

TOWN OF HIGHLAND BEACH

2020 Revenue Sufficiency and Rate Study – Water and Wastewater Systems

Final Report / August 20, 2020

 RAFTELIS





August 20, 2020

Honorable Mayor and Members of the
Town Commissioners
Town of Highland Beach
3614 South Ocean Boulevard
Highland Beach, FL 33487

Subject: 2020 Revenue Sufficiency and Rate Study – Water and Wastewater Systems

Ladies and Gentlemen:

Raftelis Financial Consultants, Inc. ("Raftelis") is pleased to submit this report for your review and consideration regarding the preparation of a six- (6) year financial forecast (the "Financial Forecast") for the water and wastewater utility enterprise fund (the "System") operations on behalf of the Town of Highland Beach (the "Town"). The primary purpose of the development of the financial forecast was to identify the ability of the System operating revenues (derived essentially from bi-monthly rates for service) to adequately fund the expenditure requirements of the System, including the funding of the identified capital improvements or needs as identified by the Town (the "net revenue requirements") and to propose adjusted rates to fully fund the cost of providing service and to promote a favorable fiscal position for the System to minimize financial risk (the "Financial Forecast"). The study also included an evaluation of the rate structure used to recover the cost of providing service and offers suggestions to more equitably recover the cost of providing service, continues to promote conservation, and follows industry norms. Specifically, the Financial Forecast focuses on the sufficiency of the existing rate revenues to fund the operation and maintenance expenses and the capital improvement plan and provide additional information to the Town with respect to the anticipated sources of available funding (i.e., anticipated indebtedness, increased operating margins from future rate adjustments, etc.) for the capital project and major maintenance expenditures identified for the Fiscal Year 2020 (the current budget year and referred to as the "Test Year") and the projected Fiscal Years 2021 through 2029 (the "Projection Period" and including the Test Year, the "Forecast Period").

This attached report includes: i) a summary of the customer and billing statistics and rates for service; ii) a discussion of the significant assumptions used in the development of the Financial Forecast; iii) an analysis of the ability of revenues of the System to meet the estimated operating and capital expenditure requirements; iv) the presentation of the identified financing plan for the identified six- (6) year capital program; and v) proposed rates for service and a comparison of the proposed rates for the first year of the Projection Period. The analysis is based on detailed financial information provided by Town staff, including but not limited to, historical customer billing statistics, financial and operating records, and engineering reports. To the extent we have performed our analyses using data and information obtained from the Town, we have relied upon such information to be accurate, no assurances are intended, and no representation or warranties are made with respect thereto.

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 rates for the System will not be sufficient to meet the identified net revenue requirements and will need to be adjusted during the Projection Period through the continuation of the annual price index adjustment. Specifically, we have identified the need to annually increase water and wastewater system revenues as shown below:

| Recommended Total Rate Revenue Adjustments – Effective October 1 st of Each Fiscal Year [1] | | | |
|---|-------|------------|------------------|
| Fiscal Year | Water | Wastewater | Consolidated [2] |
| 2021 | 15.0% | 25.0% | 18.5% |
| 2022 | 12.0% | 13.0% | 12.4% |
| 2023 | 12.0% | 13.0% | 12.4% |
| 2024 | 6.0% | 6.0% | 6.0% |
| 2025 | 2.5% | 2.5% | 2.5% |

[1] Amounts shown represent percent increases in rate revenues targeted in each fiscal year to fully fund the net revenue requirements; the actual increases may be different due to changes in rate structure associated with the recovery of costs.

[2] The majority of customers receive both water and wastewater service; increase reflect and reflects the average revenue adjustment for a combined water and wastewater bill.

As can be seen above, Raftelis is recommending annual increases which are higher in the early portion of the Projection Period and which decline as the recommended increases are phased in over time with the goal of implementing only inflation-related adjustments by the end of the Projection Period. The primary need for the identified rate adjustments are to offset the projected increase in the cost of operations and maintenance primarily due to inflation, increased cost in purchased wastewater from the City of Delray Beach, maintain sufficient cash flows to fund the capital improvement plan on a balanced approach recognizing both a pay-as-you-go (cash funding) and debt financing to minimize System increases yet fully fund the capital plan, and to phase in the full recovery of the debt service requirements allocable to the System from rates as opposed to General Fund revenues. The following provides a summary of the principal issues affecting the Financial Forecast and identified rate adjustments:

1. The Town is essentially at a “built-out” position and there is limited future growth anticipated for the project period (no new account growth has been assumed during the Projection Period), which places the need for increased future expenditure funding on the existing customer base of the System.
2. The estimated effects of continued inflation on the cost of operation and maintenance of the System is outpacing System growth, thus reducing revenue margins (amounts available for capital financing after the payment of the cost of operation and maintenance); the estimated increase in the cost of operation and maintenance was estimated to average approximately 3% annually during the Projection Period, which is comparable to the expenses increases being experienced by other public utilities.
3. The capital improvement plan (the “CIP”) is estimated total approximately \$6.3 million for renewals, replacements, and improvements to existing infrastructure which is necessary to

maintain ongoing service for the benefit of the community. This level of spending is representative of amounts in prior studies and it is indicative of need to have an ongoing capital re-investment plan due to the assets continuing to reach their service lives. The need for asset replacement is becoming an increasing issue facing utilities in the Southeast Florida region. Funding for the CIP as identified in the Financial Forecast presented in this report is derived from existing cash reserves, future rate revenues, as well as the issuance of additional debt secured from the revenues of the System.

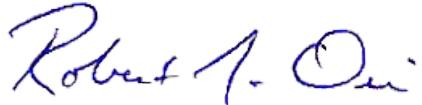
4. Historically, a significant amount of the capital improvements was financed from debt secured by the full faith and credit of the Town (i.e., a general obligation debt of the General Fund). As an enterprise fund and since the debt is for the benefit of the existing customers (represented the funding of asset replacements and System betterments), at the direction of the Town the debt repayment obligation being made from General Fund revenues is being phased out and being replaced as an obligation of the System. This equitably assigns the cost of debt recovery from those benefitting from the assets financed by the debt – the existing ratepayers of the System.
5. The proposed Fiscal Year 2021 rates for both water and wastewater service were compared with neighboring and peer communities and it is expected that the Town's rates will remain competitive and that this position will continue during the Projection Period.
6. Based on the assumptions regarding the expenditure requirements as delineated in this report, which should be read in its entirety, and assuming that the Town implements the proposed rate increases as recommended, the revenues are projected to be sufficient to fully fund the identified net revenue requirements of the System, provides for an attainable finance plan that promotes a positive fiscal credit, and should allow for the ability to secure debt financing to fund a portion of its capital improvement plan, which will promote long-term System rate and service sustainability and affordability.

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Honorable Mayor and Members of the Town Commission
Town of Highland Beach
August 20, 2020
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We appreciate the opportunity to be of service to the Town in meeting its financial goals and objectives and would like to thank the Town and its staff for the valuable assistance and cooperation provided in the development of this report.

Very truly yours,
Raftelis Financial Consultant, Inc.



Robert J. Ori
Executive Vice President



Mark Tuma
Consultant

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Attachments

TOWN OF HIGHLAND BEACH, FLORIDA

2020 REVENUE SUFFICIENCY AND RATE STUDY –

WATER AND WASTEWATER SYSTEMS

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TOWN OF HIGHLAND BEACH, FLORIDA

2020 REVENUE SUFFICIENCY AND RATE STUDY – WATER AND WASTEWATER SYSTEMS

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TOWN OF HIGHLAND BEACH, FLORIDA

2020 REVENUE SUFFICIENCY AND RATE STUDY – WATER AND WASTEWATER SYSTEMS

INTRODUCTION

The Town of Highland Beach (the “Town”) water and wastewater utility system (the “System”) is a public enterprise which: i) produces and distributes potable water and ii) provides for the collection and disposal of wastewater within its designated utility service areas. The Town’s System is established as a utility enterprise fund. As such, the System should have revenues equal to the costs of the services provided, and the Town should attempt to establish rates that are always sufficient to cover the cost of operating, maintaining, repairing, and financing the System (referred to as the “revenue requirements”). According to the Governmental Accounting Standards Board:

Enterprise Funds should be used to account for operations that are financed and operated in a manner similar to private business enterprises – where the intent of the governing body is that costs of providing services to the general public on a continuing basis should be financed or recovered primarily through user charges.

General accounting policies and prudent utility management recommend that the System have revenues (financial resources) at least equal to the costs of providing services by the System.

The Town has not formally reviewed rates in approximately five (5) years and recognizes that the cost of doing business has continued to increase due to inflation and increased regulations on the cost of service, coupled with the primary need to have a sufficient capital program to replace aging infrastructure on an ongoing basis. Additionally, the cost of purchased wastewater from the City of Delray Beach also continues to increase for these factors as well associated with the processing and disposal of wastewater. As a result of these pressures and the need to continue to fund the identified capital needs of the, Raftelis was retained to prepare a six- (6) year financial forecast of the System operations. The six- (6) fiscal-year forecast period reflected in this study included the Fiscal Year 2020 (the current budget year and referred to as the “Test Year”) and the projected Fiscal Years 2021 through 2029 (the “Projection Period” and including the Test Year, the “Forecast Period”). Specifically, Raftelis was tasked with analyzing the revenue requirements (expenditure needs) of the respective systems, update the capital expenditure financing analysis to reflect the funding requirements associated with the capital plan, evaluate the ability of the revenues to meet the financial requirements of the respective Systems, and determine the potential need for rate adjustments during the Projection Period in order to maintain a strong and sustainable financial position.

The remainder of this report provides a discussion of the financial forecast analysis methodology, historical and projected customer statistics and demand requirements, identification of the revenue requirements and estimated sufficiency of the existing rates, and provides a summary of the financial trends and position of the System (the “Report”).

FINANCIAL FORECAST AND RATE ANALYSIS METHODOLOGY

In developing the Financial Forecast, the rate revenue requirements are based on an approach that is commonly used by public utilities throughout the industry. The approach generally supports the budget / cash flow determination needs of the System and included:

1. An evaluation of the service area requirements for the individual water and wastewater systems. This included a review of recent historical customers served and corresponding respective usage and water production / wastewater treatment requirements such that: i) a representative forecast of System needs by specific system from a financial standpoint could be prepared; ii) a projection of rate revenues consistent with the projected service area needs could be developed; and iii) to identify the variable costs associated with meeting the water production and wastewater treatment-related service area demands.
2. A projection of the net revenue requirements from rates, which equates to the expenditure requirements funded from monthly user charges, was analyzed. A summary of the determination of the Net Revenue Requirements is shown below:

| | |
|-----|---|
| + | Cost of Operation and Maintenance |
| + | Debt Service Payments (Senior and Subordinate) |
| + | Transfers to Repair and Replacement Fund / Capital Funded from Operations |
| +/- | Operating and Capital Reserve |
| + | Working Capital Reserves / Financial Compliance |
| - | Interest Income |
| - | <u>Other Operating Revenue / Other Transfers in</u> |
| = | Net Revenue Requirements (Funded from Rates) |
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 (unencumbered) operating reserves or other available cash balances as a first priority (above targeted reserve balances); ii) the use of Impact Fees, to the extent available, to fund expansion-related System capital expenditures; iii) the recognition of a pay-as-you-go (PAYGO) capital funding program (e.g., funded by deposits to a Repair and Replacement Fund [discussed in more detail later in this Report]) to finance capital projects that primarily benefit existing rate payers; and iv) the use of additional debt / loans to fund large capital expenditures (initially financed from ad-valorem tax revenues accounted for in the Town's General Fund but planned to be funded from System net revenues) as discussed with Town staff.
4. Perform a review and projection of the Town's System cash account and fund balances to maintain adequate operating reserves to provide funds for unexpected expenditures (say due to a storm event), to economically attract external funds to finance the capital program, and to minimize the overall financial risk of the System.
5. An evaluation of compliance with internal financial targets and rate covenants associated with any assumed additional debt requirements, if applicable during the Projection Period.

- The determination of the identified and projected annual rate adjustments required to fund the net revenue requirements and the overall financial needs of the Utility.

EXISTING WATER RATES

The existing water rates were became effective on October 1, 2019 pursuant to the adoption of Resolution No. 19-026R by the City Commission on November 5, 2019 (the “Rate Resolution”) associated with a rate evaluation in Fiscal Year 2015 (supported the implementation of a five- (5) year rate phasing plan and the rates placed into effect for the Fiscal Year 2020 represented the last year of such rate phasing plan). The existing water rates that are currently in effect for the Fiscal Year 2020 are summarized below and on Table 2:

| Bi-monthly Water Rate Schedule | |
|--|--------------------------|
| Bi-monthly Service Charge: | |
| Residential (Single- and Multi-Family) and Commercial Service [1][2] | |
| | Current Rate |
| Flat Charge – All Dwelling Units | \$33.59 |
| Residential (Single-Family) and Commercial Service (per Account) | |
| Bi-monthly Usage Charges | |
| 0 – 19,000 Gallons | \$2.41 per 1,000 Gallons |
| 20,000 – 49,000 Gallons | \$4.18 per 1,000 Gallons |
| 50,000 Gallons or More | \$5.15 per 1,000 Gallons |
| Multi-Family Service (per Unit) | |
| 0 – 13,000 Gallons | \$2.41 per 1,000 Gallons |
| 14,000 – 23,000 Gallons | \$4.18 per 1,000 Gallons |
| 24,000 Gallons or More | \$5.15 per 1,000 Gallons |

[1] Amounts shown derived from the Rate Resolution.

[2] Metering of multi-family accounts where a single meter is installed in a water connection serving a multi-family structure, the minimum monthly service charge shall be not less than an amount equal to the number of dwelling units multiplied by the flat bi-monthly rate.

As shown above, the Town has a conservation-promoting water rate structure. This initiative taken by the Town is consistent with the water use policies of the South Florida Water Management District (the “SFWMD”) to encourage water conservation efforts.

| Bi-monthly Wastewater Rate Schedule | |
|---|--------------|
| Bi-monthly Service Charge: | |
| Residential (Single- and Multi-Family) and Commercial Service [1] | |
| | Current Rate |
| Flat Charge – per Dwelling Unit | \$44.03 |
| [1] Amounts shown derived from the Rate Resolution; all wastewater charges are currently billed on a “Flat Rate” basis. | |

HISTORICAL AND PROJECTED SYSTEM SALES AND CUSTOMER USAGE STATISTICS AND DEMANDS

General

The projection of the number of customer accounts and the corresponding metered and billed water use (i.e., customer demands) are referred to as the “customer statistics” and serve as the basis for developing the projected rate revenues for the Forecast Period. The customer statistics consist of two main components, which include: i) the number of individual meters in active service (customers) and the corresponding units served by such meters; and ii) their respective demand (metered or billed use) for water service per consumption block or usage range. An updated projection of the Town’s customer service area demands and growth was developed based on discussions with Town staff, recognition of recent historical trends in customers served, the amount of metered water consumption per account and by customer class, and recognition of current economic conditions. The evaluation of the customer statistics is also necessary 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 respective systems. This is significant since revenues derived from the application of the rates for monthly service (user charges) currently account for approximately 92% of the total estimated System revenues (exclusive of the use of funds from the General Fund for allocated utility debt repayment). For purposes of this financial analysis and in order to assist the Town in its continuing long-term financing efforts, a financial projection period encompassing the historical Fiscal Year 2019 (which at the time of the initiation of the study was the most recently completed fiscal year), the current Fiscal Year 2020 which is the budget year in effect at time the study was being prepared (the "Test Year"), and the subsequent five (5) Fiscal Years 2020 through 2025 (the Study focused on the five Fiscal Years ending 2025 and was previously defined as the “Projection Period”). This length of analysis was recognized in order to identify trends in the cost of providing service, to examine the estimated near term financial effects of funding the Town’s five- (5) year capital improvement program, and initiate the full funding of the System allocated debt service requirements from rate revenues.

Projected Customer and Sales Statistics

During the Fiscal Year 2019, it is estimated that the Town provided water and wastewater service to an average of 461 retail customers representing approximately 4,334 equivalent residential dwelling units (“EDU”). An EDU is generally representative of the average daily capacity or demands of a single-family residential unit and generally represents the lowest level and the most common level of use and is used to evaluate the size and capacity needs of a utility system. Since multi-family (condominiums) and commercial customers may be served by a larger-sized meter than the standard residential customers and generally have different (higher) water usage per account / meter requirements, it is useful to equate such customers on an equivalent basis to the single-family residential class to provide a more consistent presentation of the total customer base served. The estimated EDUs were based on the data contained in the utility customer billing program; no detailed evaluation of the EDUs allocated to a particular customer was performed in this study since it was not part of our scope of services.

The Town reports that all the water customers also receive wastewater service. The following table provides details concerning the composition of the estimated water customer base during the Fiscal Years 2018 and estimated for Fiscal Year 2019:

| Historical Water System Customer Statistics by Class [1] | | |
|---|--|--------------|
| | Fiscal Year Ended September 30, | |
| | 2018 | 2019 |
| Single-family Residential Customers: | | |
| Average Annual Accounts | 384 | 381 |
| Average Annual EDUs | 384 | 384 |
| Annual Consumption (000s Gallons) | 142,015 | 118,258 |
| Average Monthly Use per EDU | 30,819 | 25,866 |
| Multi-family Residential Customers: | | |
| Average Annual Accounts | 78 | 78 |
| Average Annual Units | 3,883 | 3,883 |
| Average Annual EDUs | 3,883 | 3,883 |
| Annual Consumption (000s Gallons) | 283,021 | 244,853 |
| Average Monthly Use per EDU | 6,074 | 5,255 |
| Commercial Customers: | | |
| Average Annual Accounts | 5 | 5 |
| Average Annual EDUs | 132 | 132 |
| Annual Consumption (000s Gallons) | 18,614 | 17,888 |
| Average Monthly Use per EDU | 11,751 | 11,293 |
| Total Water System: | | |
| Average Annual Accounts | 467 | 464 |
| Average Annual EDUs | 4,399 | 4,396 |
| Annual Consumption (000s Gallons) | 443,650 | 380,999 |
| Average Monthly Use per EDU | 8,404 | 7,222 |
| Finished Water Produced (000s Gallons) | 414,860 | 408,288 |
| Non-Revenue Water (Unbilled) as Percent of Production | <u>---%</u> | <u>6.68%</u> |

EDU = Equivalent Residential Dwelling Unit

[1] Amounts shown derived from Table 1 at the end of this Report and were based on detailed customer billing data as provided by Town staff.

