. Supplies-Chemicals	Inflation	10,190	10,404	10,633	10,888	11,149
113	411-1438-535-0-5204	Oper. Supplies-Janitor	Inflation	510	520	532	544	557
114	411-1438-535-0-5205	Oper. Supplies-Clothin	Inflation	12,738	13,005	13,291	13,610	13,937
115	411-1438-535-0-5206	Oper. Supplies-Other	Inflation	20,380	20,808	21,266	21,776	22,299
116	411-1438-535-0-5401	Books and Periodicals	Inflation	255	260	266	272	279
117	411-1438-535-0-5402	Subscriptions & Member	Inflation	306	312	319	327	334
118	411-1438-535-0-5403	Employee Development	Inflation	2,038	2,081	2,127	2,178	2,230
119	Total Sewage Collection -1438			\$ 4,076,219	\$ 4,276,026	\$ 4,511,506	\$ 4,645,223	\$ 4,864,784
Other Expenses								
120	412-1438-535-0-4604	Repair & Maint.-Contract	Inflation	\$ 101,900	\$ 104,040	\$ 106,329	\$ 108,881	\$ 111,494
121	412-1438-535-0-4606	Repair & Maint.-Lines	Inflation	254,750	260,100	265,822	272,202	278,735
122	Total Other Expenses			\$ 356,650	\$ 364,140	\$ 372,151	\$ 381,082	\$ 390,228

Table 7
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Operating Expenses

Line No.	G/L Code	Description	Escalation Factor	Fiscal Year Ending September 30,				
				2015	2016	2017	2018	2019
123	Adjustments Contingency	Contingency	Calculated	794,555	827,149	859,613	887,910	921,156
124	Total Adjustments			\$ 794,555	\$ 827,149	\$ 859,613	\$ 887,910	\$ 921,156
125	TOTAL OPERATING EXPENSES			\$ 17,042,301	\$ 17,734,273	\$ 18,424,014	\$ 19,027,196	\$ 19,734,510

Table 8
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Water Operating Expenses

Line No.	Expense Number	Description	Escalation Factor	Fiscal Year Ending September 30,				
				2015	2016	2017	2018	2019
Administration - 1417								
1	411-1417-536-0-2600	OPEB Liability Expense	Insurance	\$ 111,150	\$ 116,707	\$ 122,542	\$ 128,670	\$ 135,103
2	411-1417-536-0-3102	Prof. Serv. Med. Dental	Inflation	207	211	216	221	226
3	411-1417-536-0-3103	Prof. Serv.-Engineerin	Inflation	30,569	31,211	31,898	32,663	33,447
4	411-1417-536-0-3106	Prof.Serv.-Other	Labor	1,656,184	1,705,869	1,757,045	1,809,757	1,864,049
5	411-1417-536-0-3106.2	PILOT	Calculated	858,550	936,163	987,072	1,041,113	1,096,453
6	411-1417-536-0-3110	CRB Direct Labor	Labor	3,244,161	3,341,486	3,441,731	3,544,983	3,651,332
7	411-1417-536-0-3201	Accting And Auditing	Inflation	3,446	3,519	3,596	3,682	3,771
8	411-1417-536-0-3401	Cont. Serv.-Janitorial	Labor	10,451	10,764	11,087	11,420	11,762
9	411-1417-536-0-3402	Cont. Serv.-Pest Contr	Labor	348	359	370	381	392
10	411-1417-536-0-3405	Merchant Services Fee'S	Inflation	17,232	17,593	17,980	18,412	18,854
11	411-1417-536-0-3406	Cont. Serv.-Other	Labor	34,835	35,880	36,957	38,065	39,207
12	411-1417-536-0-4001	Travel	Inflation	2,068	2,111	2,158	2,209	2,262
13	411-1417-536-0-4101	Commun. Serv.-Telephon	Inflation	20,482	20,912	21,372	21,885	22,410
14	411-1417-536-0-4201	Postage & Freight Chgs	Inflation	345	352	360	368	377
15	411-1417-536-0-4501	Ins.-Gen. Liab.-Self I	Insurance	59,417	62,388	65,507	68,782	72,222
16	411-1417-536-0-4601	Repair & Mant.-Contrac	Repair	1,407	1,463	1,522	1,583	1,646
17	411-1417-536-0-4602	Repair & Maint. - Buildin	Repair	1,407	1,463	1,522	1,583	1,646
18	411-1417-536-0-4605	Repair & Maint. - Motor V	Repair	1,407	1,463	1,522	1,583	1,646
19	411-1417-536-0-4701	Printing & Binding	Inflation	689	704	719	736	754
20	411-1417-536-0-4703	Printing & Bind.-Copie	Inflation	689	704	719	736	754
21	411-1417-536-0-4801	Promotional Activities	Inflation	15,770	16,101	16,455	16,850	17,255
22	411-1417-536-0-4907	Others-Surveillance	Inflation	10,339	10,556	10,788	11,047	11,312
23	411-1417-536-0-4910	Bad Debt Expense	Calculated	214,637	234,041	246,768	260,278	274,113
24	411-1417-536-0-5101	Office Supplies-Statio	Inflation	2,048	2,091	2,137	2,189	2,241
25	411-1417-536-0-5201	Office Supplies-General	Inflation	8,705	8,888	9,083	9,301	9,524
26	411-1417-536-0-5202	Operating Supplies-Software	Inflation	23,896	24,397	24,934	25,533	26,145
27	411-1417-536-0-5204	Oper. Supplies-Janitor	Inflation	689	704	719	736	754
28	411-1417-536-0-5205	Oper. Supplies-Clothin	Inflation	827	844	863	884	905
29	411-1417-536-0-5206	Oper. Supplies-Other	Inflation	4,136	4,222	4,315	4,419	4,525
30	411-1417-536-0-5250	Operating Small Equip	Inflation	1,379	1,407	1,438	1,473	1,508
31	411-1417-536-0-5401	Books and Periodicals	Inflation	683	697	712	730	747
32	411-1417-536-0-5402	Subscriptions & Member	Inflation	3,414	3,485	3,562	3,648	3,735
33	411-1417-536-0-5403	Employee Development	Inflation	3,414	3,485	3,562	3,648	3,735
34	411-1417-536-0-5404	Tuition Reimbursement	Inflation	6,827	6,971	7,124	7,295	7,470
35	Total Administration - 1417			\$ 6,351,806	\$ 6,609,214	\$ 6,838,356	\$ 7,076,862	\$ 7,322,286
Water Distribution - 1430								
36	411-1430-533-0-3102	Prof. Serv. Med. Dental	Inflation	\$ 153	\$ 156	\$ 159	\$ 163	\$ 167
37	411-1430-533-0-3401	Cont. Serv.-Janitorial	Inflation	3,057	3,121	3,190	3,266	3,345
38	411-1430-533-0-3406	Cont. Serv.-Other	Inflation	105,984	108,210	110,590	113,245	115,962
39	411-1430-533-0-4001	Travel	Inflation	2,038	2,081	2,127	2,178	2,230
40	411-1430-533-0-4306	Utilities-Other	Inflation	3,057	3,121	3,190	3,266	3,345
41	411-1430-533-0-4501	Ins.-Gen. Liab.-Self I	Infl + Assets	294,291	296,080	297,881	299,692	301,514
42	411-1430-533-0-4602	Repair & Maint. - Buildin	Repair	1,040	1,082	1,125	1,170	1,217
43	411-1430-533-0-4603	Repair & Maint. Grounds	Repair	1,040	1,082	1,125	1,170	1,217
44	411-1430-533-0-4604	Repair & Maint.-Contract	Repair	31,200	32,448	33,746	35,096	36,500
45	411-1430-533-0-4605	Repair & Maint. - Motor V	Repair	15,600	16,224	16,873	17,548	18,250
46	411-1430-533-0-4606	Repair & Maint.-Lines	Repair	26,000	27,040	28,122	29,246	30,416
47	411-1430-533-0-4607	Repair & Maint. Other	Repair	20,800	21,632	22,497	23,397	24,333
48	411-1430-533-0-4618	Repair & Maint. Easements	Repair	5,200	5,408	5,624	5,849	6,083
49	411-1430-533-0-4702	Printing & Bind - Photo	Inflation	510	520	532	544	557
50	411-1430-533-0-4906	Other Chgs. -Others	Inflation	1,019	1,040	1,063	1,089	1,115
51	411-1430-533-0-4907	Others-Surveillance	Inflation	1,019	1,040	1,063	1,089	1,115
52	411-1430-533-0-5101	Office Supplies-Statio	Inflation	510	520	532	544	557
53	411-1430-533-0-5201	Office Supplies-General	Inflation	5,095	5,202	5,316	5,444	5,575
54	411-1430-533-0-5202	Operating Supplies-Software	Gas	5,350	5,725	6,125	6,554	7,013
55	411-1430-533-0-5203	Oper. Supplies-Chemicals	Inflation	1,529	1,561	1,595	1,633	1,672
56	411-1430-533-0-5204	Oper. Supplies-Janitor	Inflation	1,019	1,040	1,063	1,089	1,115
57	411-1430-533-0-5205	Oper. Supplies-Clothin	Inflation	5,095	5,202	5,316	5,444	5,575
58	411-1430-533-0-5206	Oper. Supplies-Other	Inflation	10,190	10,404	10,633	10,888	11,149
59	411-1430-533-0-5207	Oper. Supplies-Water	Inflation	2,548	2,601	2,658	2,722	2,787
60	411-1430-533-0-5401	Books and Periodicals	Inflation	255	260	266	272	279
61	411-1430-533-0-5402	Subscriptions & Member	Inflation	510	520	532	544	557
62	411-1430-533-0-5403	Employee Development	Inflation	1,019	1,040	1,063	1,089	1,115
63	Total Water Distribution - 1430			\$ 545,125	\$ 554,361	\$ 564,007	\$ 574,233	\$ 584,761
Water Treatment - 1437								
64	411-1437-533-0-3102	Prof. Serv. Med. Dental	Insurance	\$ 105	\$ 110	\$ 116	\$ 122	\$ 128
65	411-1437-533-0-3103	Prof. Serv.-Engineerin	Inflation	10,190	10,404	10,633	10,888	11,149
66	411-1437-533-0-3401	Cont. Serv.-Janitorial	Labor	1,030	1,061	1,093	1,126	1,159
67	411-1437-533-0-3406	Cont. Serv.-Other	Labor	51,500	53,045	54,636	56,275	57,964