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The following table provides details concerning the composition of the estimated wastewater customer base during the Fiscal Years 2018 and estimated for Fiscal Year 2019:

| Historical Wastewater System Customer Statistics by Class [1] | | |
|--|-------------|-------------|
| Fiscal Year Ended September 30, | | |
| | 2018 | 2019 |
| Single-family Residential Customers: | | |
| Average Annual Accounts | 384 | 381 |
| Average Annual EDUs | 384 | 384 |
| Multi-family Residential Customers: | | |
| Average Annual Accounts | 78 | 78 |
| Average Annual EDUs | 3,875 | 3,875 |
| Commercial Customers: | | |
| Average Annual Accounts | 5 | 5 |
| Average Annual EDUs | 132 | 132 |
| Total Wastewater System: | | |
| Average Annual Accounts | 467 | 464 |
| Average Annual EDUs | 4,391 | 4,388 |
| Total Wastewater Purchased [2] | 245,793 | 252,014 |
| Gallons Treated per EDU | 55,793 | 57,433 |

ERC = Equivalent Residential Connection

[1] Amounts shown derived from Table 1 at the end of this Report and were based on detailed customer billing data as provided by Town staff.

[2] Amounts estimated as there was an underbilling of flow.

The development of a forecast of future water sales or usage / billed wastewater flows and treatment and customers is necessary in the evaluation of water and wastewater rate levels. The forecast is essential for the determination of revenues from existing rates, for the escalation of certain water production / purchased wastewater treatment-related expenses, and the identification of potential adjustments to rates for monthly service.

With respect to recent historical growth levels, the Town reports that the System is built-out with limited growth potential (limited number of lots available for redevelopment opportunities and no basis to expand service area boundaries). With respect to projections of customers and water sales, no future customer growth was assumed during the Projection Period based on recent historical trends and discussions with Town staff. A summary of the Fiscal Year 2019 actual and 2020 estimated results and the customer and demand projections assumed for the Projection Period for the System are shown by customer class on Table 1 at the end of this Report and are summarized as follows:

| Water and Wastewater Systems – Recent and Projected Customer and Demand Statistics [1] | | | | | | | | |
|--|-------------------------|-------------------------|-------------------------------------|-----------------------------|-------------------------|---------|---|---------|
| Fiscal Year Ending September 30, | Average Annual Accounts | Average Annual EDUs [2] | Billed Water Flow (000s of Gallons) | Average Monthly Use per EDU | Finished Water | | Purchased Wastewater | |
| | | | | | Finished Water Produced | ADF-MGD | Purchased Wastewater (000s Gallons) [3] | ADF-MGD |
| 2019 (Actual) | 464 | 4,396 | 380,999 | 7,222 | 431,368 | 1.18 | 245,463 | 0.673 |
| 2020 (Est.) [4] | 464 | 4,396 | 380,714 | 7,217 | 431,045 | 1.18 | 252,014 | 0.690 |
| 2021 | 464 | 4,396 | 380,714 | 7,217 | 431,045 | 1.18 | 250,572 | 0.693 |
| 2022 | 464 | 4,396 | 380,714 | 7,217 | 431,045 | 1.18 | 250,572 | 0.693 |
| 2023 | 464 | 4,396 | 380,714 | 7,217 | 431,045 | 1.18 | 250,572 | 0.693 |
| 2024 | 464 | 4,396 | 380,714 | 7,217 | 431,045 | 1.18 | 250,572 | 0.693 |
| 2025 | 464 | 4,396 | 380,714 | 7,217 | 431,045 | 1.18 | 250,572 | 0.693 |
| Average Annual Growth Rate [5] | <u>0.00%</u> | <u>0.00%</u> | <u>(0.01%)</u> | <u>(0.01%)</u> | <u>(0.01%)</u> | | <u>0.034%</u> | |

ADF-MGD = Average Daily Flow expressed in million gallons per day

[1] Amounts shown derived from Table 1 at end of this Report.

[2] EDUs determined based on: i) number of active accounts served for the single-family residential; ii) number of units served for the multi-family class; and iii) the number of units billed for the commercial class based on detailed customer billing information as provided by the Town.

[3] All wastewater from the Town's service area is treated on a wholesale contractual basis by the City of Delray Beach. The amounts shown for 2019 and 2020 are estimated since there was a dispute in the amount of sewage flow actually delivered to the City from the Town's wastewater system.

[4] Estimated Fiscal Year 2020 statistics based on estimated year-to-date rate revenues.

[5] Reflects average annual projected compounded growth from Fiscal Year 2019 to Fiscal Year 2025.

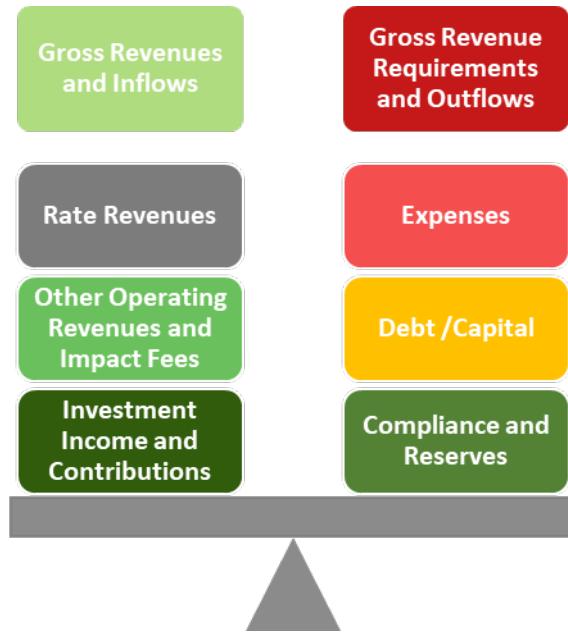
As can be seen above, it is assumed that there will be no increase in customers and corresponding billed flow during the Projection Period. The projections do not recognize any additional commercial or multi-family connections since there is minimal vacant land for this type of development based on discussions with the Town staff. System billed flow were projected predicated on usage trends experienced by the Town's customers for Fiscal Year 2019 and as estimated for the Fiscal Year 2020, which was based on estimated year-end customer billing and revenue data available at the time of the analyses. These trends were used to forecast future water demands and corresponding rate revenues in support of the financial projections, capital funding plans, and the determination of the System to meet its financial targets and maintain overall creditworthiness. The forecast of accounts and sales served as the basis for the Water System and Wastewater Systems rate revenue projections for the Forecast Period.

FINANCIAL FORECAST AND SUFFICIENCY OF EXISTING RATE REVENUES

General

The foundation of the study and the primary objective of the utility rates are to reasonably recover the cost of providing service, cost of infrastructure investment and compliance with covenants of the outstanding loans and identified or adopted fiscal policies / targets (referred to as the “revenue sufficiency” evaluation). The various components of costs associated with operating and maintaining a utility system, the costs of financing the renewals and replacements of existing facilities and the capital improvements for upgrades and expansions, and compliance with policies and covenants, which would include the maintenance of adequate cash reserves, are generally considered as the revenue requirements of a public utility such as the Town's System. The sum of these costs, after adjusting for other income and other operating revenues

available to the utility, represents the net revenue requirements of a utility system required to be funded from monthly user charges or rates. The evaluation of the sufficiency of the existing rate revenues were identified independently on a water and wastewater system basis. The following figure provides an overview of the derivation of the net revenue requirement derivation:



The net revenue requirements signify a minimum level of expenditures required to be recovered from monthly user fees or rates. The development of the net revenue requirements of the System is a critical component of the study since water utility rates should be designed to fully recover the projected cost of providing service. The estimates of the revenue requirements associated with the System are consistent with methods generally employed by publicly owned utilities that rely on revenue bond financing to fund capital investment needs.

The projected revenue requirements of the System can be organized into four main categories: i) operation and maintenance expenses (does not include capital, depreciation, debt service, or transfers); ii) annual principal and interest payments on existing and future debt / loans / notes allocable to the System (funded from rate revenues); iii) capital improvements to the utility infrastructure funded from System rates; and iv) transfers to other departments / cost centers and for the maintenance of reserves for the System to maintain or meet management objectives / policies regarding financial position and long-term sustainability of the System. The sum of these payments represent the gross revenue requirements of the respective Systems which are to be recovered from the available financial resources of such Systems, including where applicable rate revenues, other operating revenues and investment income, and impact fees (developer contributions), and available cash reserves.

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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 Raftelis and the information and assumptions provided to us, or prepared by others, include the following:

1. The actual Fiscal Year 2019 operating results, the adopted Fiscal Year 2020 Budget, the estimated year-end operating results for Fiscal Year 2020, and the adopted Fiscal Year 2021 budget available at the time the analysis was preformed, as provided by the Town served as the baseline for the expenditure projections for the Fiscal Years 2020 and 2021. Such amounts were compared to prior period results and the underlying projections included therein by the Town were considered as being reasonable and have been assumed to reflect anticipated operations and overall System financial needs. The Fiscal Year 2021 Budget (the “Budget”) represented the most recent financial plan / forecast as approved by the Town Commission at the time of the analytical evaluations included in this Report. The Budget recognizes anticipated changes by System management in operations and costs based on known events, trends, and actual historical financial results and based on a comparison with actual Fiscal Year 2019 and estimated Fiscal Year 2020 results, certain adjustments were made to the Budget to reflect more current estimates; these adjustments are included Table 7 at the end of this Report. Such amounts were incorporated into the Fiscal Year 2021 component of the Forecast Period except for certain adjustments and assumptions as noted hereunder and served as the basis for the operating expense forecast.
2. Projected revenues from current rates and charges for the Town’s water and wastewater utility systems have been based on the schedule of rates and charges currently in effect as adopted by the Town Commission pursuant to the Rate Resolution. Such rates and charges were applied to the forecast of water and wastewater customers and sales forecast for the individual systems as previously discussed.
3. The Town currently charges an impact fee to new customer growth or development to recover the pro rata share of the System cost of water and / or wastewater capacity allocable to such customers. Since no growth was assumed for the Projection Period, no impact fee revenues have been assumed. As discussed later in the report, the Town does have certain impact fee funds on deposit in its impact fee account and it is recommended that the available impact fees be used to pay expansion-related debt service issued on behalf of the System since there was no expansion-related capital expenditures identified for the System during the Projection Period.
4. Included in the financial projections are other operating revenues associated with fire hydrant maintenance fees, interest income, disposition of fixed assets and administrative reimbursements, and other miscellaneous revenues. For the purposes of this Report, other operating revenues were based on: i) the Fiscal Year 2021 budgeted revenues; ii) a review of historical amounts received from such charges; and iii) discussions with the Town staff. Based on a review of such sources, it was assumed that such revenues would remain constant during the Projection Period.
5. The development of the projected operation and maintenance (operating) expenses for the Town’s individual water and wastewater systems was based upon: i) a review of recent cost escalation trends in expenses for the System; ii) the Fiscal Year 2020 operating budget and year-to-date actuals

and the Fiscal Year 2021 operating budget, which represents the most recent financial forecast as prepared by the Town; iii) expense cost trends based on actual results for the Historical Period; iii) historical cost indices as published by the Bureau of Labor Statistics, the Florida Public Service Commission (used in regulation of private utilities), and in the Engineering News Record associated with the change in construction costs, iv) the forecast of the Consumer Price Index as prepared by the Congressional Budget Office and published in the *February 2020 Economic and Budget Outlook*; and v) certain other assumptions and considerations as identified within this report.

Projected operating expenses associated with operation of the System have been escalated from Fiscal Year 2021 levels based upon several assumptions and the nature of the expense. The 2021 Budget represented the Town's current annual financial plan for the System at the time of the analysis and based on a comparison of such projections to recent reported amounts (Fiscal Year 2019 audited and Fiscal Year 2020 unaudited results), it was determined that the underlying assumptions used by the Town in the development of such budgets were considered reasonable and reflect reasonable costs for anticipated operations of the System. Such amounts were projected based on a variety of escalation parameters respective of the specific cost to provide service.

A summary of the projected operating expenses for the Water System is summarized below for the Projection Period:

| Summary of Forecasted Water System Operating Expenses (\$000s) [1] | | | | | | |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Description | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Allocated Salaries and Benefits | \$573,108 | \$598,800 | \$726,581 | \$750,659 | \$775,616 | \$801,483 |
| Professional Fees and Other Contractual Services | 106,520 | 187,000 | 112,962 | 115,786 | 118,565 | 121,292 |
| Communications | 4,050 | 3,700 | 3,796 | 3,891 | 3,984 | 4,076 |
| Telephone | 0 | 0 | 0 | 0 | 0 | 0 |
| Insurance | 145,000 | 145,000 | 148,770 | 152,489 | 156,149 | 159,740 |
| Electricity | 300,000 | 300,000 | 307,890 | 315,988 | 324,298 | 332,827 |
| Repairs and Maintenance | 260,000 | 218,925 | 174,200 | 181,168 | 524,105 | 195,951 |
| Administrative Charges | 327,870 | 325,000 | 333,450 | 341,786 | 349,989 | 358,039 |
| Operating Supplies | 237,950 | 237,950 | 244,137 | 250,240 | 256,246 | 262,140 |
| Contingency | 67,925 | 72,294 | 75,635 | 78,266 | 80,727 | 83,082 |
| Total Water Operating Expenses | <u>\$2,022,423</u> | <u>\$2,088,669</u> | <u>\$2,127,421</u> | <u>\$2,190,272</u> | <u>\$2,589,679</u> | <u>\$2,318,630</u> |

[1] Amounts shown derived from Table 10 at end of this Report.

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A summary of the projected operating expenses for the Wastewater System is summarized below for the Projection Period:

| Summary of Forecasted Wastewater System Operating Expenses (\$000s) [1] | | | | | | |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Description | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Allocated Salaries and Benefits | \$310,607 | \$324,205 | \$335,191 | \$346,570 | \$358,356 | \$370,566 |
| Professional Fees and Other Contractual Services | 79,000 | 124,000 | 79,494 | 81,481 | 83,437 | 85,356 |
| Communications | 0 | 0 | 0 | 0 | 0 | 0 |
| Telephone | 0 | 0 | 0 | 0 | 0 | 0 |
| Insurance | 7,000 | 9,000 | 9,360 | 9,734 | 10,124 | 10,529 |
| Electricity | 40,000 | 40,000 | 41,052 | 42,132 | 43,240 | 44,377 |
| Purchased Wastewater Treatment | 959,755 | 988,052 | 909,542 | 936,816 | 964,924 | 993,866 |
| Repairs and Maintenance | 57,000 | 80,000 | 83,200 | 86,528 | 89,989 | 93,589 |
| Administrative Charges | 147,000 | 154,350 | 158,363 | 162,322 | 166,218 | 170,041 |
| Operating Supplies | 0 | 1,000 | 1,026 | 1,052 | 1,077 | 1,102 |
| Contingency | 38,693 | 41,892 | 38,461 | 39,602 | 40,770 | 41,966 |
| Total Wastewater Operating Expenses | \$1,639,055 | \$1,762,499 | \$1,655,690 | \$1,706,237 | \$1,758,135 | \$1,811,391 |

[1] Amounts shown derived from Table 10 at end of this Report.