Table 8
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Water Operating Expenses

Line No.	Expense Number	Description	Escalation Factor	Fiscal Year Ending September 30,				
				2015	2016	2017	2018	2019
68	411-1437-533-0-4001	Travel	Inflation	2,038	2,081	2,127	2,178	2,230
69	411-1437-533-0-4301	Utilities-Electricity	Electric	457,608	475,913	494,949	514,747	535,337
70	411-1437-533-0-4306	Utilities-Other	Gen Utility	6,036	6,073	6,110	6,147	6,185
71	411-1437-533-0-4401	Rent And Leases-Land	Inflation	10,190	10,404	10,633	10,888	11,149
72	411-1437-533-0-4501	Ins.-Gen. Liab.-Self I	Insurance	286,452	300,774	315,813	331,603	348,184
73	411-1437-533-0-4602	Repair & Maint. - Buildin	Repair	10,400	10,816	11,249	11,699	12,167
74	411-1437-533-0-4603	Repair & Maint. Grounds	Repair	1,040	1,082	1,125	1,170	1,217
75	411-1437-533-0-4604	Repair & Maint.-Contract	Repair	109,200	113,568	118,111	122,835	127,749
76	411-1437-533-0-4605	Repair & Maint. - Motor V	Repair	15,600	16,224	16,873	17,548	18,250
77	411-1437-533-0-4606	Repair & Maint.-Lines	Repair	10,400	10,816	11,249	11,699	12,167
78	411-1437-533-0-4607	Repair & Maint. Other	Repair	114,400	118,976	123,735	128,684	133,832
79	411-1437-533-0-4702	Printing & Bind - Photo	Inflation	7,643	7,803	7,975	8,166	8,362
80	411-1437-533-0-4906	Other Chgs. -Others	Inflation	5,095	5,202	5,316	5,444	5,575
81	411-1437-533-0-4907	Others-Surveillance	Inflation	2,038	2,081	2,127	2,178	2,230
82	411-1437-533-0-5101	Office Supplies-Statio	Inflation	510	520	532	544	557
83	411-1437-533-0-5201	Office Supplies-General	Inflation	7,897	8,063	8,240	8,438	8,641
84	411-1437-533-0-5202	Operating Supplies-Software	Inflation	76,425	78,030	79,747	81,661	83,620
85	411-1437-533-0-5203	Oper. Supplies-Chemicals	Inflation	499,310	509,796	521,011	533,515	546,320
86	411-1437-533-0-5204	Oper. Supplies-Janitor	Inflation	2,038	2,081	2,127	2,178	2,230
87	411-1437-533-0-5205	Oper. Supplies-Clothin	Inflation	13,247	13,525	13,823	14,154	14,494
88	411-1437-533-0-5206	Oper. Supplies-Other	Inflation	6,624	6,763	6,911	7,077	7,247
89	411-1437-533-0-5207	Oper. Supplies-Water	Inflation	10,190	10,404	10,633	10,888	11,149
90	411-1437-533-0-5208	Operating Lime Sludge Removal	Inflation	101,900	104,040	106,329	108,881	111,494
91	411-1437-533-0-5401	Books and Periodicals	Inflation	255	260	266	272	279
92	411-1437-533-0-5402	Subscriptions & Member	Inflation	510	520	532	544	557
93	411-1437-533-0-5403	Employee Development	Inflation	2,038	2,081	2,127	2,178	2,230
94	Total Water Treatment - 1437			\$ 1,821,907	\$ 1,882,515	\$ 1,946,144	\$ 2,013,727	\$ 2,083,850
Other Expenses								
95	412-1438-535-0-4604	Repair & Maint.-Contract	Inflation	\$ 68,926	\$ 70,374	\$ 71,922	\$ 73,648	\$ 75,415
96	412-1438-535-0-4606	Repair & Maint.-Lines	Inflation	172,315	175,934	179,804	184,120	188,539
97	Total Other Expenses			\$ 241,241	\$ 246,307	\$ 251,726	\$ 257,768	\$ 263,954
Adjustments								
98	Contingency		Calculated	\$ 562,133	\$ 585,193	\$ 608,161	\$ 628,181	\$ 651,702
99	Total Adjustments			\$ 562,133	\$ 585,193	\$ 608,161	\$ 628,181	\$ 651,702
100	Total Water System			\$ 9,522,213	\$ 9,877,590	\$ 10,208,394	\$ 10,550,770	\$ 10,906,552

Table 9
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Wastewater Operating Expenses

Line No.	Expense Number	Description	Escalation Factor	Fiscal Year Ending September 30,				
				2015	2016	2017	2018	2019
	Administration - 1417							
1	411-1417-536-0-2600	OPEB Liability Expense	Insurance	\$ 54,745	\$ 57,483	\$ 60,357	\$ 63,375	\$ 66,543
2	411-1417-536-0-3102	Prof. Serv. Med. Dental	Inflation	99	101	103	106	108
3	411-1417-536-0-3103	Prof. Serv.-Engineerin	Inflation	15,056	15,373	15,711	16,088	16,474
4	411-1417-536-0-3106	Prof.Serv.-Other	Labor	792,310	816,079	840,561	865,778	891,751
5	411-1417-536-0-3106.2	PILOT	Calculated	410,726	447,856	472,210	498,063	524,537
6	411-1417-536-0-3110	CRB Direct Labor	Labor	1,597,871	1,645,807	1,695,181	1,746,036	1,798,417
7	411-1417-536-0-3201	Accting And Auditing	Inflation	1,649	1,683	1,720	1,762	1,804
8	411-1417-536-0-3401	Cont. Serv.-Janitorial	Labor	4,999	5,149	5,304	5,463	5,627
9	411-1417-536-0-3402	Cont. Serv.-Pest Contr	Labor	167	172	177	182	188
10	411-1417-536-0-3405	Merchant Services Fee'S	Inflation	8,243	8,417	8,602	8,808	9,020
11	411-1417-536-0-3406	Cont. Serv.-Other	Labor	16,665	17,165	17,680	18,210	18,757
12	411-1417-536-0-4001	Travel	Inflation	989	1,010	1,032	1,057	1,082
13	411-1417-536-0-4101	Commun. Serv.-Telephon	Inflation	10,088	10,300	10,527	10,779	11,038
14	411-1417-536-0-4201	Postage & Freight Chgs	Inflation	165	168	172	176	180
15	411-1417-536-0-4501	Ins.-Gen. Liab.-Self I	Insurance	29,265	30,728	32,265	33,878	35,572
16	411-1417-536-0-4601	Repair & Mant.-Contrac	Repair	673	700	728	757	787
17	411-1417-536-0-4602	Repair & Maint. - Buildin	Repair	673	700	728	757	787
18	411-1417-536-0-4605	Repair & Maint. - Motor V	Repair	673	700	728	757	787
19	411-1417-536-0-4701	Printing & Binding	Inflation	330	337	344	352	361
20	411-1417-536-0-4703	Printing & Bind.-Copie	Inflation	330	337	344	352	361
21	411-1417-536-0-4801	Promotional Activities	Inflation	15,205	15,525	15,866	16,247	16,637
22	411-1417-536-0-4907	Others-Surveillance	Inflation	4,946	5,050	5,161	5,285	5,412
23	411-1417-536-0-4910	Bad Debt Expense	Calculated	102,681	111,964	118,052	124,516	131,134
24	411-1417-536-0-5101	Office Supplies-Statio	Inflation	1,009	1,030	1,053	1,078	1,104
25	411-1417-536-0-5201	Office Supplies-General	Inflation	4,287	4,377	4,474	4,581	4,691
26	411-1417-536-0-5202	Operating Supplies-Software	Inflation	11,769	12,017	12,281	12,576	12,878
27	411-1417-536-0-5204	Oper. Supplies-Janitor	Inflation	330	337	344	352	361
28	411-1417-536-0-5205	Oper. Supplies-Clothin	Inflation	396	404	413	423	433
29	411-1417-536-0-5206	Oper. Supplies-Other	Inflation	1,978	2,020	2,064	2,114	2,165
30	411-1417-536-0-5250	Operating Small Equip	Inflation	659	673	688	705	722
31	411-1417-536-0-5401	Books and Periodicals	Inflation	336	343	351	359	368
32	411-1417-536-0-5402	Subscriptions & Member	Inflation	1,681	1,717	1,754	1,797	1,840
33	411-1417-536-0-5403	Employee Development	Inflation	1,681	1,717	1,754	1,797	1,840
34	411-1417-536-0-5404	Tuition Reimbursement	Inflation	3,363	3,433	3,509	3,593	3,679
35	Total Administration - 1417			\$ 3,096,039	\$ 3,220,870	\$ 3,332,238	\$ 3,448,159	\$ 3,567,445
	Sewage Collection -1438							
36	411-1438-535-0-3102	Prof. Serv. Med. Dental	Inflation	\$ 102	\$ 104	\$ 106	\$ 109	\$ 111
37	411-1438-535-0-3106	Prof.Serv.-Other	Inflation	5,095	5,202	5,316	5,444	5,575
38	411-1438-535-0-3201	Accting And Auditing	Inflation	5,095	5,202	5,316	5,444	5,575
39	411-1438-535-0-3405	Merchant Services Fee'S	Calculated	3,574,198	3,754,092	3,968,745	4,080,596	4,277,417
40	411-1438-535-0-4001	Travel	Inflation	2,038	2,081	2,127	2,178	2,230
41	411-1438-535-0-4102	Commun. Serv.-Radio	Inflation	510	520	532	544	557
42	411-1438-535-0-4201	Postage & Freight Chgs	Inflation	102	104	106	109	111
43	411-1438-535-0-4301	Utilities-Electricity	Electric	182,000	189,280	196,851	204,725	212,914
44	411-1438-535-0-4305	Utilities-Water	Water Rev	2,042	2,082	2,125	2,168	2,168
45	411-1438-535-0-4501	Ins.-Gen. Liab.-Self I	Insurance	137,871	144,765	152,003	159,603	167,583
46	411-1438-535-0-4602	Repair & Maint. - Buildin	Repair	10,400	10,816	11,249	11,699	12,167
47	411-1438-535-0-4604	Repair & Maint.-Contract	Repair	52,000	54,080	56,243	58,493	60,833
48	411-1438-535-0-4605	Repair & Maint. - Motor V	Repair	12,480	12,979	13,498	14,038	14,600
49	411-1438-535-0-4606	Repair & Maint.-Lines	Repair	26,000	27,040	28,122	29,246	30,416
50	411-1438-535-0-4702	Printing & Bind - Photo	Inflation	510	520	532	544	557
51	411-1438-535-0-5201	Office Supplies-General	Inflation	1,529	1,561	1,595	1,633	1,672
52	411-1438-535-0-5202	Operating Supplies-Software	Inflation	17,833	18,207	18,608	19,054	19,511
53	411-1438-535-0-5203	Oper. Supplies-Chemicals	Inflation	10,190	10,404	10,633	10,888	11,149
54	411-1438-535-0-5204	Oper. Supplies-Janitor	Inflation	510	520	532	544	557
55	411-1438-535-0-5205	Oper. Supplies-Clothin	Inflation	12,738	13,005	13,291	13,610	13,937
56	411-1438-535-0-5206	Oper. Supplies-Other	Inflation	20,380	20,808	21,266	21,776	22,299
57	411-1438-535-0-5401	Books and Periodicals	Inflation	255	260	266	272	279
58	411-1438-535-0-5402	Subscriptions & Member	Inflation	306	312	319	327	334
59	411-1438-535-0-5403	Employee Development	Inflation	2,038	2,081	2,127	2,178	2,230
60	Total Sewage Collection -1438			\$ 4,076,219	\$ 4,276,026	\$ 4,511,506	\$ 4,645,223	\$ 4,864,784