The projected water and wastewater system revenue requirements, as shown on Table 10 at the end of this report, were based upon certain assumptions, considerations, and analyses. The major assumptions, considerations, and analyses that are included in the development of the projected revenue requirements for the study period are as:

- a. Based on discussions with the Town, the escalation of wages and salaries above Fiscal Year 2021 budgeted amounts for the System 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. Personnel benefits (i.e., contributions toward retirement, health insurance, FICA, Other-Post-Employment-Benefits, etc.) were projected to increase by approximately 5.0% annually due to recent projections of escalating costs of sustaining such benefits (e.g., medical insurance) in addition to discussions with the Town.
- b. Based on discussions with the Town, no additional personnel above the amount of Full Time Equivalent positions as budgeted for the Fiscal Year 2021 for the System were assumed to be required during the remainder of the Projection Period.
- c. Materials and supplies expenses, other contractual services expenses, repair and maintenance expenses, and certain other operating expenses for the System have been projected to increase in general from historical and current budgetary levels at an annual rate equal to inflation ranging from 2.3% to 4.0% 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 February 2020, trends experienced by other utilities, a review of recent trends in expenses for the System as reported by the Town, and discussions with the Town.

d. With respect to the projection of variable costs for water plant operations which included the cost for purchased power and chemicals for water pumping and treatment, such projections were based on the Town's Budget and was escalated for the Forecast Period based on an allowance for inflation, which is consistent with recent historical trends, and the projection of flow requirements as discussed earlier in this Report. For the Forecast Period, the following was assumed for the variable expenses:

- i. Current period System electrical expenses were increased during the Forecast Period by a general or base inflation allowance of 2.63% based on 20-year average change in the Consumer Price Index for All Urban Consumers for Electricity (CUSR0000SEFH01) as published by the Bureau of Labor Statistics as of June 2020 plus an allowance for increased finished water production, if any. Based on these assumptions, the increase in System electric expenses for the Water System was projected to average approximately 2.63% annually after Fiscal Year 2021 for the Projection Period (no increase in finished water production was assumed).
- ii. Current period System chemical expenses were increased during the Forecast Period by a general or base inflation allowance of 2.54% based on 20-year average change in the Consumer Price Index for All Urban Consumers for Industrial Chemicals (WPU061) as published by the *Bureau of Labor Statistics* as of May 2020 plus an allowance for System growth. Based on these assumptions, the increase in System chemical expenses was projected to average approximately 2.54% annually after Fiscal Year 2020 for the Projection Period (no increase in finished water production was assumed).

e. Pursuant to the Amended and Restated Interlocal Agreement with the City of Delray Beach (the "City" or "Delray Beach") dated May 21, 2004, the City provides all of the wastewater treatment services for the Town's Wastewater System from its South Central Regional Wastewater Treatment Facility (the "Wastewater Service Agreement"). The Wastewater Service Agreement provides, among other things, for the rate to be charged to the Town, including the basis for any increases in costs will be passed along to the Town. The projected wastewater treatment expense is shown on Table 11 at the end of this Report and was based on the rates currently being charged by Delray Beach pursuant to the provisions of the Wastewater Service Agreement, projections of wastewater customers, and recent trends regarding the wastewater treated per EDU.

f. A contingency allowance equal to three percent (3.0%) for the respective Water and Wastewater Systems total operating expenses was recognized in each fiscal year of the Forecast Period beginning in Fiscal Year 2020. The allowance has been included in order to i) recognize unknown or unplanned expenditures that may occur throughout the fiscal year; and ii) provide an allowance for any potential negative changes in the revenues that may occur due to weather, conservation, and other factors, including customer adjustments due to changes in rate structure. This allowance increases the revenue requirements of the combined Water and Wastewater System by approximately \$112,400 annually and is included as an operating expense for each specific utility with respect to the determination of total revenue requirements. To the extent the contingency allowance is not required to meet the projected operating expenses or provide funds for ongoing System operations, such monies would accrue to the benefit of the System and could be used for other purposes such as providing increased

funds for deposit to the Renewal and Replacement Fund to finance renewals, replacements, and upgrades to the System over time or to reduce potential rate adjustments that may be required in the future.

- g. 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. This expenditure item has been included as an operating expense and was projected based on trends incurred by utilities statewide and discussions with Town staff. A bad debt expense ratio estimated at 0.15% of sales revenues was assumed for the Forecast Period and was projected to average \$7,000 per year.
- h. Although considered a System operating expense for financial reporting purposes, depreciation and amortization expenses have not been recognized as an Operating Expense for the purposes of this report. The analysis does recognize the dedicated funding of a capital fund associated with the accrual of funds for ongoing capital re-investment which is discussed later in this report.

6. The Town currently has four (5) outstanding series of loans issued on behalf of the Water System that represent a debt accounted for in the utility system but are secured for repayment by ad valorem taxes (General Fund revenues); there has been not loans issued by the Town to fund wastewater improvements. The following loans were outstanding as of September 30, 2019; they were issued by the Town on behalf of the Water System:

| Current Principal Amount of Outstanding Loans Issued on Behalf of System | | | |
|--|---------------------------|---------------------|------------------------|
| Issue | Principal Outstanding [1] | Annual Debt Payment | Year of Final Maturity |
| Bank of America Promissory Note, 2007 (the "2007 Note") | \$2,387,936 | \$296,880 | 2029 |
| Revolving Fund Loan DW 500200 [2] | 1,864,328 | 198,311 | 2030 |
| Revolving Fund Loan DW 500201 [2] | 495,729 | 52,136 | 2030 |
| Revolving Fund Loan DW 502901 [2] | 3,096,315 | 738,424 | 2024 |
| Revolving Fund Loan DW 500210 [2] | 4,367,393 | 263,472 | 2038 |
| Total Outstanding Loans Allocated to System (the "Outstanding Loans") | <u>\$12,211,701</u> | <u>\$1,549,223</u> | |

[1] Amount outstanding as of October 1, 2019; all loans secured by the Town are for capital improvements allocable to the Water System.

[2] Amounts represent low-interest State Revolving Fund ("SRF") loans administered by the Florida Department of Environmental Protection.

As can be seen above, a significant amount of the annual debt service on the Outstanding Loans will mature as 2030 which will provide a financial benefit to the System and allow for future leveraging (debt issue) capability. The annual debt service payments for each series of notes and loans are level (the same each year).

Historically (including the Fiscal Year 2020), the Town has funded the Outstanding Loans from General Fund revenues consistent with the pledge for repayment. Because these loans are secured for repayment from the Town's General Fund and to identify the net revenue requirements of the System for our study, we have recognized i) the annual debt service associated with the Outstanding Loans as a component of the Water System revenue requirements since these loans

are directly associated with System capital financing activities and are accounted for as a System liability for financial reporting purposes, offset by ii) a transfer (contribution) from the General Fund as a financial resource to pay for the annual loan repayment requirements.

There are no loans that have been issued by the Town to finance any capital improvements for the Wastewater System; it should be noted that any capital improvements associated with the cost of wastewater treatment services purchased from Delray Beach is included as a component of the cost of purchased wastewater and is included as a component of the operating expenses for the System.

7. Based on discussions with the Town and to fully recognize that utility rates should fund the full cost of providing service, the payment of the annual debt service on the Outstanding Loans and any additional loans that may be issued in the future should be from System rate revenues and not from revenues realized within the General Fund. In the development of the financial forecast and to recognize the full cost recovery objective, the forecast assumes a phasing-out of the debt repayment solely from General Fund revenues to being fully funded from System rates (i.e., would be a transfer to the General Fund in support of the pledge of revenues for debt repayment). The change in funding of the annual debt service payment was fully modified by Fiscal Year 2025 (the last year of the Projection Period) as is summarized below:

| Summary of Annual Debt Service Payment Funding – for the Projection Period [1] | | | | | |
|--|-----------------------------------|---|---------------------------------------|---|--|
| Fiscal Year | Total Annual Debt Service Payment | Less Amounts Funded from Connection Charges [2] | Total Net Annual Debt Service Payment | Amount Funded from System Rate Revenues | Amount Funded from General Fund Revenues |
| 2020 | \$1,549,224 | \$--- | \$1,549,224 | \$119,224 | \$1,430,000 |
| 2021 | 1,549,224 | (226,353) | 1,322,871 | 264,574 | 1,058,297 |
| 2022 [3] | 1,612,824 | (234,202) | 1,378,622 | 551,449 | 827,173 |
| 2023 | 1,676,424 | (242,323) | 1,343,101 | 860,461 | 573,640 |
| 2024 | 1,307,212 | (250,726) | 1,056,486 | 851,343 | 205,144 |
| 2025 | 938,000 | (259,420) | 678,580 | 678,580 | --- |

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

[2] Based on discussions with the Town staff, it was recommended that the use of available Water System Connection Fees be used to fund a portion of the annual Debt Service Payment on the Outstanding Loans; reference Assumption No. 8 below.

[3] During Fiscal Year 2022 and based on the assumed capital plan recognized for the Financial Forecast, additional loans are anticipated to be secured by the Town to fund a portion of the capital improvement plan; reference Assumption No. 9 below.

The change in the funding of the Outstanding Loan to System revenues is a major driver for the need to adjust System rates during the Projection Period.

8. As mentioned above, the financial forecast assumes the use of water-related connection fees to be applied towards the payment of the Outstanding Loans. Currently, the Town has on deposit \$2.288 million in water connection fees which are available to fund expansion-related projects. Since the CIP is primarily driven by the need to perform renewals and replacements and a portion of the Outstanding Loans were issued to fund the expansion of the water treatment plant, the use of the connection fees to be applied to expansion-related debt was recognized to reduce the cash flow requirements from water rates. The use of connection fees to fund expansion-related debt is a lawful use of the fees collected. For the purposes of preparing the financial forecast, it was assumed that the available water connection fees would be used to pay the annual principal payments associated with the 2007 Note for the remaining term of the note since it was obtained for the purpose of financing the expansion of the Town's water treatment plant. This served to reduce the debt funded from the General Fund by approximately \$242,000 annually beginning in Fiscal Year 2021.

9. Based on the identified capital needs of the System as identified by the Town and as referenced on Table 14 of the report, it is anticipated that during the Forecast Period, additional System debt will be required to finance a portion of the capital improvement plan ("CIP") (referred to as the "additional debt"). It is assumed that the additional debt will be issued on the same basis as the Outstanding Loans. Therefore, it is assumed that the debt will be considered as System debt and will be accounted for as a System liability for financial reporting purposes but the pledge for repayment will be secured from the revenues of the General Fund. Specifically, the financial forecast recognizes the issuance of in the aggregate principal amount of approximately \$4.2 million in additional indebtedness during the Forecast Period.

The following is a summary of the assumed terms and assumptions associated with the issuance of the additional debt to finance a portion of the CIP:

| Summary of Assumptions – Issuance of Additional Debt [1] | | | | | | | |
|--|-------------------------|---------------------------------|--------------------|----------------------------|------------------------------|---------------------------------------|--|
| Issue | Principal Amount Issued | Capital Projects Being Financed | Assumed Issue Date | First Year of Debt Payment | Average Annual Interest Rate | Term (Yrs.)/ Assumed Year of Maturity | Average Annual Debt Payment from Rates [3] |
| 2022 Additional Loan [1] | \$4,240,000 | \$4,175,291 | April 2022 | 2022 [2] | 3.0% | 15 / 2037 | \$379,024 |

[1] The 2022 Additional Loan has been recognized to fund a portion of the capital improvement program; reference Table 14 of report.

[2] For the Fiscal Year 2022, a partial interest payment was assumed to be due based on the debt repayment schedule assumed for the capital funding plan.

[3] Based on discussions with Town staff, the financing schedule for the 2022 Additional Loan assumes the payment of interest-only payments through April 2025 to "wrap" the debt payments after the maturity of the Revolving Fund Loan DW 502901 in 2024 to minimize the debt payments during the first two years of the Projection Period (full debt service payments begin in 2026).

10. In order to accrue funds to finance the ongoing capital re-investment requirements for the System, Raftelis is recommending that the Town annually fund an allowance for major capital repairs and ongoing or recurring capital improvements from rates. The funding of these expenditures should be on an annual basis in support of the capital funding process (similar to the recognition of depreciation expense on the financial statements for the System). Specifically, Raftelis recommends the establishment of a capital / repair-related account – the Capital Renewal and Replacement Fund – to allow the System to annually accrue funds to finance future capital improvements due to changes in regulation, service needs and other factors, pay for large recurring plant replacements (i.e., water treatment plant membranes), and fund ongoing annual or recurring

utility plant or asset replacements (i.e., vehicles and meters). It is recommended that in order to establish this fund the System should make an initial deposit from available operating reserves to initially provide monies to establish the fund; for the purposes of this Report it was assumed this deposit would be made during the Fiscal Year 2020 in the amount of \$164,280 or 5% of prior System gross revenues. Additionally, a dedicated deposit to a capital-related account reflects industry norms and a positive management practice for the funding of a major portion of the repairs, renewals, replacements, rehabilitations, and betterments to a utility system and is considered as a prudent business practice by the bond rating agencies that evaluate utility credits. For the purposes of developing the financial forecast beginning in the Fiscal Year 2021, the deposit to the Capital Renewal and Replacement Fund was assumed to be equal ten percent (10%) of the prior year gross revenues and increased to 115% beginning in Fiscal Year 2023. Although a policy decision of the Town, the recommended funding level target for capital re-investment is 15% of prior year gross revenues and it is assumed that this funding level may be achieved after the Projection Period. This deposit was based on the capital improvement needs as developed by the Town and was assumed to be made annually from rate revenues, regardless of the timing of the expenditure requirement under the premise that the ratepayer should annually fund for the repairs and replacement of the utility assets used to provide service during such year (i.e., a depreciation equivalent). As shown on Table 12 and based on this funding assumption, the annual deposit to the Capital Renewal and Replacement Fund averaged approximately \$486,000 during the Fiscal Years 2021 through 2025 (60% of current year depreciation expense).

With respect to the System, Raftelis is of the opinion that the Capital Renewal and Replacement Fund should be maintained to fund the ongoing capital needs of the respective systems and to limit the amount of future debt that may be issued by the Town on behalf of such system. Specifically the annual capital funding from rates provides a balanced capital funding plan since it: i) promotes pay-as-you-go (“PAYGO”) funding of these projects which are for renewals, repairs, and replacements of existing assets that have reached their service life and which generally benefit the existing ratepayer; ii) increases the Town’s equity in the System; iii) preserves the potential future debt leveraging capability of the System for expansion-related or large capital projects that normally would be funded from additional loans; and iv) promotes the long-term rate stability of the System. For the Forecast Period, the annual deposit to the Capital Renewal and Replacement Fund recognized from rates for capital PAYGO financing is as follows:

(Remainder of page intentionally left blank)

| Annual Deposits to Capital Renewal and Replacement Fund for Capital Reinvestment (PAYGO) from System Operations [1] | | | | | | |
|---|----------------------------------|------------------|------------------|------------------|------------------|------------------|
| | Fiscal Year Ending September 30, | | | | | |
| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Initial Deposit from Operating Reserves: [2] | \$164,280 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Percent of Prior Year Gross Revenues | 0% | 10% | 11% | 11% | 11% | 11% |
| Water System: | | | | | | |
| Renewal and Replacement Deposit | \$0 | \$302,690 | \$383,752 | \$449,267 | \$502,497 | \$531,473 |
| Wastewater System: | | | | | | |
| Renewal and Replacement Deposit | \$0 | \$36,482 | \$46,251 | \$54,147 | \$60,563 | \$64,055 |
| Total System R&R Fund Deposits | <u>\$164,280</u> | <u>\$339,172</u> | <u>\$430,003</u> | <u>\$503,414</u> | <u>\$563,060</u> | <u>\$595,528</u> |

[1] Amounts shown derived from Table 12 and assume the adoption of the identified rate adjustments as presented in this Report.

[2] Amounts shown represents initial deposit from operating reserves to the Repair and Replacement Fund and is set equal to one- (1) year's depreciation expense.

11. Investment income on funds and accounts created by the Town (e.g., utility-related operating reserves, Capital Renewal and Replacement Fund, etc.) has been estimated utilizing average annual interest rates ranging from 1.0% to 1.20% during the Forecast Period. We have also assumed that any interest earnings on any balances in the Connection Fee Funds and the Construction Funds (from future bond or loan proceeds on deposit for the System) will be deposited in the respective funds and not be available for operating expenses consistent with the provisions of the Florida State Statute 163 and case law (regarding impact fees) or pursuant to a loan agreement (note that no balances on these funds were assumed for the Forecast Period). Table 18 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 Town on behalf of the System.
12. The capital improvement program for the respective Water and Wastewater Systems was based on: i) the Fiscal Year 2020 estimated capital expenditures; ii) the Fiscal Year 2021 five- (5) year capital improvement plan budget; iii) information provided by Town Staff regarding the status of current projects and future projects (e.g., costs incurred to date, updated capital costs due to changes in scope of the project, etc.); and iv) the application of an inflationary allowance for all projects planned after Fiscal Year 2021 to account for increased construction costs in the year the expenditure is assumed to occur. The primary purpose for the capital projects by the Town is to provide for the ongoing of renewals, repairs, betterments, and replacements of the existing infrastructure of the System. The following table summarizes the projected capital expenditures (when funds are appropriated for projects and must be available, which may be slightly different from when the cash expenditures actually occur).

(Remainder of page intentionally left blank)

| Capital Improvement Plan (CIP) – For the Projection Period [1] | | | | | | |
|--|----------------------------------|--------------------|--------------------|------------------|------------------|------------------|
| Description | Fiscal Year Ending September 30, | | | | | |
| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Capital Improvement Plan – Expenditures | | | | | | |
| Water System Capital Projects | \$378,000 | \$339,405 | \$349,078 | \$549,420 | \$503,535 | \$138,103 |
| Wastewater System Capital Projects | 125,000 | 694,238 | 3,173,437 | 163,194 | 167,845 | 172,629 |
| Total Capital Improvement Plan – Expenditures | <u>\$503,000</u> | <u>\$1,033,643</u> | <u>\$3,522,515</u> | <u>\$712,614</u> | <u>\$671,380</u> | <u>\$310,731</u> |
| Capital Improvement Plan - Funding | | | | | | |
| Water and Wastewater Rates | \$0 | \$0 | \$0 | \$32,639 | \$0 | \$0 |
| Operating Reserves | 295,000 | 668,525 | 0 | 0 | 0 | 0 |
| Capital Renewal and Replacement Fund | 100,000 | 313,693 | 0 | 27,199 | 335,690 | 310,731 |
| Proposed Debt | 0 | 0 | 3,522,515 | 652,776 | 0 | 0 |
| Reclass to Operating Expenses | <u>108,000</u> | <u>51,425</u> | <u>0</u> | <u>0</u> | <u>335,690</u> | <u>0</u> |
| Total Capital Improvement Plan – Funding | <u>\$503,000</u> | <u>\$1,033,643</u> | <u>\$3,522,515</u> | <u>\$712,614</u> | <u>\$671,380</u> | <u>\$310,731</u> |

[1] Amounts shown derived from Table 14 at the end of this Report.