Table 9
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Summary of Projected Wastewater Operating Expenses

Line No.	Expense Number	Description	Escalation Factor	Fiscal Year Ending September 30,				
				2015	2016	2017	2018	2019
	Other Expenses							
61	412-1438-535-0-4604	Repair & Maint.-Contract	Inflation	\$ 32,974	\$ 33,666	\$ 34,407	\$ 35,233	\$ 36,078
62	412-1438-535-0-4606	Repair & Maint.-Lines	Inflation	82,435	84,166	86,017	88,082	90,196
63	Total Other Expenses			\$ 115,409	\$ 117,832	\$ 120,424	\$ 123,315	\$ 126,274
	Adjustments							
64	Contingency		Calculated	\$ 232,421	\$ 241,956	\$ 251,452	\$ 259,729	\$ 269,455
65	Total Adjustments			\$ 232,421	\$ 241,956	\$ 251,452	\$ 259,729	\$ 269,455
66	Total Wastewater System			\$ 7,520,088	\$ 7,856,683	\$ 8,215,621	\$ 8,476,426	\$ 8,827,957

Table 10
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Five (5) Year Projected Capital Improvement Plan

Line No.	Project Description	Funding Sources	Fiscal Year Ending September 30,					Total
			2015	2016	2017	2018	2019	
Water Projects								
1	Air Stripper Replacement at Water Treatment Plant	CapFund	\$ 600,000	\$ -	\$ -	\$ -	\$ -	\$ 600,000
2	Water Treatment Plant Disinfection	Debt1	3,800,000	-	-	-	-	3,800,000
3	Secondary Disinfection at Avenue "U" Booster Pump Station	CapFund	150,000	-	-	-	-	150,000
4	MLK Blvd - Road Construction (Phase C)	R&R	-	-	-	-	-	-
5	MLK Blvd - Road Construction (Phase C)	Debt1	2,500,000	-	-	-	-	2,500,000
6	Silver Beach Road (Old Dixie HWY to Congress AVE) Impr	Debt1	200,000	-	-	-	-	200,000
7	Replace existing WTP generators & switchgear	R&R	-	103,000	1,061,000	-	1,126,000	2,290,000
8	Miscellaneous Water/Sewer Improvements in conjunction wi	R&R	-	257,500	265,250	546,500	563,000	1,632,250
9	West 23rd Street Water Main Replacement	Debt1	175,000	-	-	-	-	175,000
10	Rehabilitation Raw Water Wells	CapFund	-	-	-	-	-	-
11	Rehabilitation Raw Water Wells	R&R	100,000	103,000	106,100	109,300	112,600	531,000
12	Utility Infrastructure in NW Strategy Area (NSA)	R&R	125,000	128,750	132,625	136,625	140,750	663,750
13	On-Call Underground Contractor	R&R	150,000	154,500	159,150	163,950	168,900	796,500
14	Replacement of Large Water Meters	RateRev	50,000	51,500	53,050	54,650	56,300	265,500
15	Replacement of Small Water Meters	RateRev	25,000	25,750	26,525	27,325	28,150	132,750
16	Replacement of Fire Hydrant Meters	RateRev	25,000	25,750	26,525	27,325	28,150	132,750
17	Lift Station #47 Rehabilitation	R&R	-	-	-	-	-	-
18	Lift Station #47 Rehabilitation	Debt1	2,100,000	-	-	-	-	2,100,000
19	Replacement Of Lime Slaker, Silo & Slurry System	R&R	-	-	-	-	-	-
20	Replacement Of Lime Slaker, Silo & Slurry System	Debt1	526,876	3,708,000	-	-	-	4,234,876
21	Rehabilitate/Replacement Water Softening Units	R&R	-	-	-	-	2,252,000	2,252,000
22	Rehabilitate/Replacement Water Softening Units	R&R	-	-	106,100	1,093,000	-	1,199,100
23	Parallel Intracoastal Water Main	Debt1	-	309,000	-	-	-	309,000
24	Parallel Intracoastal Water Main	Debt1	-	-	2,970,800	-	-	2,970,800
25	New Water Treatment Plant Perimeter Wall	Debt1	500,000	1,030,000	-	-	-	1,530,000
26	New Utility Field Operations Building	Debt1	-	103,000	1,061,000	-	-	1,164,000
27	New Raw Water Wells (A & B)	Debt1	200,000	2,060,000	-	-	-	2,260,000
28	New Aqueous Ammonia System	Debt1	500,000	-	-	-	-	500,000
29	Garden Road Improvement	Debt1	125,000	-	-	-	-	125,000
30	Havervill Road Improvements	CapFund	25,000	-	265,250	-	-	290,250
31	Water Storage Tank Inspection	R&R	50,000	-	-	54,650	-	104,650
32	Replace perimeter Water Main	Debt1	900,000	-	-	-	-	900,000
33	Replace perimeter Water Main	Debt1	90,000	-	-	-	-	90,000
34	Water & Sewer Infrastructure for Marina Projects	CapFund	-	-	-	-	-	-
Sewer Projects								
35	Replacement Lift Station # 50	CapFund	-	-	-	-	-	-
36	Replacement Lift Station # 50	Debt1	2,500,000	-	-	-	-	2,500,000
37	Replacement Lift Station # 10	CapFund	-	-	-	-	-	-
38	Replacement Lift Station # 10	Debt1	1,100,000	-	-	-	-	1,100,000
39	Aerial Crossing Rehabilitation	CapFund	250,000	-	-	-	-	250,000
40	New Access Culvert Crossing to Lift Station #48	CapFund	50,000	-	-	-	-	50,000
41	Miscellaneous Water/Sewer Improvements in conjunction wi	R&R	-	257,500	265,250	546,500	563,000	1,632,250
42	Replacement of Lift Station Pumps	R&R	50,000	51,500	53,050	54,650	56,300	265,500
43	Parallel Intracoastal Force Main	Debt1	-	-	1,061,000	6,558,000	-	7,619,000
44	Lift Station Rehabilitations - Phase 1	CapFund	500,000	515,000	530,500	546,500	-	2,092,000
45	Lift Station Rehabilitations - Phase 2	CapFund	-	-	530,500	546,500	-	1,077,000
46	Lift Station Rehabilitations - Phase 2	R&R	-	-	-	-	1,126,000	1,126,000
47	Havervill Road Improvements	CapFund	25,000	-	265,250	-	-	290,250
48	Ground Water Rule (GWR) Sanitary Survey	R&R	50,000	-	53,050	-	-	103,050
49	Inflow/Infiltration Sanitary Sewer Relining	R&R	100,000	103,000	106,100	109,300	112,600	531,000
Capital Outlay								
50	Meter Replacement Program Additional Cost Recognized	RateRev	103,315	106,414	109,617	112,923	116,333	548,603
51	Budgeted Capital Outlay	RateRev	408,016	420,256	432,905	445,961	459,426	2,166,565
52	Budgeted CIP by Department	R&R	-	-	-	-	-	-
53	TOTAL CIP		\$ 18,053,207	\$ 9,513,421	\$ 9,640,597	\$ 11,133,660	\$ 6,909,509	\$ 55,250,394
FUNDING SOURCES:								
54	Rate Revenues	RateRev	\$ 611,331	\$ 629,671	\$ 648,622	\$ 668,185	\$ 688,359	\$ 3,246,168
55	Operating Reserves	OpReserve	-	-	-	-	-	-
56	Impact Fees	Impact	-	-	-	-	-	-
57	Renewal and Replacement Fund	R&R	625,000	1,158,750	2,307,675	2,814,475	6,221,150	13,127,050
58	Capital Improvement Fund	CapFund	1,600,000	515,000	1,591,500	1,093,000	-	4,799,500
59	Series 2015 Bonds	Debt1	15,216,876	7,210,000	5,092,800	6,558,000	-	34,077,676
60	Total Funding		\$ 18,053,207	\$ 9,513,421	\$ 9,640,597	\$ 11,133,660	\$ 6,909,509	\$ 55,250,394

Table 11
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Projected Water System Net Revenue Requirements and Rate Adjustments

Line No.	Description	Fiscal Year Ending September 30,				
		2015	2016	2017	2018	2019
1	Total Operating Expenses:	\$9,522,213	\$9,877,590	\$10,208,394	\$10,550,770	\$10,906,552
	Other Revenue Requirements:					
2	Existing Debt Service	\$1,282,560	\$1,279,344	\$1,277,669	\$1,280,483	\$1,279,009
3	Proposed Debt Service	0	714,668	1,653,367	1,877,398	1,877,397
4	Capital Funded from Rates	407,323	419,543	432,170	445,204	458,646
5	Transfer to R&R Fund - Minimum Requirement	680,069	731,760	796,617	839,169	884,170
6	Transfer to R&R Fund - Additional	50,568	418,291	848,927	887,995	934,303
7	Transfer to Cap Improvement Fund	0	0	0	0	0
8	Transfers From Operating Reserves	0	0	0	0	0
9	Transfer to Debt Service Reserve Requirement	0	0	0	0	0
10	Total Other Revenue Requirements	\$2,420,520	\$3,563,606	\$5,008,749	\$5,330,248	\$5,433,525
11	Gross Revenue Requirements	\$11,942,733	\$13,441,196	\$15,217,143	\$15,881,018	\$16,340,077
	Less Income and Funds from Other Sources:					
12	Other Revenues [5]	\$503,905	\$506,343	\$508,809	\$511,425	\$514,084
13	Interest Income [6]	24,958	35,552	42,234	46,801	48,618
14	Transfers From Operating Reserves	0	0	0	0	0
15	Net Revenue Requirements	\$11,413,870	\$12,899,301	\$14,666,100	\$15,322,793	\$15,777,376
	APPROVED RATE ADJUSTMENTS					
16	Projected Increase Water	1.94%	2.11%	1.96%	2.03%	2.03%
17	Projected Increase Irrigation	1.94%	2.11%	1.96%	2.03%	2.03%
18	Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
19	Water Rate Revenues w/effective increase	\$12,325,802	\$12,595,361	\$12,856,413	\$13,140,424	\$13,424,569
20	Irrigation Rate Revenues w/effective increase	1,742,998	1,778,912	1,814,767	1,851,529	1,888,483
21	Total	\$14,068,800	\$14,374,272	\$14,671,180	\$14,991,953	\$15,313,052
	Revenue Surplus/(Deficiency) Under Approved Rates:					
22	Amount	\$2,654,931	\$1,474,971	\$5,081	(\$330,840)	(\$464,324)
23	Percent of Rate Revenue	18.87%	10.26%	0.03%	(2.21%)	(3.03%)
	ADDITIONAL RATE ADJUSTMENTS					
	Effective Increase					
24	Projected Increase Water	0.00%	0.00%	0.00%	0.00%	0.00%
25	Projected Increase Irrigation	0.00%	0.00%	0.00%	0.00%	0.00%
26	Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
27	Water - Prior Period Compound Rate Adjustments	0.00%	0.00%	0.00%	0.00%	0.00%
28	Irrigation - Prior Period Compound Rate Adjustments	0.00%	0.00%	0.00%	0.00%	0.00%
	Revenue From Water Rates:					
29	Current Year Rate Adjustment	0	0	0	0	0
30	Prior Year Rate Adjustment	0	0	0	0	0
	Revenue From Irrigation Rates:					
31	Current Year Rate Adjustment	0	0	0	0	0
32	Prior Year Rate Adjustment	0	0	0	0	0
33	Adjusted Water	\$14,068,800	\$14,374,272	\$14,671,180	\$14,991,953	\$15,313,052

Table 11
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Projected Water System Net Revenue Requirements and Rate Adjustments

Line No.	Description	Fiscal Year Ending September 30,				
		2015	2016	2017	2018	2019
34	Revenue Surplus / (Deficiency) Under Proposed Rate Adj.	2,654,931	1,474,971	5,081	(330,840)	(464,324)
35	As Percent of Existing Revenue	18.87%	10.26%	0.03%	(2.21%)	(3.03%)
	Rate Revenue Recap					
36	Water	\$12,325,802	\$12,595,361	\$12,856,413	\$13,140,424	\$13,424,569
37	Irrigation	1,742,998	1,778,912	1,814,767	1,851,529	1,888,483
38	Total Adjusted Rate Revenue	\$14,068,800	\$14,374,272	\$14,671,180	\$14,991,953	\$15,313,052