Table 14 at the end of this Report provides a detailed listing of the capital projects for the Water and Wastewater Systems for the Forecast Period and includes the anticipated funding sources for each project through the Forecast Period. Included in the capital improvement program is the use of the Capital Renewal and Replacement Fund to finance recurring capital projects (i.e., essentially for the betterment or replacement of assets). The recognition of this revenue requirement is necessary in order to allow the Town a funding mechanism to continue to provide high-quality service (i.e., maintain same level of service) to its customers as the utility system ages. As can be seen above it is anticipated that the capital needs of the System are estimated to be approximately \$6.25 million over the Forecast Period. The Capital Improvement Plan (also referred to as the “CIP”) is projected to be funded from available funds on deposit (operating reserves), revenues anticipated to be generated during the Projection Period and deposited into the Capital Renewal and Replacement Fund, and the issuance of an Additional Loan as previously discussed assumed to be secured by revenues realized in the Town’s General Fund (consistent with previous repayment pledge for the other System-related loans secured through the FDEP SRF loan program). As a result of the projected limited growth assumed for the System during the Projection Period, it is recommended that the System move towards a greater PAYGO capital funding strategy, where practical, to promote the long-term sustainability and flexibility in the use of funds for the System and limit the use of debt for large, non-recurring, or expansion-related projects.

NET REVENUE REQUIREMENTS – WATER SYSTEM

The net revenue requirements of the Water System are presented on Table 15 and are shown below and were based upon: i) the customer forecast identified herein; ii) the existing rates for service; iii) the operation and maintenance expense assumptions as previously discussed; and iv) the CIP as identified with Town staff, and the capital funding analysis assumed herein. The purpose of the development of the net revenue requirements is to determine the level of revenue from monthly user rates required 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 – For the Forecast Period | | | | | | |
|---|----------------------------------|-------------|-------------|-------------|-------------|-------------|
| Description | Fiscal Year Ending September 30, | | | | | |
| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Operation and Maintenance Expenses | \$2,022,423 | \$2,088,669 | \$2,127,421 | \$2,190,272 | \$2,589,679 | \$2,318,630 |
| Annual Debt Service: | | | | | | |
| Existing Debt | \$1,549,224 | \$1,549,224 | \$1,549,224 | \$1,549,224 | \$1,180,012 | \$810,800 |
| Proposed Debt | 0 | 0 | 12,775 | 25,550 | 25,550 | 25,550 |
| Less Connection Charges to Pay Debt Service | 0 | (226,353) | (234,202) | (242,323) | (250,726) | (259,420) |
| Other Revenue Requirements: | | | | | | |
| Capital Funded from Rate Revenues | \$0 | \$0 | \$0 | \$32,639 | \$0 | \$0 |
| Transfers to the Renewal and Replacement Fund | 0 | 302,690 | 383,752 | 449,267 | 502,497 | 531,473 |
| Gross Revenue Requirements | \$3,571,647 | \$3,714,230 | \$3,838,970 | \$4,004,629 | \$4,047,012 | \$3,427,033 |
| Less Other Income and Funds from Other Sources: | | | | | | |
| Other Revenue | \$179,720 | \$187,070 | \$191,083 | \$195,042 | \$198,938 | \$202,761 |
| Unrestricted Interest Income | 42,528 | 40,425 | 41,264 | 43,439 | 43,386 | 43,820 |
| General Fund Transfers - Debt Service Payment | 1,430,000 | 1,058,297 | 796,691 | 533,004 | 184,823 | 0 |
| Transfers from Operating Reserves | 119,224 | 0 | 0 | 0 | 0 | 0 |
| Net Revenue Requirements | \$1,800,176 | \$2,428,438 | \$2,809,932 | \$3,233,144 | \$3,619,866 | \$3,180,452 |
| Revenue Under Existing Water Rates: | | | | | | |
| Water System Rate Revenue | \$2,083,498 | \$2,083,498 | \$2,083,498 | \$2,083,498 | \$2,083,498 | \$2,083,498 |
| Prior and Current Year Rate Adjustment | 0 | 0 | 312,525 | 600,048 | 922,073 | 1,102,407 |
| Total Applicable Rate Revenue | \$2,083,498 | \$2,083,498 | \$2,396,023 | \$2,683,546 | \$3,005,571 | \$3,185,906 |
| Percent Rate Increase | 0.00% | 15.00% | 12.00% | 12.00% | 6.00% | 2.50% |
| Effective Months of Increase (Assumes Oct. 1 st) | 12 | 12 | 12 | 12 | 12 | 12 |
| Percent of Current Year Effective | 100% | 100% | 100% | 100% | 100% | 100% |
| Revenue from Current Year Rate Adjustments | \$0 | 312,525 | 287,523 | 322,026 | 180,334 | 79,648 |
| Total Rate Revenue | \$2,083,498 | \$2,396,023 | \$2,683,546 | \$3,005,571 | \$3,185,906 | \$3,265,553 |
| Revenue Surplus / (Deficiency): | | | | | | |
| Amount | \$283,323 | (\$32,415) | (\$126,386) | (\$227,573) | (\$433,960) | \$85,101 |
| Percent of Rate Revenue | 13.60% | (1.35%) | (4.71%) | (7.57%) | (13.62%) | 2.61% |

It should be noted that no adjustment is shown for Fiscal Year 2020 since the fiscal year is nearing completion and any rate adjustment that could be implemented would not generate sufficient revenue during the fiscal year to significantly impact the financial position of the System for such fiscal year.

NET REVENUE REQUIREMENTS – WASTEWATER SYSTEM

The net revenue requirements of the Wastewater System are presented on Table 16 and are shown below and were based upon: i) the customer forecast identified herein; ii) the existing rates for service; iii) the

operation and maintenance expense assumptions as previously discussed, including the projections of purchased wastewater treatment service from Delray Beach; iv) the CIP as identified with the Town and the capital funding analysis assumed herein. The purpose of the development of the net revenue requirements is to determine the level of revenue from monthly user rates required 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 – For the Forecast Period | | | | | | |
|--|----------------------------------|-------------|-------------|-------------|-------------|-------------|
| Description | Fiscal Year Ending September 30, | | | | | |
| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Operation and Maintenance Expenses | \$1,640,793 | \$1,764,672 | \$1,658,146 | \$1,709,013 | \$1,761,077 | \$1,814,406 |
| Annual Debt Service: | | | | | | |
| Existing Debts | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Proposed Debts | 0 | 0 | 50,825 | 101,650 | 101,650 | 101,650 |
| Other Revenue Requirements: | | | | | | |
| Transfers to the Renewal and Replacement Fund | \$0 | \$36,482 | \$46,251 | \$54,147 | \$60,563 | \$64,055 |
| Gross Revenue Requirements | \$1,640,793 | \$1,801,154 | \$1,755,222 | \$1,864,810 | \$1,923,290 | \$1,980,112 |
| Less Other Income and Funds from Other Sources: | | | | | | |
| Other Revenue | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Unrestricted Interest Income | 23,904 | 22,722 | 23,193 | 24,416 | 24,386 | 24,630 |
| General Fund Transfers – Debt Service Payment | 0 | 0 | 30,482 | 40,637 | 20,321 | 0 |
| Transfers from Operating Reserves | 105,000 | 105,000 | 0 | 0 | 0 | 0 |
| Net Revenue Requirements | \$1,511,890 | \$1,673,432 | \$1,701,546 | \$1,799,758 | \$1,878,583 | \$1,955,481 |
| Revenue Under Existing Wastewater Rates: | | | | | | |
| Wastewater System Rate Revenue | \$1,159,222 | \$1,159,222 | \$1,159,222 | \$1,159,222 | \$1,159,222 | \$1,159,222 |
| Prior and Current Year Rate Adjustment | 0 | 0 | 289,805 | 478,179 | 691,041 | 802,057 |
| Total Applicable Rate Revenue | \$1,159,222 | \$1,159,222 | \$1,449,027 | \$1,637,401 | \$1,850,263 | \$1,961,279 |
| Percent Rate Increase | 0.00% | 25.00% | 13.00% | 13.00% | 6.00% | 2.50% |
| Effective Months of Increase (Assumes Oct. 1 st) | 12 | 12 | 12 | 12 | 12 | 12 |
| Percent of Current Year Effective | 100% | 100% | 100% | 100% | 100% | 100% |
| Revenue from Current Year Rate Adjustments | \$0 | \$289,805 | \$188,374 | \$212,862 | \$111,016 | \$49,032 |
| Total Rate Revenue | \$1,159,222 | \$1,449,027 | \$1,637,401 | \$1,850,263 | \$1,961,279 | \$2,010,311 |
| Revenue Surplus / (Deficiency): | | | | | | |
| Amount | (\$352,668) | (\$224,405) | (\$64,145) | \$50,505 | \$82,696 | \$54,830 |
| Percent of Rate Revenue | (30.42%) | (15.49%) | (3.92%) | 2.73% | 4.22% | 2.73% |

As can be seen above and as shown in more detail on Table 16, the existing wastewater rate revenues are not anticipated to be sufficient to adequately fund the identified Net Revenue Requirements of the

Wastewater System during the Forecast Period and provide funds to maintain operating reserves to maintain a strong utility credit. As was previously discussed for the Water System, no adjustment is shown for Fiscal Year 2020 since the fiscal year is nearing completion and any rate adjustment that could be implemented would not generate sufficient revenue during the fiscal year to significantly impact the financial position of the System for such fiscal year.

NET REVENUE REQUIREMENTS – COMBINED SYSTEM

Since the System customers receive both water and wastewater service, the net revenue requirements for the combined Water and Wastewater System are presented on Table 17 and are shown below:

| Projected Combined Water and Wastewater System Net Revenue Requirements – For the Forecast Period | | | | | | |
|---|----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Description | Fiscal Year Ending September 30, | | | | | |
| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Operation and Maintenance Expenses | \$3,663,217 | \$3,853,342 | \$3,785,567 | \$3,899,285 | \$4,350,756 | \$4,133,037 |
| Annual Debt Service: | | | | | | |
| Existing Debts | \$1,549,224 | \$1,549,224 | \$1,549,224 | \$1,549,224 | \$1,180,012 | \$810,800 |
| Proposed Debts | 0 | 0 | 63,600 | 127,200 | 127,200 | 127,200 |
| Less Connection Charges to Pay Debt Service | 0 | (226,353) | (234,202) | (242,323) | (250,726) | (259,420) |
| Other Revenue Requirements: | | | | | | |
| Capital Funded from Rate Revenues | \$0 | \$0 | \$0 | \$32,639 | \$0 | \$0 |
| Transfers to the Renewal and Replacement Fund | 0 | 339,172 | 430,003 | 503,414 | 563,060 | 595,528 |
| Gross Revenue Requirements | \$5,212,441 | \$5,515,384 | \$5,594,191 | \$5,869,439 | \$5,970,302 | \$5,407,145 |
| Less Other Income and Funds from Other Sources: | | | | | | |
| Other Revenue | \$179,720 | \$187,070 | \$191,083 | \$195,042 | \$198,938 | \$202,761 |
| Unrestricted Interest Income | 66,431 | 63,147 | 64,457 | 67,854 | 67,772 | 68,451 |
| General Fund Transfers - Debt Service Payment | 1,430,000 | 1,058,297 | 827,173 | 573,640 | 205,144 | 0 |
| Transfers from Operating Reserves | 224,224 | 105,000 | 0 | 0 | 0 | 0 |
| Net Revenue Requirements | \$3,312,065 | \$4,101,871 | \$4,511,478 | \$5,032,902 | \$5,498,449 | \$5,135,933 |
| Revenue Under Existing Rates: | | | | | | |
| Combined System Rate Revenue | \$3,242,720 | \$3,242,720 | \$3,242,720 | \$3,242,720 | \$3,242,720 | \$3,242,720 |
| Prior and Current Year Rate Adjustment | 0 | 0 | 602,330 | 1,078,227 | 1,613,114 | 1,904,464 |
| Total Applicable Rate Revenue | \$3,242,720 | \$3,242,720 | \$3,845,050 | \$4,320,947 | \$4,855,834 | \$5,147,184 |
| Percent Rate Increase | 0.00% | 15.00% | 12.00% | 12.00% | 6.00% | 2.50% |
| Effective Months of Increase | 12 | 12 | 12 | 12 | 12 | 12 |
| Percent of Current Year Effective | 100% | 100% | 100% | 100% | 100% | 100% |
| Revenue from Current Year Rate Adjustments | \$0 | \$602,330 | \$475,896 | \$534,888 | \$291,350 | \$128,680 |
| Total Rate Revenue | \$3,242,720 | \$3,845,050 | \$4,320,947 | \$4,855,834 | \$5,147,184 | \$5,275,864 |
| Revenue Surplus / (Deficiency): | | | | | | |
| Amount | (\$69,345) | (\$256,820) | (\$190,531) | (\$177,068) | (\$351,265) | \$139,931 |
| Percent of Rate Revenue | (2.14%) | (6.68%) | (4.41%) | (3.65%) | (6.82%) | 2.65% |

As can be seen above and as shown in more detail on Table 17, the existing rate revenues on a combined basis beginning in Fiscal Year 2020 are not anticipated to be sufficient to adequately fund the identified Net Revenue Requirements of the combined Water and Wastewater System during the Forecast Period. While the System does continue to operate in deficiency after the implementation of the proposed rate adjustments during the remainder of the Forecast Period, Raftelis is of the opinion that this deficiency is acceptable considering the levels of operating reserves the System currently has and the primary driver is the need to adjust the responsibility for the repayment of the Outstanding and Additional Loans from rates as opposed to General Fund revenues (i.e., if there is an issue, a delay in the debt funding can be effectuated).

The following table summarizes the recommended percent rate adjustments for both water and wastewater service based on the financial forecast presented in this report:

| Recommended Total Rate Revenue Adjustments – Effective October 1 st of Each Fiscal Year [1] | | | |
|---|-------|------------|------------------|
| Fiscal Year | Water | Wastewater | Consolidated [2] |
| 2021 | 15.0% | 25.0% | 18.5% |
| 2022 | 12.0% | 13.0% | 12.4% |
| 2023 | 12.0% | 13.0% | 12.4% |
| 2024 | 6.0% | 6.0% | 6.0% |
| 2025 | 2.5% | 2.5% | 2.5% |

[1] Amounts shown represent percent increases in rate revenues targeted in each fiscal year to fully fund the net revenue requirements; the actual increases may be different due to changes in rate structure associated with the recovery of costs.

[2] The majority of customers receive both water and wastewater service; increase reflect and reflects the average revenue adjustment for a combined water and wastewater bill.

The primary reasons for the System rate adjustments is associated with:

- Continued increases in the cost to operate the System due to continued inflation on cost of operation and maintenance and on the capital costs associated with infrastructure replacement and the need to maintain existing revenue margins to provide for funds for capital re-investment, debt service payments, and to maintain a favorable fiscal position.
- Increases in the cost of purchased wastewater treatment expenses also due to continued inflationary impacts on the cost of service coupled with the repayment of certain billing issues (causing an underpayment per the Town).
- Based on the capital funding plan, the need to have sufficient funds and cash flow to pay the anticipated debt service requirements on Additional Loans assumed to be issued during the Projection Period.
- Pursuant to Town directives, recognize that the System debt liability be funded from rates as opposed to General Fund revenues to accurately match the cost of service to the rates charged for service.

- Recognition of the need to develop and maintain a capital re-investment plan (recognized as deposits to the Capital Renewal and Replacement Fund), in order to provide for ongoing utility plant replacement, rehabilitation, and improvements and to limit the issuance of future debt for utility plant replacement.
- Limited System customer growth of the System (no increase in revenues or receipt of connection fees) which places a greater emphasis on maintaining current operating margins to fund debt repayment and pay-as-you-go capital funding.

PROJECTED RESERVE FUND TRANSFERS

In the development of the System revenue requirements, projected fund transfers to operating and capital funds were assumed to provide: i) sufficient operating reserves to provide a hedge against unknown events (e.g., COVID-19, storm events, etc.), to maintain a strong fiscal position to attract external capital at reduced borrowing costs, and to provide for the stabilization of rates in the event any short-term deficiencies occur in net revenue requirements; and ii) dedicated transfers to provide for the re-investment of capital into the System and to provide funds for any unknown or extraordinary event that may occur (whether regulatory or an asset failure / mortality). We would recommend that the two separate reserves balances be maintained since they are for different purposes with operating reserves providing a funds for annual cash flow considerations (i.e., expenses, fluctuation in rate revenues, etc.) and capital reserves providing for plant investment and long-term utility service (asset replacement, major maintenance, etc.) and to promote ongoing service.