Table 12
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Projected Wastewater System Net Revenue Requirements and Rate Adjustments

Line No.		Fiscal Year Ending September 30,				
		2015	2016	2017	2018	2019
1	Operating Expenses	\$3,945,890	\$4,102,591	\$4,246,876	\$4,395,830	\$4,550,541
2	ECR Expenses	3,574,198	3,754,092	3,968,745	4,080,596	4,277,417
3	Total Operating Expenses	\$7,520,088	\$7,856,683	\$8,215,621	\$8,476,426	\$8,827,957
	Other Revenue Requirements:					
4	Existing Debt Service	\$631,709	\$630,125	\$629,300	\$630,686	\$629,960
5	Proposed Debt Service	0	352,001	814,345	924,688	924,688
6	Capital Funded from Rates	304,008	313,128	322,552	332,281	342,313
7	Transfer to R&R Fund - Minimum Requirement	334,959	360,419	392,363	413,322	435,487
8	Transfer to R&R Fund - Additional	24,907	206,024	418,128	437,371	460,179
9	Transfer to Cap Improvement Fund	0	0	0	0	0
10	Transfers From Operating Reserves	0	0	0	0	0
11	Transfer to Debt Service Reserve Requirement	0	0	0	0	0
12	Total Other Revenue Requirements	\$1,295,582	\$1,861,697	\$2,576,689	\$2,738,347	\$2,792,627
13	Gross Revenue Requirements	\$8,815,671	\$9,718,380	\$10,792,310	\$11,214,773	\$11,620,584
	Less Income and Funds from Other Sources:					
14	Other Revenues [5]	\$135,178	\$135,178	\$135,178	\$135,178	\$135,178
15	Interest Income [6]	24,958	35,552	42,234	46,801	48,618
16	Transfers From Operating Reserves	0	0	0	0	0
17	Net Revenue Requirements	\$8,655,534	\$9,547,649	\$10,614,897	\$11,032,794	\$11,436,788
	APPROVED RATE ADJUSTMENTS					
18	Projected Increase Wastewater w/effective increase	2.05%	5.17%	1.99%	3.69%	3.61%
19	Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
20	Wastewater Rate Revenues w/effective increase	6,480,909	6,817,809	6,965,373	7,234,517	7,508,977
21	Total	\$6,480,909	\$6,817,809	\$6,965,373	\$7,234,517	\$7,508,977
	Revenue Surplus/(Deficiency) Under Approved Rates:					
22	Amount	(\$2,174,625)	(\$2,729,840)	(\$3,649,524)	(\$2,874,820)	(\$3,124,899)
23	Percent of Rate Revenue	(33.55%)	(40.04%)	(52.40%)	(39.74%)	(41.62%)
	ADDITIONAL RATE ADJUSTMENTS					
	Effective Increase					
24	Projected Increase Wastewater	16.00%	12.00%	9.00%	6.00%	6.00%
25	Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
26	Sewer - Prior Period Compound Rate Adjustments	0.00%	16.00%	29.92%	41.61%	50.11%
	Revenue From Wastewater Rates:					
27	Current Year Rate Adjustment	604,885	784,048	600,763	415,985	431,766
28	Prior Year Rate Adjustment	0	1,090,849	2,084,040	3,010,485	3,762,716
29	Adjusted Wastewater Rate Revenue	\$7,085,794	\$8,692,706	\$9,650,176	\$10,660,987	\$11,703,460
30	Revenue Surplus / (Deficiency) Under Proposed Rate Adj.	(1,569,740)	(854,943)	(964,721)	(371,807)	266,672
31	As Percent of Existing Revenue	(22.15%)	(9.84%)	(10.00%)	(3.49%)	2.28%
	Rate Revenue Recap					
32	Sewer	\$7,085,794	\$8,692,706	\$9,650,176	\$10,660,987	\$11,703,460
33	Total Adjusted Rate Revenue	\$7,085,794	\$8,692,706	\$9,650,176	\$10,660,987	\$11,703,460

Table 13
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Projected Water and Wastewater System Net Revenue Requirements and Rate Adjustments

Line No.	Description	Fiscal Year Ending September 30,				
		2015	2016	2017	2018	2019
1	Total Operating Expenses:	\$17,042,301	\$17,734,273	\$18,424,014	\$19,027,196	\$19,734,510
	Other Revenue Requirements:					
2	Existing Debt Service	\$1,914,268	\$1,909,468	\$1,906,968	\$1,911,168	\$1,908,968
3	Proposed Debt Service	0	1,066,669	2,467,712	2,802,086	2,802,085
4	Capital Funded from Rates	611,331	629,671	648,622	668,185	688,359
5	Transfer to R&R Fund - Minimum Requirement	1,015,028	1,092,180	1,188,980	1,252,491	1,319,657
6	Transfer to R&R Fund - Additional	75,475	624,315	1,267,055	1,325,366	1,394,482
7	Total Other Revenue Requirements	\$3,616,102	\$5,322,303	\$7,479,338	\$7,959,295	\$8,113,552
8	Gross Revenue Requirements	\$20,658,404	\$23,056,576	\$25,903,352	\$26,986,492	\$27,848,061
	Less Income and Funds from Other Sources:					
9	Other Revenues [5]	\$639,083	\$641,521	\$643,988	\$646,603	\$649,262
10	Interest Income [6]	49,917	71,105	84,468	93,601	97,235
11	Transfers From Operating Reserves	0	0	0	0	0
12	Net Revenue Requirements	\$19,969,404	\$22,343,951	\$25,174,897	\$26,246,287	\$27,101,564
	APPROVED RATE ADJUSTMENTS					
	Effective Increase					
13	Projected Increase Water	1.94%	2.11%	1.96%	2.03%	2.03%
14	Projected Increase Irrigation	1.94%	2.11%	1.96%	2.03%	2.03%
15	Projected Increase Wastewater	2.05%	5.17%	1.99%	3.69%	3.61%
16	Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
17	Water Rate Revenues	\$12,325,802	\$12,595,361	\$12,856,413	\$13,140,424	\$13,424,569
18	Irrigation Rate Revenues	1,742,998	1,778,912	1,814,767	1,851,529	1,888,483
19	Sewer Rate Revenues	6,480,909	6,817,809	6,965,373	7,234,517	7,508,977
20	Total	\$20,549,709	\$21,192,081	\$21,636,553	\$22,226,471	\$22,822,029
21		4.66%	3.13%	2.10%	2.73%	2.68%
	Revenue Surplus/(Deficiency) Under Existing Rates:					
22	Amount	\$580,305	(\$1,151,870)	(\$3,538,343)	(\$2,874,820)	(\$3,124,899)
23	Percent of Rate Revenue	2.82%	(5.44%)	(16.35%)	(12.93%)	(13.69%)
	ADDITIONAL RATE ADJUSTMENTS					
	Effective Increase					
24	Projected Increase Water	0.00%	0.00%	0.00%	0.00%	0.00%
25	Projected Increase Irrigation	0.00%	0.00%	0.00%	0.00%	0.00%
26	Projected Increase Wastewater	16.00%	12.00%	9.00%	6.00%	6.00%
27	Months Rate Increase in Effect	7.00	11.50	11.50	11.50	11.50
28	Water - Prior Period Compound Rate Adjustments	0.00%	0.00%	0.00%	0.00%	0.00%
29	Irrigation - Prior Period Compound Rate Adjustments	0.00%	0.00%	0.00%	0.00%	0.00%
30	Sewer - Prior Period Compound Rate Adjustments	0.00%	16.00%	29.92%	41.61%	50.11%
	Revenue From Water Rates:					
31	Current Year Rate Adjustment	0	0	0	0	0
32	Prior Year Rate Adjustment	0	0	0	0	0
	Revenue From Irrigation Rates:					
33	Current Year Rate Adjustment	0	0	0	0	0
34	Prior Year Rate Adjustment	0	0	0	0	0

Table 13
City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design

Projected Water and Wastewater System Net Revenue Requirements and Rate Adjustments

Line No.	Description	Fiscal Year Ending September 30,				
		2015	2016	2017	2018	2019
	Revenue From Wastewater Rates:					
35	Current Year Rate Adjustment	604,885	784,048	600,763	415,985	431,766
36	Prior Year Rate Adjustment	0	1,090,849	2,084,040	3,010,485	3,762,716
37	Adjusted Water and Wastewater Rate Revenue	<u>\$21,154,594</u>	<u>\$23,066,978</u>	<u>\$24,321,356</u>	<u>\$25,652,941</u>	<u>\$27,016,512</u>
38	Revenue Surplus / (Deficiency) Under Proposed Rate Adj.	1,185,190	723,028	(853,541)	(593,346)	(85,052)
39	As Percent of Existing Revenue	<u>5.60%</u>	<u>3.13%</u>	<u>(3.51%)</u>	<u>(2.31%)</u>	<u>(0.31%)</u>
	Rate Revenue Recap					
40	Water	\$12,325,802	\$12,595,361	\$12,856,413	\$13,140,424	\$13,424,569
41	Irrigation	1,742,998	1,778,912	1,814,767	1,851,529	1,888,483
42	Sewer	7,085,794	8,692,706	9,650,176	10,660,987	11,703,460
43	Total Adjusted Rate Revenue	<u>\$21,154,594</u>	<u>\$23,066,978</u>	<u>\$24,321,356</u>	<u>\$25,652,941</u>	<u>\$27,016,512</u>

Table 14

**City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design**

Projected Debt Service Coverage and Rate Covenant Requirements

Line No.	Description	2014	2015	2016	2017	2018	2019
	System Revenues:						
1	Water and Wastewater Rate Revenue [1], [2]	\$ 19,633,942	\$ 21,154,594	\$ 23,066,978	\$ 24,321,356	\$ 25,652,941	\$ 27,016,512
2	Other Operating Revenue	636,700	639,083	641,521	643,988	646,603	649,262
3	Unrestricted Interest Income [3]	29,913	49,917	71,105	84,468	93,601	97,235
4	Total Gross System Revenues	\$20,300,554	\$21,843,594	\$23,779,604	\$25,049,812	\$26,393,145	\$27,763,009
5	Operating Expenses [4]	\$15,412,236	\$17,042,301	\$17,734,273	\$18,424,014	\$19,027,196	\$19,734,510
6	Net Revenues	\$4,888,318	\$4,801,292	\$6,045,331	\$6,625,798	\$7,365,949	\$8,028,499
	Annual Debt Service - Senior Lien Debt:						
7	Existing Debt Payment [5]	\$1,328,782	\$1,775,725	\$1,770,925	\$1,768,425	\$1,772,625	\$1,770,425
8	Proposed Debt Payment [5]	-	-	1,066,669	2,467,712	2,802,086	2,802,085
9	Total Senior Lien Indebtness	\$1,328,782	\$1,775,725	\$2,837,594	\$4,236,137	\$4,574,711	\$4,572,510
10	Bond Debt Service Calculated Coverage	3.68	2.70	2.13	1.56	1.61	1.76
11	Minimum Required Factor	1.20	1.20	1.20	1.20	1.20	1.20
	Required Transfers:						
12	Renewal and Replacement Fund Requirement [6]	912,181	1,015,028	1,092,180	1,188,980	1,252,491	1,319,657
13	Subordinate Debt Payments [7]	138,543	138,543	138,543	138,543	138,543	138,543
14	Amount Available for Other Purposes [8]	\$3,837,593	\$3,647,721	\$1,258,978	\$1,094,869	\$5,974,915	\$6,570,299
	All-In Debt Coverage Requirements: [9]						
15	Gross Revenues	\$20,300,554	\$21,843,594	\$23,040,558	\$24,229,846	\$26,393,145	\$27,763,009
16	Operating Expenses	15,412,236	17,042,301	17,734,273	18,424,014	19,027,196	19,734,510
17	Net Revenues	\$4,888,318	\$4,801,292	\$5,306,285	\$5,805,831	\$7,365,949	\$8,028,499
18	Total System Annual Debt Service	\$1,467,325	\$1,914,268	\$2,976,137	\$4,374,680	\$4,713,254	\$4,711,053
19	Calculated Coverage (Line 17 / Line 18)	3.33	2.51	1.78	1.33	1.56	1.70
20	Minimum Bond Resolution	1.25	1.25	1.25	1.25	1.25	1.25

Footnotes:

- [1] Amounts shown include sales revenues based upon projected customer and usage statistics shown on Table 2 for the water system and Table 4 for the wastewater system.
- [2] Includes additional sales revenue related to adopted and recommended water and wastewater rate adjustments for Fiscal Year 2015 through 2019, assumed to be effective October 1, of each respective year. The additional water and wastewater adjustments assumed are as follows:

Rate Adjustments						
	Adopted Water	Recommended Water	Total Effective Water Increase	Adopted Wastewater	Recommended Wastewater	Total Effective Wastewater Increase
2015	1.94%	0.00%	1.94%	2.05%	16.00%	18.38%
2016	2.11%	0.00%	2.11%	5.17%	12.00%	17.79%
2017	1.96%	0.00%	1.96%	1.99%	9.00%	11.17%
2018	2.03%	0.00%	2.03%	3.69%	6.00%	9.91%
2019	2.03%	0.00%	2.03%	3.61%	6.00%	9.82%

- [3] Amounts shown reflect estimated interest income earned on projected balances of the various funds created by the Bond Resolution.
- [4] Amounts shown do not include depreciation or amortization expenses which are non-cash expense of the System and not considered as a component of the Cost of Operation and Maintenance in the Bond Resolution.
- [5] Reflects Debt Service Requirements associated with bonds issued in accordance with the provisions of the Bond Resolution and which have a senior lien on the Pledged Revenues of the System.