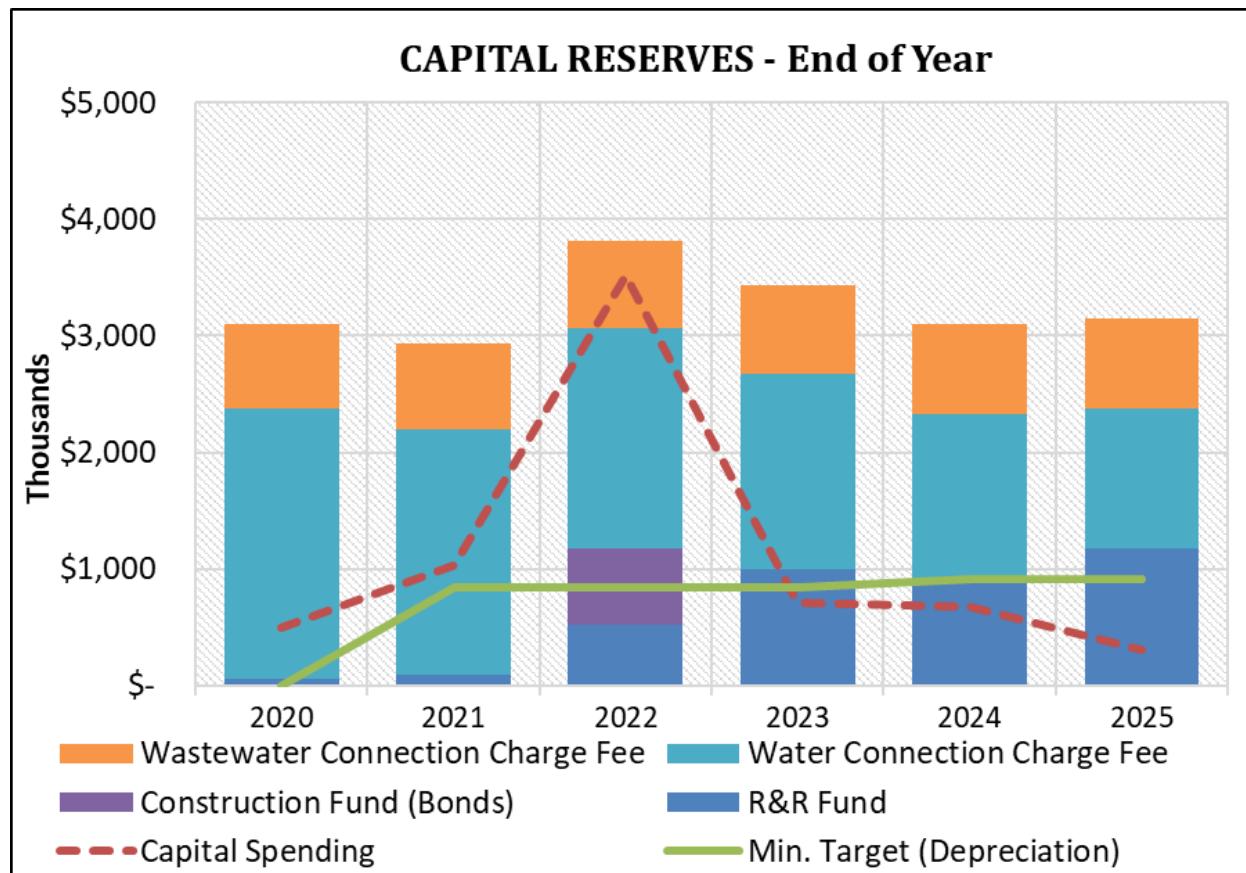
To provide adequate levels of cash reserves for operations the financial forecast assumes an internal reserve target of one hundred fifty (150) days of operating expenses was recognized. The minimum targeted level of operating reserves is generally consistent with recommended policy by the Government Finance Officers Association (“GFOA”) and credit rating agencies and serve to: i) mitigate current and future risks regarding revenue shortfalls and unanticipated expenses; and ii) ensure stable services and rates. The following chart provides a projection of ending cash balances for operating reserves:

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Assuming the continued implementation of the identified rates increases to meet the financial plan for the System as presented later in this report, it is expected based on the assumptions recognized in the development of the financial forecast that the System will meet or exceed the minimum operating reserve target.

With respect to the capital-related funds (e.g., Capital Renewal and Replacement Fund) of the System, it is recommended that the utility target a minimum cash reserve equal to the annual depreciation expense. Depreciation expense represents a non-cash expense for purposes of financial reporting and accounting based on the original cost to acquire a capital asset relative to its use in terms of an assumed service life. While depreciation is not intended to be a perfect proxy for the annual repair and maintenance costs for a utility, it is considered a reasonable target for purposes of this analysis since it links to the use of assets that have been constructed to provide potable water service. The purpose to maintain such a capital reserve at this level is to: i) mitigate risks regarding unanticipated capital expenditures or increases in materials, labor, or other costs from on-going or planned capital projects; ii) provide for changes in capital expenditure priorities resulting in the advancement or addition of certain capital projects; iii) promote the availability of funds for capital reinvestment for the existing infrastructure intended to limit outages and inability to provide service from equipment or infrastructure failures or as a result of force majeure incidents due to weather events and other occurrences; and iv) to ensure reliable service and ameliorate the effects to monthly service rates from unanticipated costs. The following chart provides a projection of capital related fund ending cash balances relative to assumed capital reserve targets:



As shown in the above figure, in the early years of the Forecast Period, the majority of the cash reserves allocated to capital primarily consists of utility connection fees which are restricted in their use (expansion-related expenditures). Over time, the balance shifts to a more balanced structure with connection fee balances declining as expansion-related debt is paid and the Capital Renewal and Replacement Fund accrues funds for future asset reinvestment. Based on the assumptions developed in support of the preparation of the Financial Forecast, the ending balance in the Capital Renewal and Replacement Fund meets the minimum target which Raftelis considers favorable.

PROPOSED RATES FOR SERVICE

General

The Town requested that Raftelis provide alternative rates for consideration by the Commission to promote water conservation, implement a wastewater consumption charge to promote fairness in use, provide rate consistency among customer classes and other factors. Rate design involves the development of bi-monthly rates and charges for each customer classification (e.g., residential, commercial, etc.) that recover the net revenue requirements of the System and meet the financial objectives of the Town and promote fairness among the customer classes. The proposed utility rates, to the extent practical, should meet the following criteria for service provided by publicly owned utilities:

- Utility rates should fully recover the cost of providing service.
- 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 and sustainable basis.
- Utility rates should be simple and understandable.
- Utility rates should reasonably recover the cost of providing service to customers, taking into consideration the cost of providing service to the various users of the System.
- Utility rate and cost recovery strategies should recognize the System's current financial needs, when rates were last adjusted, and where possible help develop approaches to avoid "rate shock" in the future.
- Utility rates should be designed to encourage water conservation.
- Utility rates should comply with applicable orders and requirements of local, state, and federal regulatory authorities, if any, that may have jurisdiction.
- Utility rates should provide sufficient revenues to comply with the rate covenants as delineated in the Bond Resolution and other loan agreements or documents as well as promote the financial creditworthiness of the Utility (including revenue stability).
- Other considerations that often have an effect on the design of the user fees include historical rate form and comparability with rates of neighboring utility systems.

The Town currently classifies its customer base into three categories which include:

1. Single-family residential service which generally relates to individually metered residential service where each account equates to one (1) EDU.
2. Multi-family residential service which relates to master-metered residential service where two (2) or more EDUs are provided service through a single (master) meter (i.e., each account would have a multitude of EDUs based on the property characteristics).
3. Commercial or Non-Residential service which relates to individually metered accounts that have EDUs assigned to the account based on the characteristics of the account (may relate to meter size, customer demands, etc.).

Proposed Fiscal Year 2021 Water System Rates

The Town's current water rates include two separate rate structure (cost recovery) components. These components are: i) a bi-monthly flat rate (minimum) charge that serves as a readiness-to-serve charge that recovers a portion of the revenue requirements considered as being fixed (links to capacity); and ii) a volumetric or flow charge which includes an inverted block rate structure to promote water conservation. The fixed costs represent expenses that are consistent and do not vary based on the water use or the customer demands of the system. Fixed costs generally would include, but are not limited to, debt service and capital facility funding, certain employee salaries and other employee benefits, insurance on utility

plant, and other related costs. The variable costs represent expenses that are incurred based on actual water use. Items that would be considered being variable-related would include, but are not limited to, electricity and chemicals, operating supplies, and certain salaries and other employee benefits.

The bi-monthly flat rate (readiness-to-serve) charge is billed based on the number of EDUs assigned to the account based on a review of the detailed customer billing data provided by the Town. As previously mentioned, all customers are billed the same flat rate based on the number of EDUs serving the property – this promotes a consistent application of the readiness-to-serve charge among all customers. An EDU is generally representative of the average daily capacity or demands of a single-family residential unit and generally represents the lowest level and the most common level of use and is used to evaluate the size and capacity needs of a utility system. Since multi-family (condominiums) and commercial customers may be served by a larger-sized meter than the standard residential customers and generally have different (higher) water usage per account / meter requirements, it is useful to equate such customers on an equivalent basis to the single-family residential class to provide a more consistent presentation of the total customer base served. The bi-monthly rate for all customer classes is the same which implies that for each unit of capacity allocation (i.e., EDU), the customer pays the same rate. Approximately 42.5% of the total revenues derived from rates are generated from the application of the water flat rate charge and it is proposed that this cost recovery strategy be maintained as it promotes a favorable level of revenue stability. It is recommended that the application of the bi-monthly flat rate i) be renamed the “Readiness-to-Serve” charge to more accurately describe the purpose of the fee; and ii) remain constant among all customer classes to promote rate consistency.

The water conservation blocks for the billing of water consumption is based on the number of EDUs recognized for each account which also promotes consistency to the capacity allocation. If a customer has more EDUs assigned to the account which results in higher readiness-to-serve charges, it is fair to match the water use to the capacity allocation and all the consumption blocks should have the same usage characteristics per EDU. Based on this rate design principle, it is proposed that the block structure and pricing for each block be the same – this will result in a rate design adjustment for the Multi-family residential service class. Currently, the block structure for this class of customer is different than the other classes which is not consistent with the allocation of capacity and are recommended to be adjusted to be the same for all customer classes.

In addition to the change in the water tier block structure to promote rate consistency and recognizing the objective of the Town to implement a wastewater flow charge as discussed later in this report, it is further recommended that the water usage tiered structure be modified as follows:

1. The first block should continue to be structured to reflect “essential use” water demands (i.e., indoor use such as bathing, cooking, cleaning, etc.) and the first block is recommended to be maintained except for an expansion of the block by 1,000 gallons to get rounded monthly demand (i.e., 10,000 gallons per month).
2. To increase water conservation incentives yet recognize differences in discretionary and excessive use, it is recommended that a stronger pricing signal be recognized based on our understanding of the conservation objectives of the water management districts and a review of rate structures for other jurisdictions. The proposed water use tier adjustments would include i) having a second tier with the same usage range as the first tier which would link to the same capacity allocated to an

EDU; ii) having the third tier rate with the same usage range as the first block that would also link to the capacity of an EDU but would be priced higher to reflect a water use considered as being excessive; and iii) a fourth block that would further promote water conservation.

Based on these rate structure modifications to promote rate consistency among the customer classes, the following rate blocks are being recommended:

| Comparison of Existing and Proposed Water Consumption Blocks - Per Unit | | |
|---|-------------------------|-------------------------|
| Class and Water Use Block Designation | Existing | Proposed |
| Residential / Commercial (Expanded per Unit): | | |
| Block 1 | 0 – 19,000 Gallons | 0 – 20,000 Gallons |
| Block 2 | 20,000 – 50,000 Gallons | 20,000 – 40,000 Gallons |
| Block 3 | 51,000 Gallons or More | 41,000 – 60,000 Gallons |
| Block 4 | | 61,000 Gallons or More |
| Master-Metered Residential (Expanded per Unit): | | |
| Block 1 | 0 – 13,000 Gallons | 0 – 20,000 Gallons |
| Block 2 | 14,000 – 23,000 Gallons | 20,000 – 40,000 Gallons |
| Block 3 | 24,000 Gallons or More | 41,000 – 60,000 Gallons |
| Block 4 | | 61,000 Gallons or More |

With respect to pricing the blocks, the following cost recovery attributes were recognized:

1. The first block was essentially increased by the average rate adjustment to limit the amount of impact to the low use water customers (target the average increase as previously discussed in the determination of the Financial Plan).
2. Since the first block is considered as the flow allocated to an EDU, the second block was designed to recover an additional readiness-to-serve charge (if the customer is going to use twice the flow of an indoor customer, then the second block usage charge will be designed to recover the readiness-to-serve charge – this continues for each consumption block thereafter and is the reason why the water use tiers are consistent).
3. The third block was designed to essentially recover an additional connection charge under the assumption that the customer is consistently incurring a water use demand that is higher than allocated.
4. The fourth block represents an additional charge to further promote conservation and the general fact that cost of peak day capacity is the most expensive capacity.

As discussed later in this report, the Town is considering a wastewater rate structure which includes a volumetric or flow component. If it is to be the policy of the Town to allow a separate irrigation meter and there may be an instance where a customer may request such a service, we would recommend that an irrigation rate be considered. Since irrigation use would represent discretionary and excessive water use and would be in addition to the domestic water use, it is recommended that the irrigation rate i) be set at

one (1) EDU since there are no dwelling units assigned to this service; and ii) the pricing be set at the higher use blocks consistent with the type of service.

Based on the above referenced rate structure adjustments and the proposed water increase as identified in the development of the Financial Forecast, the following rates are being proposed:

| Proposed Bi-monthly Water Rate Schedule | |
|--|--------------------------|
| Bi-monthly Service Charge: | |
| All Residential and Commercial Classes | |
| | Proposed Rates |
| Readiness-to-Serve Charge – All Units [1] | \$38.63 per Unit |
| Water Use per Unit: | |
| Bi-monthly Usage Charges (per Unit): | |
| 0 – 20,000 Gallons | \$2.60 per 1,000 Gallons |
| 21,000 – 40,000 Gallons | \$4.53 per 1,000 Gallons |
| 41,000 – 60,000 Gallons | \$5.81 per 1,000 Gallons |
| 61,000 Gallons or More | \$7.09 per 1,000 Gallons |
| Irrigation Class: | |
| Readiness-to-Serve Charge – All Accounts [2] | \$38.63 per Account |
| Water Use per Account: | |
| Bi-monthly Usage Charges (per Account): | |
| 0 – 40,000 Gallons | \$4.53 per 1,000 Gallons |
| 41,000 – 60,000 Gallons | \$5.81 per 1,000 Gallons |
| 61,000 Gallons or More | \$7.09 per 1,000 Gallons |

[1] Rate applicable to all dwelling units assigned to an account as determined by the Town with single family residential being considered as 1 unit (EDU).

[2] All individually-metered irrigation water meters are recommended to be classified as 1 EDU.

Based on the estimated billing determinates assumed for the Fiscal Year 2021 and the basis of the application of the rates as shown in the above table, approximately 42.1% of the total revenues derived from rates are generated from the application of the water readiness-to-serve charge, thus maintaining the same cost recovery strategy as the existing rates to continue to promote a favorable level of revenue stability.

Proposed Fiscal Year 2021 Wastewater System Rates

The Town's current wastewater rates includes only one rate structure (cost recovery) component which is a bi-monthly flat rate (minimum) charge that serves as a readiness-to-serve charge that recovers all of the allocated revenue requirements of the Wastewater System. As was previously discussed for the Water System, the bi-monthly flat rate (readiness-to-serve) charge is billed based on the number of EDUs assigned to the account based on a review of the detailed customer billing data provided by the Town. All customers are billed the same flat rate based on the number of EDUs serving the property which promotes a consistent application of the readiness-to-serve charge among all customers.

The Town requested that Raftelis prepare a rate structure that includes a volumetric or use component. To develop a wastewater usage charge, the following cost recovery attributes were recognized:

1. The rates would maintain a readiness-to-serve charge that is applied to all EDUs or units on the same basis as currently being performed for the Wastewater System.
2. The costs to be recovered in the volumetric charge included the net variable costs associated with purchased wastewater treatment from the City of Delray Beach, since it is billed on a volumetric basis to the Town, and the cost of utilities for pumping. All other costs were assumed to be recovered in the proposed readiness-to-serve charge. Based on the allocation of costs, approximately 57% of the net Wastewater System revenue requirements were proposed to be recovered in the flow charge with the remaining 43% to be recovered in the readiness-to-serve charge. This cost allocation basis was consistent with the cost recovery strategy of the Water System.
3. The basis to bill for wastewater flow service is through the use of water meter readings. For the single-family and master metered residential customer classes, it was assumed that a bi-monthly wastewater flow cap equal to 20,000 gallons applied to each EDU or unit of billed water service be implemented to recognize that not all of the metered water use is returned to the wastewater system. This is a common rate application structure in the state. The monthly wastewater usage cap was designed to equal the first block of the water flow charges which was considered more of an indoor use (thus a higher probability of being returned to the wastewater system). No billing cap on commercial service is being recommended which is also consistent with how other utilities bill for wastewater service. It was also assumed that for those customers that are classified as a master-metered residential customer that receive service through multiple meters, that the sum of all the billed water flow would be applied the wastewater flow charge.

It should be noted that with the introduction of a volumetric charge, the bi-monthly readiness-to-serve charge will reduce so customers with low flow could actually experience a wastewater rate reduction and customers with higher “per EDU” flows will experience an increase higher than the Wastewater System average. Based on the cost recovery attributes mentioned above, the following Wastewater System rates are being proposed:

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| Proposed Bi-monthly Wastewater Rate Schedule | |
|---|---|
| | Proposed Rates |
| Bi-monthly Service Charge: | |
| All Residential and Commercial Classes: | |
| Readiness-to-Serve Charge – All Units | \$28.50 per Unit |
| Wastewater Use per Unit: | |
| All Residential Classes | \$2.56 per 1,000 Gallons [1] |
| Commercial Class | \$2.56 per 1,000 Gallons (All Metered Water Use) |

[1] Rates based on metered water usage at customer premise. Bi-monthly wastewater usage charges shall be based on the water meter readings for all meters serving the applicant's property with a maximum billed bi-monthly flow equal to 20,000 gallons multiplied by the number of units.

Proposed Fiscal Year 2022 – 2025 Rates

The Financial Forecast reflected in this study includes projections of rate adjustments through the Fiscal Year 2025. It is recommended that the rates for service subsequent to the Fiscal Year 2021 be increased uniformly based on the proposed water and wastewater service rates adjustments as previously discussed. The proposed rates for the remainder of the Projection Period are included on Table 19 at the end of this report.

RATE COMPARISONS

In order to provide additional information to the Town regarding the effects of the recommended change in rates for water and wastewater service, an analysis to illustrate the impact for a typical residential customer (considered as one EDU or unit) was prepared. This is also comparative to the usage characteristics of the Multi-Family customer class (while these customers are master metered, on a per unit basis are representative to the single-family customer class and represent the largest class in terms of EDUs served by the Town). The average multi-family residential unit (the majority of the residential units are classified as multi-family) is billed approximately 6,000 gallons per month for water service metered at the customer premise. The typical or average single-family residential customer used approximately 30,000 gallons per month. It should be noted that the Town renders water and wastewater bills to the residential class on a bi-monthly basis; a monthly comparison is presented since most utilities bill at this frequency level in the State. The effect of the proposed rate adjustments for Fiscal Year 2020 for the average multi-family and single-family residential customer would be as follows:

(Remainder of page intentionally left blank)

| Combined Water and Wastewater Bill Increase Residential Customer Presented on a MONTHLY Basis [1] | | |
|--|------------------|-------------------|
| | Multi-Family | Single-Family |
| | At 6,000 Gallons | At 15,000 Gallons |
| Existing 2020 Rates | \$53.28 | \$74.96 |
| Proposed Increase – 2021 Rates [2] | <u>64.52</u> | <u>107.81</u> |
| Increase in Monthly Bill: | | |
| Amount | \$13.44 | \$32.85 |
| Percent | <u>21.09%</u> | <u>43.82%</u> |

[1] Based on identified rate adjustment as applied on a uniform basis; reference subsequent section in Study regarding proposed rates and rate levels.

[2] Rates assumed to become effective with bills rendered on and after October 1, 2020.

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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 20 through 22 and is summarized below:

| Residential Water and Wastewater Service Assuming 6,000 Gallons and 15,000 of Monthly Utility Service [1][2] | | | | | | |
|---|--------------------------|----------------|----------------|---------------------------|----------------|-----------------|
| | 6,000 Gallons of Service | | | 15,000 Gallons of Service | | |
| | Water | Sewer | Total | Water | Sewer | Total |
| Town of Highland Beach: | | | | | | |
| Current Rates – FY 2020 | \$31.26 | \$22.02 | \$53.28 | \$52.95 | \$22.02 | \$74.96 |
| Proposed Rates – FY 2021 | 34.91 | 29.61 | 64.52 | 67.96 | 39.85 | 107.81 |
| Other Neighboring Utilities: (2020 Rates) | | | | | | |
| Broward County [3] | \$30.72 | \$46.10 | \$76.82 | \$96.39 | \$84.44 | \$180.83 |
| City of Boca Raton | 19.85 | 42.70 | 62.55 | 30.61 | 78.88 | 109.49 |
| City of Boynton Beach | 23.23 | 32.03 | 55.26 | 46.93 | 34.21 | 81.14 |
| City of Cooper City [3] | 32.31 | 44.79 | 77.10 | 70.24 | 56.87 | 127.11 |
| City of Coral Springs | 26.29 | 49.32 | 75.61 | 65.91 | 88.74 | 154.65 |
| City of Dania Beach | 41.54 | 66.28 | 107.82 | 102.03 | 133.42 | 235.45 |
| City of Delray Beach | 19.47 | 38.39 | 57.86 | 32.97 | 58.74 | 91.71 |
| City of Lake Worth [3] | 45.28 | 44.10 | 89.38 | 121.54 | 72.54 | 194.08 |
| City of Tamarac | 24.16 | 47.55 | 71.71 | 64.21 | 76.35 | 140.56 |
| City of West Palm Beach [3] | 44.51 | 46.34 | 90.85 | 87.21 | 95.19 | 182.40 |
| Hillsboro Beach | 37.88 | 46.10 | 83.98 | 73.91 | 84.44 | 158.35 |
| Martin County [3] | 31.17 | 45.03 | 76.20 | 56.21 | 62.87 | 119.08 |
| Palm Beach County [3] | 28.61 | 35.41 | 64.02 | 83.36 | 54.37 | 137.73 |
| Seacoast Utility Authority | 28.35 | 36.15 | 64.50 | 67.41 | 39.07 | 106.48 |
| Town of Jupiter [3] | 30.07 | 22.75 | 52.82 | 47.45 | 22.75 | 70.20 |
| Town of Lantana | 29.74 | 43.11 | 72.85 | 51.94 | 62.51 | 114.45 |
| Town of Manalapan [3] | 35.47 | 63.45 | 98.92 | 56.53 | 118.08 | 174.61 |
| Village of Golf [3] | 32.20 | 28.79 | 60.99 | 38.93 | 39.94 | 78.87 |
| Village of Palm Springs [3] | 30.57 | 54.23 | 84.80 | 66.39 | 68.61 | 135.00 |
| Village of Tequesta [3] | 38.39 | 22.75 | 61.14 | 72.86 | 22.75 | 95.61 |
| Village of Wellington [3] | 33.57 | 31.68 | 65.25 | 63.90 | 50.58 | 114.48 |
| Other Florida Utilities' Average | \$31.59 | \$42.24 | \$73.83 | \$66.52 | \$66.92 | \$133.44 |

- [1] Unless otherwise noted, amounts shown reflect residential rates in effect July 2020 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside-the-town 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] Reflects average usage of a typical single-family residential customer and multi-family usage per unit with both water and wastewater service located inside the corporate limits of the Town of Highland Beach.
- [3] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next 12 months following the comparison preparation date.

As can be seen above, the average bills produced from the rates that have been adopted by the Town for the Fiscal Year 2021 are comparable or lower than that of other neighboring utilities surveyed and are considered reasonable and comparable. It should be noted that several of the utilities surveyed are anticipating a rate change in the next 12 months (pursuant to a rate evaluation that is underway, an adopted rate-phasing program, or through the application of a price [inflationary] index), which would further improve the competitive position of the System from what is indicated above.

CONCLUSIONS AND RATE RECOMMENDATIONS

Based on assumptions and analyses as presented in this report and shown in more detail in the tables at the end of this report relative to the determination of the Financial Forecast and revenue sufficiency analysis for the System and in the design of the proposed rates for utility service, the following conclusions and recommendations are made:

1. The existing rates are not projected to be sufficient to meet the forecasted financial needs of the System, including: i) the funding of the ongoing operation and maintenance expenses; ii) the capital improvement program primarily for the renewal and replacements of the System utility infrastructure; iii) the issuance of additional debt to fund a portion of the identified capital plan; and iv) the phase-out of the Outstanding and Additional Loan debt service payment from the General Fund.
2. Based upon the assumptions as disclosed herein and the findings of this analysis, which includes the implementation and recognition of the proposed rate adjustments effective October 1st of each fiscal year, the Town's financial operating targets and goals are anticipated to be generally achieved:
 - a. The revenue requirements of the Utility are fully funded.
 - b. The projected capital needs of the Utility are fully funded.
 - c. Targeted ending cash balances are met throughout the Projection Period.
3. The proposed rates are designed to implement rate structure changes in support of the rate objectives of the Town. It is unknown how customers may react and how that will affect the amount of rate revenues to be received. It is recommended that the Town closely monitor the actual revenues realized from the proposed rates and make corresponding adjustments, if necessary, to assure full cost recovery.
4. Recognizing that the proposed rates as reflected in this study represent an increase in the rates charged for utility service and pursuant to Florida Statutes, Chapter 180.136, the Town will need to notice the proposed increase to each customer of the utility through the utility's billing process. The notice needs to state the date, time, and place of the Town's meeting at which the proposed rates will be considered.
5. For all years after Fiscal Year 2021, the rates are proposed to be adjusted uniformly by the percent increase. The projected rates for water and wastewater service were compared with neighboring and peer communities. It is expected that the Town's rates will remain competitive recognizing implementation of the identified rate implementation plan.

6. Recognizing that actual results may vary from projections, it is recommended that the Town periodically perform updates to this revenue sufficiency evaluation in order meet the capital, rate and financial objectives and best management practices as discussed in this report.
7. Based on our review of the detailed customer billing information conducted in support of the determination of the existing rate revenues and the proposed rates for utility service, several of the customers appeared to possibly not be classified correctly in the utility billing system. It is recommended that the Town conduct a customer analysis of the rate classifications to assure that the customers are properly recognized and are being billed in accordance with the proposed rate classifications and rates recommendations.

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TOWN OF HIGHLAND BEACH, FLORIDA

2020 REVENUE SUFFICIENCY AND RATE STUDY – WATER AND WASTEWATER SYSTEMS

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Table 1

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Water and Wastewater Customers

Table 1

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Water and Wastewater Customers

Table 2

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Historical and Current Rates - Water and Wastewater System

| Line No. | Description | Fiscal Year Ending September 30, | | |
|--|------------------------------------|----------------------------------|----------|--|
| | | 2019 | 2020 | |
| Water Service: | | | | |
| Residential Metered Services (Bi-Monthly) | | | | |
| 1 | Water Flat Charge | \$ 32.80 | \$ 33.59 | |
| Usage Charge per Unit (per 1,000 gallons) | | | | |
| 2 | Block 1 (0-19,000 gallons) | \$ 2.35 | \$ 2.41 | |
| 3 | Block 2 (19,001-49,000 gallons) | 4.08 | 4.18 | |
| 4 | Block 3 (49,001 gallons and above) | 5.03 | 5.15 | |
| Multi-Family Services (Bi-Monthly) | | | | |
| 5 | Water Flat Charge | \$ 32.80 | \$ 33.59 | |
| Usage Charge per Unit (per 1,000 gallons) | | | | |
| 6 | Block 1 (0-13,000 gallons) | \$ 2.35 | \$ 2.41 | |
| 7 | Block 2 (13,001-23,000 gallons) | 2.83 | 2.90 | |
| 8 | Block 3 (23,001 gallons and above) | 5.03 | 5.15 | |
| Commercial Services (Bi-Monthly) | | | | |
| Base Service Charge: | | | | |
| 9 | Water Flat Charge | \$ 32.80 | \$ 33.59 | |
| Usage Charge per Unit (per 1,000 gallons) | | | | |
| 10 | Block 1 (0-19,000 gallons) | \$ 2.35 | \$ 2.41 | |
| 11 | Block 2 (19,001-49,000 gallons) | 4.08 | 4.18 | |
| 12 | Block 3 (49,001 gallons and above) | 5.03 | 5.15 | |
| Wastewater Service: | | | | |
| Residential Metered Services (Bi-Monthly) | | | | |
| 13 | Flat Charge | \$ 43.00 | \$ 44.03 | |
| Multi-Family Services (Bi-Monthly) | | | | |
| 14 | Flat Charge | \$ 43.00 | \$ 44.03 | |
| Commercial Services (Bi-Monthly) | | | | |
| 15 | Flat Charge | \$ 43.00 | \$ 44.03 | |

Table 3

Town of Highland Beach, Florida
 Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Water Rate Revenues Under Existing Rates

| Line No. | Description | Historical - Test Year | | | | | | | | Projected Fiscal Year Ending September 30, | | | | | | | |
|---|---|------------------------|----------|---------|---------------------|------------|----------|---------|---------------------|--|----------|---------|---------------------|------------|----------|---------|---------------------|
| | | 2019 | | | | 2020 | | | | 2021 | | | | 2022 | | | |
| | | Bill Freq | Rates | Stats | Revenues | Bill Freq. | Rates | Stats | Revenues | Bill Freq. | Rates | Stats | Revenues | Bill Freq. | Rates | Stats | Revenues |
| Residential Services (Bi-Monthly) | | | | | | | | | | | | | | | | | |
| 1 | Base Charge | 100% | \$ 32.80 | 381 | \$ 74,981 | 100% | \$ 33.59 | 381 | \$ 76,787 | 100% | \$ 33.59 | 381 | \$ 76,787 | 100% | \$ 33.59 | 381 | \$ 76,787 |
| 2 | Sub-Total | | | 381 | \$ 74,981 | | | 381 | \$ 76,787 | | | 381 | \$ 76,787 | | | 381 | \$ 76,787 |
| 3 | Usage Charges (per 1,000 gallons) | | | | | | | | | | | | | | | | |
| 3 | Block 1 (0-19,000 gallons) | 25.88% | \$ 2.35 | 30,602 | \$ 71,915 | 25.88% | \$ 2.41 | 30,583 | \$ 73,706 | 25.88% | \$ 2.41 | 30,583 | \$ 73,706 | 25.88% | \$ 2.41 | 30,583 | \$ 73,706 |
| 4 | Block 2 (19,001-49,000 gallons) | 26.76% | 4.08 | 31,650 | 129,132 | 26.76% | 4.18 | 31,631 | 132,217 | 26.76% | 4.18 | 31,631 | 132,217 | 26.76% | 4.18 | 31,631 | 132,217 |
| 5 | Block 3 (49,001 gallons and above) | 47.36% | 5.03 | 56,006 | 281,710 | 47.36% | 5.15 | 55,972 | 288,256 | 47.36% | 5.15 | 55,972 | 288,256 | 47.36% | 5.15 | 55,972 | 288,256 |
| 6 | Sub-Total | | | 118,258 | \$ 482,757 | | | 118,186 | \$ 494,178 | | | 118,186 | \$ 494,178 | | | 118,186 | \$ 494,178 |
| 7 | Total Residential Services (Bi-Monthly) | | | | \$ 557,738 | | | | \$ 570,965 | | | | \$ 570,965 | | | | \$ 570,965 |
| Multi-Family Services (Bi-Monthly) | | | | | | | | | | | | | | | | | |
| 8 | Base Charge | 100% | \$ 32.80 | 3,883 | \$ 764,174 | 100% | \$ 33.59 | 3,883 | \$ 782,580 | 100% | \$ 33.59 | 3,883 | \$ 782,580 | 100% | \$ 33.59 | 3,883 | \$ 782,580 |
| 9 | Sub-Total | | | 3,883 | \$ 764,174 | | | 3,883 | \$ 782,580 | | | 3,883 | \$ 782,580 | | | 3,883 | \$ 782,580 |
| 10 | Usage Charges (per 1,000 gallons) | | | | | | | | | | | | | | | | |
| 10 | Block 1 (0-13,000 gallons) | 89.60% | \$ 2.35 | 219,388 | \$ 515,562 | 89.60% | \$ 2.41 | 219,188 | \$ 528,242 | 89.60% | \$ 2.41 | 219,188 | \$ 528,242 | 89.60% | \$ 2.41 | 219,188 | \$ 528,242 |
| 11 | Block 2 (13,001-23,000 gallons) | 3.40% | 2.83 | 8,325 | 23,560 | 3.40% | 2.90 | 8,317 | 24,120 | 3.40% | 2.90 | 8,317 | 24,120 | 3.40% | 2.90 | 8,317 | 24,120 |
| 12 | Block 3 (23,001 gallons and above) | 6.90% | 5.03 | 16,895 | 84,981 | 6.90% | 5.15 | 16,879 | 86,929 | 6.90% | 5.15 | 16,879 | 86,929 | 6.90% | 5.15 | 16,879 | 86,929 |
| 13 | Sub-Total | | | 244,853 | \$ 624,103 | | | 244,629 | \$ 639,291 | | | 244,629 | \$ 639,291 | | | 244,629 | \$ 639,291 |
| 14 | Total Multi-Family Services (Bi-Monthly) | | | | \$ 1,388,278 | | | | \$ 1,421,871 | | | | \$ 1,421,871 | | | | \$ 1,421,871 |
| General Service | | | | | | | | | | | | | | | | | |
| 15 | Base Charge | | \$ 32.80 | 132 | \$ 25,978 | | \$ 33.59 | 132 | \$ 26,603 | | \$ 33.59 | 132 | \$ 26,603 | | \$ 33.59 | 132 | \$ 26,603 |
| 16 | Sub-Total | | | 132 | \$ 25,978 | | | 132 | \$ 26,603 | | | 132 | \$ 26,603 | | | 132 | \$ 26,603 |
| 17 | Usage Charge per Unit (per 1,000 gallons) | | | | | | | | | | | | | | | | |
| 17 | Block 1 (0-19,000 gallons) | 55.04% | \$ 2.35 | 9,846 | \$ 23,137 | 55.04% | \$ 2.41 | 9,852 | \$ 23,743 | 55.04% | \$ 2.41 | 9,852 | \$ 23,743 | 55.04% | \$ 2.41 | 9,852 | \$ 23,743 |
| 18 | Block 2 (19,001-49,000 gallons) | 6.50% | 4.08 | 1,163 | 4,744 | 6.50% | 4.18 | 1,163 | 4,863 | 6.50% | 4.18 | 1,163 | 4,863 | 6.50% | 4.18 | 1,163 | 4,863 |
| 19 | Block 3 (49,001 gallons and above) | 38.46% | 5.03 | 6,880 | 34,605 | 38.46% | 5.15 | 6,884 | 35,453 | 38.46% | 5.15 | 6,884 | 35,453 | 38.46% | 5.15 | 6,884 | 35,453 |
| 20 | Sub-Total | | | 17,888 | \$ 62,486 | | | 17,899 | \$ 64,059 | | | 17,899 | \$ 64,059 | | | 17,899 | \$ 64,059 |
| 21 | Total General Service | | | | \$ 88,464 | | | | \$ 90,662 | | | | \$ 90,662 | | | | \$ 90,662 |
| 22 | Subtotal before Revenue Adjustment | | | | \$ 2,034,479 | | | | \$ 2,083,498 | | | | \$ 2,083,498 | | | | \$ 2,083,498 |
| 23 | Revenue Adjustment - Percent | | | | -1.00% | | | | 0.00% | | | | 0.00% | | | | 0.00% |
| 24 | Revenue Adjustment - Amount | | | | (20,345) | | | | - | | | | - | | | | - |
| 25 | ADJUSTED RETAIL WATER REVENUE | | | | \$ 2,014,134 | | | | \$ 2,083,498 | | | | \$ 2,083,498 | | | | \$ 2,083,498 |