Footnotes (Continued):

- [6] Amount shown reflects the annual funding requirement of the Renewal, Replacement, and Improvement Fund (R&R Fund) in the amount equal to 5% for FY 2015, 7.5% for FY2016 and 10% for FY 2017 - 2019 of the water and wastewater system's Gross Revenues for the immediately preceding Fiscal Year consistent with the provisions of the Bond Resolutions. Additionally, the R&R Fund transfer includes any additional saving from the refunding of the Series 2004 Bond Issuance.

- [7] Reflects Subordinate Debt Service obligation for the acquisition of Consolidated Utility Company.

- [8] Amounts shown represent sum of excess Net Revenues above required transfers; amounts shown available for other purposes of the System.

- [9] Represent Debt Service Coverage including both Senior Lien and Subordinate Lien Debt Service.

Table 15

City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design
Comparison of Typical Monthly Residential Bills for Water Service

Line No.	City of Riviera Beach Utility District	Residential Service Assuming 5,000 Gallons of Utility Service [1]		
		Base	Usage	Total
1	Adopted FY 2015	\$13.24	\$13.60	\$26.84
2	Proposed FY 2015	13.24	13.60	26.84
	<u>Other Neighboring/Surveyed Utilities</u>			
3	City of Boca Raton [2]	13.28	3.90	17.18
4	Broward County	15.14	9.34	24.48
5	City of Boynton Beach [2]	11.99	8.00	19.99
6	City of Cooper City	11.82	14.65	26.47
7	City of Coral Springs [2]	11.75	8.14	19.89
8	City of Dania Beach	14.55	20.45	35.00
9	City of Delray Beach	15.72	2.50	18.22
10	City of Fort Lauderdale [2]	6.22	14.14	20.36
11	City of Hollywood [2]	6.76	20.17	26.93
12	Town of Jupiter	19.41	5.70	25.11
13	City of Lake Worth [2]	18.12	16.17	34.29
14	Town of Lantana [2]	19.98	6.25	26.23
15	Martin County [2]	16.57	10.65	27.22
16	Palm Beach County [2]	12.77	8.01	20.78
17	City of West Palm Beach	20.91	16.18	37.09
18	Seacoast Utility Authority	19.13	4.85	23.98
19	City of Tamarac	11.77	10.03	21.80
20	Village of Tequesta [2]	14.58	11.55	26.13
21	Village of Wellington	18.22	10.30	28.52
22	Other Florida Utilities' - Average	\$14.67	\$10.58	\$25.25

[1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2014 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

[2] Utilities are currently involved in or contemplating a rate study, or are expecting a change in the rates charged during the next twelve months; the proposed rate adjustments, if any, are not reflected in the current rate above.

Table 16

City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design
Comparison of Typical Monthly Residential Bills for Wastewater Service

Line No.	City of Riviera Beach Utility District	Residential Service Assuming 5,000 Gallons of Utility Service [1]		
		Base	Usage	Total
1	Adopted FY 2015	\$8.72	\$9.80	\$18.52
2	Proposed FY 2015	12.02	10.75	22.77
<u>Other Neighboring/Surveyed Utilities</u>				
3	City of Boca Raton [2]	16.81	0.00	16.81
4	Broward County	17.46	18.30	35.76
5	City of Boynton Beach [2]	18.16	10.40	28.56
6	City of Cooper City	25.56	14.59	40.15
7	City of Coral Springs [2]	19.40	18.45	37.85
8	City of Dania Beach	21.52	37.30	58.82
9	City of Delray Beach	18.04	16.96	35.00
10	City of Fort Lauderdale [2]	9.12	25.00	34.12
11	City of Hollywood [2]	6.48	35.75	42.23
12	Town of Jupiter	21.13	0.00	21.13
13	City of Lake Worth [2]	11.37	17.20	28.57
14	Town of Lantana [2]	13.25	22.90	36.15
15	Martin County [2]	17.18	20.95	38.13
16	Palm Beach County [2]	14.33	11.05	25.38
17	City of West Palm Beach	11.77	17.35	29.12
18	Seacoast Utility Authority	27.94	3.25	31.19
19	City of Tamarac	18.75	24.00	42.75
20	Village of Tequesta [2]	21.13	0.00	21.13
21	Village of Wellington	17.38	9.60	26.98
22	Other Florida Utilities' - Average	\$17.20	\$15.95	\$33.15

[1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2014 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

[2] Utilities are currently involved in or contemplating a rate study, or are expecting a change in the rates charged during the next twelve months; the proposed rate adjustments, if any, are not reflected in the current rate above.

Table 17

City of Riviera Beach Utility Special District (CRBUD)
Water and Wastewater Revenue Sufficiency and Rate Design
Comparison of Typical Monthly Residential Bills for Water and Wastewater Service

Line No.	City of Riviera Beach Utility District	Residential Service Assuming 5,000 Gallons of Utility Service [1]		
		Water	Wastewater	Total
1	Adopted FY 2015	\$26.84	\$18.52	\$45.36
2	Proposed FY 2015	26.84	22.77	49.61
	<u>Other Neighboring/Surveyed Utilities</u>			
3	City of Boca Raton [2]	17.18	16.81	33.99
4	Broward County	24.48	35.76	60.24
5	City of Boynton Beach [2]	19.99	28.56	48.55
6	City of Cooper City	26.47	40.15	66.62
7	City of Coral Springs [2]	19.89	37.85	57.74
8	City of Dania Beach	35.00	58.82	93.82
9	City of Delray Beach	18.22	35.00	53.22
10	City of Fort Lauderdale [2]	20.36	34.12	54.48
11	City of Hollywood [2]	26.93	42.23	69.16
12	Town of Jupiter	25.11	21.13	46.24
13	City of Lake Worth [2]	34.29	28.57	62.86
14	Town of Lantana [2]	26.23	36.15	62.38
15	Martin County [2]	27.22	38.13	65.35
16	Palm Beach County [2]	20.78	25.38	46.16
17	City of West Palm Beach	37.09	29.12	66.21
18	Seacoast Utility Authority	23.98	31.19	55.17
19	City of Tamarac	21.80	42.75	64.55
20	Village of Tequesta [2]	26.13	21.13	47.26
21	Village of Wellington	28.52	26.98	55.50
22	Other Florida Utilities' - Average	\$25.25	\$33.15	\$58.39

[1] Unless otherwise noted, amounts shown reflect residential rates in effect October 2014 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

[2] Utilities are currently involved in or contemplating a rate study, or are expecting a change in the rates charged during the next twelve months; the proposed rate adjustments, if any, are not reflected in the current rate above.