Table 3

Town of Highland Beach, Florida
 Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Water Rate Revenues Under Existing Rates

| Line No. | Description | Projected Fiscal Year Ending September 30, | | | | | | | | | | | |
|---|---|--|----------|---------|---------------------|------------|----------|---------|---------------------|------------|----------|---------|---------------------|
| | | 2023 | | | | 2024 | | | | 2025 | | | |
| | | Bill Freq. | Rates | Stats | Revenues | Bill Freq. | Rates | Stats | Revenues | Bill Freq. | Rates | Stats | Revenues |
| Residential Services (Bi-Monthly) | | | | | | | | | | | | | |
| 1 | Base Charge | 100% | \$ 33.59 | 381 | \$ 76,787 | 100% | \$ 33.59 | 381 | \$ 76,787 | 100% | \$ 33.59 | 381 | \$ 76,787 |
| 2 | Sub-Total | | | 381 | \$ 76,787 | | | 381 | \$ 76,787 | | | 381 | \$ 76,787 |
| Usage Charges (per 1,000 gallons) | | | | | | | | | | | | | |
| 3 | Block 1 (0-19,000 gallons) | 25.88% | \$ 2.41 | 30,583 | \$ 73,706 | 25.88% | \$ 2.41 | 30,583 | \$ 73,706 | 25.88% | \$ 2.41 | 30,583 | \$ 73,706 |
| 4 | Block 2 (19,001-49,000 gallons) | 26.76% | 4.18 | 31,631 | 132,217 | 26.76% | 4.18 | 31,631 | 132,217 | 26.76% | 4.18 | 31,631 | 132,217 |
| 5 | Block 3 (49,001 gallons and above) | 47.36% | 5.15 | 55,972 | 288,256 | 47.36% | 5.15 | 55,972 | 288,256 | 47.36% | 5.15 | 55,972 | 288,256 |
| 6 | Sub-Total | | | 118,186 | \$ 494,178 | | | 118,186 | \$ 494,178 | | | 118,186 | \$ 494,178 |
| 7 | Total Residential Services (Bi-Monthly) | | | | \$ 570,965 | | | | \$ 570,965 | | | | \$ 570,965 |
| Multi-Family Services (Bi-Monthly) | | | | | | | | | | | | | |
| 8 | Base Charge | 100% | \$ 33.59 | 3,883 | \$ 782,580 | 100% | \$ 33.59 | 3,883 | \$ 782,580 | 100% | \$ 33.59 | 3,883 | \$ 782,580 |
| 9 | Sub-Total | | | 3,883 | \$ 782,580 | | | 3,883 | \$ 782,580 | | | 3,883 | \$ 782,580 |
| Usage Charges (per 1,000 gallons) | | | | | | | | | | | | | |
| 10 | Block 1 (0-13,000 gallons) | 89.60% | \$ 2.41 | 219,188 | \$ 528,242 | 89.60% | \$ 2.41 | 219,188 | \$ 528,242 | 89.60% | \$ 2.41 | 219,188 | \$ 528,242 |
| 11 | Block 2 (13,001-23,000 gallons) | 3.40% | 2.90 | 8,317 | 24,120 | 3.40% | 2.90 | 8,317 | 24,120 | 3.40% | 2.90 | 8,317 | 24,120 |
| 12 | Block 3 (23,001 gallons and above) | 6.90% | 5.15 | 16,879 | 86,929 | 6.90% | 5.15 | 16,879 | 86,929 | 6.90% | 5.15 | 16,879 | 86,929 |
| 13 | Sub-Total | | | 244,629 | \$ 639,291 | | | 244,629 | \$ 639,291 | | | 244,629 | \$ 639,291 |
| 14 | Total Multi-Family Services (Bi-Monthly) | | | | \$ 1,421,871 | | | | \$ 1,421,871 | | | | \$ 1,421,871 |
| General Service | | | | | | | | | | | | | |
| 15 | Base Charge | | \$ 33.59 | 132 | \$ 26,603 | | | 132 | \$ 26,603 | | | 132 | \$ 26,603 |
| 16 | Sub-Total | | | 132 | \$ 26,603 | | | 132 | \$ 26,603 | | | 132 | \$ 26,603 |
| Usage Charge per Unit (per 1,000 gallons) | | | | | | | | | | | | | |
| 17 | Block 1 (0-19,000 gallons) | 55.04% | \$ 2.41 | 9,852 | \$ 23,743 | 55.04% | \$ 2.41 | 9,852 | \$ 23,743 | 55.04% | \$ 2.41 | 9,852 | \$ 23,743 |
| 18 | Block 2 (19,001-49,000 gallons) | 6.50% | 4.18 | 1,163 | 4,863 | 6.50% | 4.18 | 1,163 | 4,863 | 6.50% | 4.18 | 1,163 | 4,863 |
| 19 | Block 3 (49,001 gallons and above) | 38.46% | 5.15 | 6,884 | 35,453 | 38.46% | 5.15 | 6,884 | 35,453 | 38.46% | 5.15 | 6,884 | 35,453 |
| 20 | Sub-Total | | | 17,899 | \$ 64,059 | | | 17,899 | \$ 64,059 | | | 17,899 | \$ 64,059 |
| 21 | Total General Service | | | | \$ 90,662 | | | | \$ 90,662 | | | | \$ 90,662 |
| 22 | Subtotal before Revenue Adjustment | | | | \$ 2,083,498 | | | | \$ 2,083,498 | | | | \$ 2,083,498 |
| 23 | Revenue Adjustment - Percent | | | | 0.00% | | | | 0.00% | | | | 0.00% |
| 24 | Revenue Adjustment - Amount | | | | - | | | | - | | | | - |
| 25 | ADJUSTED RETAIL WATER REVENUE | | | | \$ 2,083,498 | | | | \$ 2,083,498 | | | | \$ 2,083,498 |

Table 4

Page 1 of 2

Town of Highland Beach, Florida
 Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Wastewater Rate Revenue Under Existing Rates

| Line No. | Description | Historical - Test Year | | | | Projected Fiscal Year Ending September 30, | | | | | | | |
|--|---|------------------------|----------|-------|----------------------------|--|----------|-------|----------------------------|------------|----------|-------|----------------------------|
| | | 2019 | | | | 2020 | | | | 2021 | | | |
| | | Bill Freq | Rates | Stats | Revenues | Bill Freq. | Rates | Stats | Revenues | Bill Freq. | Rates | Stats | Revenues |
| Residential Metered Services (Bi-Monthly) | | | | | | | | | | | | | |
| 1 | Base Charge | 100.00% | \$ 43.00 | 381 | \$ 98,298 | 100.00% | \$ 44.03 | 381 | \$ 100,653 | 100.00% | \$ 44.03 | 381 | \$ 100,653 |
| 2 | Sub-Total | | | 381 | \$ 98,298 | | | 381 | \$ 100,653 | | | 381 | \$ 100,653 |
| Multi-Family Services (Bi-Monthly) | | | | | | | | | | | | | |
| 3 | Base Charge | 100.00% | \$ 43.00 | 3,875 | \$ 999,750 | 100.00% | \$ 44.03 | 3,875 | \$ 1,023,698 | 100.00% | \$ 44.03 | 3,875 | \$ 1,023,698 |
| 4 | Sub-Total | | | 3,875 | \$ 999,750 | | | 3,875 | \$ 1,023,698 | | | 3,875 | \$ 1,023,698 |
| Other Customers Service (Bi-Monthly) | | | | | | | | | | | | | |
| 5 | Base Charge | 100.00% | \$ 43.00 | 132 | \$ 34,056 | 100.00% | \$ 44.03 | 132 | \$ 34,872 | 100.00% | \$ 44.03 | 132 | \$ 34,872 |
| 6 | Sub-Total | | | 132 | \$ 34,056 | | | 132 | \$ 34,872 | | | 132 | \$ 34,872 |
| 7 | Subtotal before Revenue Adjustment | | | | \$ 1,132,104 | | | | \$ 1,159,222 | | | | \$ 1,159,222 |
| 8 | Revenue Adjustment - Percent | | | | 0.00% | | | | 0.00% | | | | 0.00% |
| 9 | Revenue Adjustment - Amount | | | | - | | | | - | | | | - |
| 10 | ADJUSTED RETAIL WASTEWATER REVENUE | | | | <u>\$ 1,132,104</u> | | | | <u>\$ 1,159,222</u> | | | | <u>\$ 1,159,222</u> |
| | | | | | | | | | | | | | <u>\$ 1,159,222</u> |

Table 4

Town of Highland Beach, Florida
 Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Wastewater Rate Revenue Under Existing Rates

| Line No. | Description | Projected Fiscal Year Ending September 30, | | | | | | | | | | | |
|--|---|--|----------|-------|----------------------------|------------|----------|-------|----------------------------|------------|----------|-------|----------------------------|
| | | 2023 | | | | 2024 | | | | 2025 | | | |
| | | Bill Freq. | Rates | Stats | Revenues | Bill Freq. | Rates | Stats | Revenues | Bill Freq. | Rates | Stats | Revenues |
| Residential Metered Services (Bi-Monthly) | | | | | | | | | | | | | |
| 1 | Base Charge | 100.00% | \$ 44.03 | 381 | \$ 100,653 | 100.00% | \$ 44.03 | 381 | \$ 100,653 | 100.00% | \$ 44.03 | 381 | \$ 100,653 |
| 2 | Sub-Total | | | 381 | \$ 100,653 | | | 381 | \$ 100,653 | | | 381 | \$ 100,653 |
| Multi-Family Services (Bi-Monthly) | | | | | | | | | | | | | |
| 3 | Base Charge | 100.00% | \$ 44.03 | 3,875 | \$ 1,023,698 | 100.00% | \$ 44.03 | 3,875 | \$ 1,023,698 | 100.00% | \$ 44.03 | 3,875 | \$ 1,023,698 |
| 4 | Sub-Total | | | 3,875 | \$ 1,023,698 | | | 3,875 | \$ 1,023,698 | | | 3,875 | \$ 1,023,698 |
| Other Customers Service (Bi-Monthly) | | | | | | | | | | | | | |
| 5 | Base Charge | 100.00% | \$ 44.03 | 132 | \$ 34,872 | 100.00% | \$ 44.03 | 132 | \$ 34,872 | 100.00% | \$ 44.03 | 132 | \$ 34,872 |
| 6 | Sub-Total | | | 132 | \$ 34,872 | | | 132 | \$ 34,872 | | | 132 | \$ 34,872 |
| 7 | Subtotal before Revenue Adjustment | | | | \$ 1,159,222 | | | | \$ 1,159,222 | | | | \$ 1,159,222 |
| 8 | Revenue Adjustment - Percent | | | | 0.00% | | | | 0.00% | | | | 0.00% |
| 9 | Revenue Adjustment - Amount | | | | - | | | | - | | | | - |
| 10 | ADJUSTED RETAIL WASTEWATER REVENUE | | | | <u>\$ 1,159,222</u> | | | | <u>\$ 1,159,222</u> | | | | <u>\$ 1,159,222</u> |

Table 5

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Other Operating Revenues

| Line No. | Description | Historical | | | Budget | | Adjusted | | Budget | | Adjusted | | Fiscal Year Ending September 30, | | | |
|------------------------------|------------------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|------------|-------------------|--------------------|-------------------|-------------------|----------------------------------|-------------------|-------------------|--|
| | | 2017 | 2018 | 2019 | 2020 | Adjustments | 2020 | Escalator | 2021 | Adjustments | 2021 | 2022 | 2023 | 2024 | 2025 | |
| Other System Revenues | | | | | | | | | | | | | | | | |
| Water - Other Revenues | | | | | | | | | | | | | | | | |
| 1 | Fire Hydrant - Maintenance Fee | \$ 30,720 | \$ 30,720 | \$ - | \$ 30,720 | \$ - | \$ 30,720 | Constant | \$ 30,720 | \$ - | \$ 30,720 | \$ 30,720 | \$ 30,720 | \$ 30,720 | \$ 30,720 | |
| 2 | Interest on Investments | 15,463 | 56,479 | 84,797 | 60,000 | (60,000) | - | Constant | 35,000 | (35,000) | - | - | - | - | - | |
| 3 | Disposition of Fixed Assets | - | - | - | - | - | - | Constant | - | - | - | - | - | - | - | |
| 4 | Administrative Reimbursements | 140,000 | 140,000 | 140,000 | 147,000 | - | 147,000 | Calculated | 154,350 | - | 154,350 | 158,363 | 162,322 | 166,218 | 170,041 | |
| 5 | Insurance Reimbursements | - | - | 2,965 | - | - | - | Constant | - | - | - | - | - | - | - | |
| 6 | Other Miscellaneous Revenue | 3,561 | 2,027 | 289 | 3,000 | (1,000) | 2,000 | Constant | 3,000 | (1,000) | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | |
| 7 | Total Water - Other Revenues | \$ 189,744 | \$ 229,226 | \$ 228,051 | \$ 240,720 | \$ (61,000) | \$ 179,720 | Yes | \$ 223,070 | \$ (36,000) | \$ 187,070 | \$ 191,083 | \$ 195,042 | \$ 198,938 | \$ 202,761 | |
| Wastewater - Other Revenues | | | | | | | | | | | | | | | | |
| 8 | Interest on Investments | \$ 6,443 | \$ 24,731 | \$ 37,982 | \$ 25,000 | \$ (25,000) | \$ - | Constant | \$ 15,000 | \$ (15,000) | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 9 | Insurance Reimbursements | - | - | 35 | - | - | - | Constant | - | - | - | - | - | - | - | |
| 10 | Other Miscellaneous Revenue | - | - | - | - | - | - | Constant | - | - | - | - | - | - | - | |
| 11 | Total Wastewater - Other Revenues | \$ 6,443 | \$ 24,731 | \$ 38,017 | \$ 25,000 | \$ (25,000) | \$ - | Yes | \$ 15,000 | \$ (15,000) | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 12 | Total Other System Revenues | \$ 196,187 | \$ 253,958 | \$ 266,068 | \$ 265,720 | \$ (86,000) | \$ 179,720 | | \$ 238,070 | \$ (51,000) | \$ 187,070 | \$ 191,083 | \$ 195,042 | \$ 198,938 | \$ 202,761 | |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Calculation of Projected Impact Fee Revenues

| Line No. | Description | Fiscal Year Ending September 30, | | | | | |
|--------------------------|-----------------------------|----------------------------------|---------|---------|---------|---------|---------|
| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Water System | | | | | | | |
| 1 | Additional Customers (ERUs) | - | - | - | - | - | - |
| | Reconnects | | | | | | |
| 2 | Percentage | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| 3 | Customers (3/4" Meters) | - | - | - | - | - | - |
| 4 | New Connections | - | - | - | - | - | - |
| Connection Fees | | | | | | | |
| 5 | Water | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| 6 | Total Connection Fees | \$3,000 | \$3,000 | \$3,000 | \$3,000 | \$3,000 | \$3,000 |
| Revenues | | | | | | | |
| 7 | Water | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 8 | Total Revenues | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Wastewater System | | | | | | | |
| 9 | Additional Customers (ERUs) | - | - | - | - | - | - |

Table 7

Town of Highland Beach, Florida

Operating Budget and Adjustments

| Line No. | Description | Actual 2017 | Actual 2018 | Actual 2019 | Budget 2020 | Adjustments | Adjusted 2020 Budget | Budget 2021 | Adjustments | Adjusted 2021 Budget |
|--------------------------------|--|---------------------|---------------------|---------------------|---------------------|-----------------------|----------------------|---------------------|-----------------------|----------------------|
| OPERATING BUDGET | | | | | | | | | | |
| Water System Operations | | | | | | | | | | |
| Personal Services | | | | | | | | | | |
| 1 | Regular Salaries and Wages | \$ 647,104 | \$ 673,551 | \$ 614,441 | \$ 484,930 | \$ - | \$ 484,930 | \$ 501,900 | \$ - | \$ 501,900 |
| 2 | Overtime | 33,381 | 41,164 | 39,812 | 36,000 | - | 36,000 | 36,000 | - | 36,000 |
| 3 | Shift Differential Pay | 5,078 | 5,412 | 6,039 | 9,960 | (3,000) | 6,960 | 10,000 | (3,000) | 7,000 |
| 4 | Education Incentive Pay | - | - | 8,000 | 6,000 | - | 6,000 | 6,000 | - | 6,000 |
| 5 | FICA Taxes | 50,850 | 50,384 | 50,125 | 49,220 | - | 49,220 | 50,000 | - | 50,000 |
| 6 | Retirement Contributions | 116,323 | 111,638 | 57,208 | 53,900 | 25,000 | 78,900 | 60,000 | 20,000 | 80,000 |
| 7 | OPEB Expense | - | 83,250 | - | - | - | - | - | - | - |
| 8 | Health Insurance / Allowance | 203,689 | 214,288 | 162,333 | 159,200 | - | 159,200 | 175,100 | - | 175,100 |
| 9 | Workers Compensation | 34,006 | 29,748 | 35,000 | 42,000 | - | 42,000 | 45,000 | - | 45,000 |
| 10 | Compensated Absences | (8,319) | (5,721) | - | - | - | - | - | - | - |
| | Total Personal Services | \$ 1,082,111 | \$ 1,203,714 | \$ 972,958 | \$ 841,210 | \$ 22,000 | \$ 863,210 | \$ 884,000 | \$ 17,000 | \$ 901,000 |
| Operating Expenses | | | | | | | | | | |
| 11 | Professional Fees | \$ 30,379 | \$ 63,747 | \$ 23,337 | \$ 75,000 | \$ (15,000) | \$ 60,000 | \$ 150,000 | \$ - | \$ 150,000 |
| 12 | Other Contractual Services | 597 | 7,572 | 10,390 | 36,520 | 10,000 | 46,520 | 37,000 | - | 37,000 |
| 13 | Travel and Per Diem | 331 | 2,361 | 1,571 | 3,745 | - | 3,745 | 3,745 | - | 3,745 |
| 14 | Training and Development | 3,245 | 3,230 | 3,473 | 2,700 | - | 2,700 | 2,700 | - | 2,700 |
| 15 | Communications | 2,380 | 1,729 | 1,714 | 4,050 | - | 4,050 | 3,700 | - | 3,700 |
| 16 | Postage and Freight | 43 | 140 | 88 | 200 | - | 200 | 200 | - | 200 |
| 17 | Utility Services | 249,704 | 250,237 | 222,292 | 360,000 | (60,000) | 300,000 | 360,000 | (60,000) | 300,000 |
| 18 | Insurance and Bonds | 101,458 | 109,789 | 106,265 | 130,000 | 15,000 | 145,000 | 135,000 | 10,000 | 145,000 |
| 19 | Repair and Maintenance - General | 358,333 | 183,539 | 238,708 | 150,000 | - | 150,000 | 150,000 | 15,000 | 165,000 |
| 20 | Repair and Maintenance - RO Cartridges | - | - | - | - | - | - | - | - | - |
| 21 | Repair and Maintenance - Vehicle | 2,682 | 1,227 | 1,831 | 3,100 | (1,100) | 2,000 | 2,500 | - | 2,500 |
| 22 | Renewal and Replacements | 13,465 | 97,209 | 110,437 | 172,500 | (172,500) | - | 172,500 | (172,500) | (172,500) |
| 23 | Other Current Charges - Licenses and Permits | - | - | 4,275 | 5,450 | - | 5,450 | 5,450 | - | 5,450 |
| 24 | Administrative Charges | 298,550 | 298,550 | 298,550 | 327,870 | - | 327,870 | 325,000 | - | 325,000 |
| 25 | Operating Supplies | 164,510 | 182,959 | 236,161 | 230,000 | - | 230,000 | 230,000 | - | 230,000 |
| 26 | Uniforms | 4,679 | 3,771 | 6,144 | 7,000 | - | 7,000 | 7,000 | - | 7,000 |
| 27 | Operating Supplies - Safety | - | 7,883 | 1,213 | 3,500 | - | 3,500 | 3,500 | - | 3,500 |
| 28 | Operating Supplies - Gasoline | 645 | 355 | 862 | 6,250 | (2,000) | 4,250 | 6,250 | (2,000) | 4,250 |
| 29 | Books, Dues, Education, and Subscriptions | 1,025 | 797 | 1,024 | 3,110 | (1,500) | 1,610 | 3,110 | - | 3,110 |
| 30 | Depreciation | 690,773 | - | - | - | - | - | - | - | - |
| 31 | Total Operating Expenses | \$ 1,922,800 | \$ 1,215,096 | \$ 1,268,334 | \$ 1,520,995 | \$ (227,100) | \$ 1,293,895 | \$ 1,597,655 | \$ (209,500) | \$ 1,388,155 |
| Capital Outlay | | | | | | | | | | |
| 32 | Buildings | \$ - | \$ - | \$ 2,160 | \$ 108,000 | \$ (108,000) | \$ - | \$ 25,000 | \$ (25,000) | \$ - |
| 33 | Improvements Other Than Buildings | - | 1,050,539 | 24,925 | 27,500 | (27,500) | - | 200,000 | (200,000) | - |
| 34 | Machinery and Equipment | - | - | - | 300,000 | (300,000) | - | 80,000 | (80,000) | - |
| 35 | Total Capital Outlay | \$ - | \$ 1,050,539 | \$ 27,085 | \$ 435,500 | \$ (435,500) | \$ - | \$ 305,000 | \$ (305,000) | \$ - |
| Debt Service | | | | | | | | | | |
| 36 | Principal - R.O. State Loan | \$ - | \$ - | \$ 635,758 | \$ 654,145 | \$ (654,145) | \$ - | \$ 673,069 | \$ (673,069) | \$ - |
| 37 | Principal - 2005 Refunding Loan | - | - | - | - | - | - | - | - | - |
| 38 | Principal - R.O. Expansion | - | - | 211,765 | 218,765 | (218,765) | - | 226,353 | (226,353) | - |
| 39 | Principal - AIA Direct Loan | - | - | 38,443 | 39,455 | (39,455) | - | 40,490 | (40,490) | - |
| 40 | Principal - ARRA Loan | - | - | 141,726 | 146,765 | (146,765) | - | 150,932 | (150,932) | - |
| 41 | Interest - R.O. State Loan | - | - | 210,273 | 212,565 | (212,565) | - | 215,078 | (215,078) | - |
| 42 | Interest - DWSRF502901 RO | 137,194 | 120,536 | 102,666 | 84,275 | (84,275) | - | 65,355 | (65,355) | - |
| 43 | Interest - R.O. Expansion | 98,759 | 92,529 | 85,116 | 78,115 | (78,115) | - | 70,527 | (70,527) | - |
| 44 | Interest - AIA Direct Loan | 15,596 | 14,677 | 13,693 | 12,685 | (12,685) | - | 11,646 | (11,646) | - |
| 45 | Interest - ARRA Loan | 63,216 | 59,540 | 56,585 | 51,545 | (51,545) | - | 47,379 | (47,379) | - |
| 46 | Interest - Capital Interest | - | - | - | - | - | - | - | - | - |
| 47 | Other Debt Cost - G O State Loan | - | - | - | - | - | - | - | - | - |
| 48 | SRF Loan Interest - WIIP 2017 | 10,820 | 49,446 | 53,200 | 50,910 | (50,910) | - | 48,395 | (48,395) | - |
| 49 | Total Debt Service | \$ 325,586 | \$ 336,728 | \$ 1,549,224 | \$ 1,549,225 | \$ (1,549,225) | \$ - | \$ 1,549,224 | \$ (1,549,224) | \$ - |
| Other Uses | | | | | | | | | | |
| 50 | Reserve for Contingency [1] | \$ 1,950 | \$ 24,974 | \$ 13,198 | \$ 72,000 | (7,200) | \$ 64,800 | \$ 70,000 | (1,300) | \$ 68,700 |
| 51 | Total Other Uses | \$ 1,950 | \$ 24,974 | \$ 13,198 | \$ 72,000 | \$ (7,200) | \$ 64,800 | \$ 70,000 | (1,300) | \$ 68,700 |
| 52 | Total Water System Operations | \$ 3,332,447 | \$ 3,831,051 | \$ 3,830,798 | \$ 4,418,930 | \$ (2,197,025) | \$ 2,221,905 | \$ 4,405,879 | \$ (2,048,024) | \$ 2,357,855 |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Operating Budget and Adjustments

| Line No. | Description | Actual 2017 | Actual 2018 | Actual 2019 | Budget 2020 | Adjustments | Adjusted 2020 Budget | Budget 2021 | Adjustments | Adjusted 2021 Budget |
|-------------------------------------|---|---------------------|---------------------|---------------------|---------------------|-----------------------|----------------------|---------------------|-----------------------|----------------------|
| Wastewater System Operations | | | | | | | | | | |
| | Operating Expenses | | | | | | | | | |
| 53 | Professional Fees | \$ - | \$ 7,750 | \$ 35,829 | \$ 105,000 | \$ (45,000) | \$ 60,000 | \$ 105,000 | \$ - | \$ 105,000 |
| 54 | Other Contractual Services | - | 4,149 | 1,175 | 19,000 | - | 19,000 | 19,000 | - | 19,000 |
| 55 | Utility Services | 30,559 | 27,963 | 32,805 | 40,000 | - | 40,000 | 40,000 | - | 40,000 |
| 56 | Sewage Treatment - City of Delray Beach | 672,269 | 690,686 | 618,182 | 750,000 | 209,755 | 959,755 | 955,000 | 33,052 | 988,052 |
| 57 | Insurance and Bonds | 4,331 | 5,453 | - | 7,000 | - | 7,000 | 9,000 | - | 9,000 |
| 58 | Repair and Maintenance - General | 51,509 | 87,260 | 103,851 | 57,000 | - | 57,000 | 57,000 | 23,000 | 80,000 |
| 59 | Renewal and Replacements | - | - | 96,698 | 150,000 | (150,000) | - | 100,000 | (100,000) | - |
| 60 | Other Current Charges - General | - | - | - | - | - | - | - | - | - |
| 61 | Administrative Charges | 140,000 | 140,000 | 140,000 | 147,000 | - | 147,000 | 154,350 | - | 154,350 |
| 62 | Operating Supplies | 255 | 209 | 564 | - | - | - | 1,000 | - | 1,000 |
| 63 | Depreciation | 95,161 | - | - | - | - | - | - | - | - |
| 64 | Total Operating Expenses | \$ 994,084 | \$ 963,469 | \$ 1,029,105 | \$ 1,275,000 | \$ 14,755 | \$ 1,289,755 | \$ 1,440,350 | \$ (43,948) | \$ 1,396,402 |
| | Capital Outlay | | | | | | | | | |
| 65 | Buildings | \$ - | \$ 6,083 | \$ 11,143 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 66 | Improvements Other Than Buildings | - | 1,321 | 22,135 | 100,000 | (100,000) | - | 425,000 | (425,000) | - |
| 67 | Machinery and Equipment | - | - | - | 75,000 | (75,000) | - | - | - | - |
| 68 | Total Capital Outlay | \$ - | \$ 7,404 | \$ 33,278 | \$ 175,000 | \$ (175,000) | \$ - | \$ 425,000 | \$ (425,000) | \$ - |
| | Other Uses | | | | | | | | | |
| 69 | Reserve for Contingency | \$ - | \$ - | \$ 17,174 | \$ 60,000 | (21,307) | \$ 38,693 | \$ 60,000 | (18,108) | \$ 41,892 |
| 70 | Total Other Uses | \$ - | \$ - | \$ 17,174 | \$ 60,000 | \$ (21,307) | \$ 38,693 | \$ 60,000 | \$ (18,108) | \$ 41,892 |
| 71 | Total Wastewater System Operations | \$ 994,084 | \$ 970,873 | \$ 1,079,556 | \$ 1,510,000 | \$ (181,552) | \$ 1,328,448 | \$ 1,925,350 | \$ (487,056) | \$ 1,438,294 |
| 72 | TOTAL OPERATING BUDGET | \$ 4,326,531 | \$ 4,801,923 | \$ 4,910,355 | \$ 5,928,930 | \$ (2,378,577) | \$ 3,550,353 | \$ 6,331,229 | \$ (2,535,080) | \$ 3,796,149 |

Table 8

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Expense Escalation Factors

| Line No. | Description | Escalation Reference | Projected Fiscal Year Ending September 30, | | | | | |
|-------------|--|-------------------------|--|--------|--------|--------|--------|--------|
| | | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| 1 | Inflation (CBO CPI Index February 2020) | Inflation | 1.0250 | 1.0260 | 1.0250 | 1.0240 | 1.0230 | 1.0230 |
| 2 | Labor Escalator | Labor | 1.0000 | 1.0300 | 1.0300 | 1.0300 | 1.0300 | 1.0300 |
| 3 | Contract Labor - Interim Plant Operations | Contract-L | 1.0000 | 1.0300 | 1.0300 | 1.0300 | 1.0300 | 1.0300 |
| 4 | Indirect Cost Escalation and OPEB | Indirect | 1.0000 | 1.0500 | 1.0500 | 1.0500 | 1.0500 | 1.0500 |
| 5 | Life/Health/Disability Insurance Escalator | Ins-Health | 1.0000 | 1.0500 | 1.0500 | 1.0500 | 1.0500 | 1.0500 |
| 6 | Property Insurance Escalator | Ins-Property | 1.0000 | 1.0400 | 1.0400 | 1.0400 | 1.0400 | 1.0400 |
| 7 | Fuel and Oil | Fuel | 1.0000 | 1.0239 | 1.0239 | 1.0239 | 1.0239 | 1.0239 |
| 8 | Electrical Expense | Electric | 1.0000 | 1.0263 | 1.0263 | 1.0263 | 1.0263 | 1.0263 |
| 9 | Chemicals | Chemical | 1.0000 | 1.0254 | 1.0254 | 1.0254 | 1.0254 | 1.0254 |
| 10 | Marginal Escalator | Margin | 1.0000 | 1.0100 | 1.0100 | 1.0100 | 1.0100 | 1.0100 |
| 11 | Constant | Constant | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 12 | Elimination Factor | Eliminate | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 13 | Other | Other | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 14 | Repair & Maintenance | Repair | 1.0000 | 1.0400 | 1.0400 | 1.0400 | 1.0400 | 1.0400 |
| 15 | Customer Acct. Growth + Inflation (Water) | Cust-W/S | 1.0000 | 1.0260 | 1.0250 | 1.0240 | 1.0230 | 1.0230 |
| 16 | Rate Revenue - Water | Water Rev | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 17 | Rate Revenue - Wastewater | Wastewater Rev | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 18 | Flow Growth + Inflation | Flow | 1.0000 | 1.0260 | 1.0250 | 1.0240 | 1.0230 | 1.0230 |
| 19 | Capital Escalator - ENR Index (10 Yr Change) | Capital-ENR | 1.0000 | 1.0285 | 1.0285 | 1.0285 | 1.0285 | 1.0285 |
| 20 | Capital Escalator - Marginal | Capital-Marginal | 1.0000 | 1.0100 | 1.0100 | 1.0100 | 1.0100 | 1.0100 |
| 21 | Capital Escalator - High | Capital-High | 1.0000 | 1.0500 | 1.0500 | 1.0500 | 1.0500 | 1.0500 |
| 22 | Bureau of Labor and Statistics - Water and Wastewater Maintenance Index (5 Yr Avg.) | WS Main Index | 1.0000 | 1.0384 | 1.0384 | 1.0384 | 1.0384 | 1.0384 |
| 23 | CIP Contingency | CIP Cont. | 1.0000 | 1.1000 | 1.1000 | 1.1000 | 1.1000 | 1.1000 |
| 24 | Calculated in Model | Calculated | N/A | N/A | N/A | N/A | N/A | N/A |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Expense Allocation Factors

| Line No. | Description | Escalation Reference | Water | Wastewater | Indirect |
|----------|-----------------------------------|----------------------|---------|------------|----------|
| 1 | Direct Water Expense | Water | 100.00% | 0.00% | 0.00% |
| 2 | Direct Wastewater Expense | Wastewater | 0.00% | 100.00% | 0.00% |
| 3 | Indirect Expense | Indirect | 0.00% | 0.00% | 100.00% |
| 4 | Total 2019 Rate Revenue | Revenue | 64.02% | 35.98% | 0.00% |
| 5 | Total Estimated Treated Flow 2020 | Flow | 63.11% | 36.89% | 0.00% |
| 6 | Total Fixed Assets - 2019 | Assets | 97.61% | 2.39% | 0.00% |
| 7 | 50% / 50% Split | 50/50 | 50.00% | 50.00% | 0.00% |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Projection and Allocation of Operating and Maintenance Expenditures to Water and Wastewater Systems

| Line No. | Description | Escalation Factor | Fiscal Year Ending September 30, | | | | | | | |
|---|--|-------------------|----------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|--|
| | | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | | |
| Total Water System Operations | | | | | | | | | | |
| Personal Services | | | | | | | | | | |
| 1 | Regular Salaries and Wages | Labor | \$ 484,930 | \$ 501,900 | \$ 516,957 | \$ 532,466 | \$ 548,440 | \$ 564,893 | | |
| 2 | Additional Personnel - Water | Calculated | - | - | 107,601 | 110,788 | 114,118 | 117,594 | | |
| 3 | Additional Personnel - Wastewater | Calculated | - | - | - | - | - | - | | |
| 4 | Overtime | Labor | 36,000 | 36,000 | 37,080 | 38,192 | 39,338 | 40,518 | | |
| 5 | Shift Differential Pay | Labor | 6,960 | 7,000 | 7,210 | 7,426 | 7,649 | 7,879 | | |
| 6 | Education Incentive Pay | Labor | 6,000 | 6,000 | 6,180 | 6,365 | 6,556 | 6,753 | | |
| 7 | FICA Taxes | Labor | 49,220 | 50,000 | 51,500 | 53,045 | 54,636 | 56,275 | | |
| 8 | Retirement Contributions | Labor | 78,900 | 80,000 | 82,400 | 84,872 | 87,418 | 90,041 | | |
| 9 | Health Insurance / Allowance | Ins-Health | 159,200 | 175,100 | 183,855 | 193,048 | 202,700 | 212,835 | | |
| 10 | Workers Compensation | Labor | 42,000 | 45,000 | 46,350 | 47,741 | 49,173 | 50,648 | | |
| 11 | Compensated Absences | Labor | - | - | - | - | - | - | | |
| Operating Expenses | | | | | | | | | | |
| 12 | Professional Fees | Inflation | \$ 60,000 | \$ 150,000 | \$ 75,000 | \$ 76,875 | \$ 78,720 | \$ 80,531 | | |
| 13 | Other Contractual Services | Inflation | 46,520 | 37,000 | 37,962 | 38,911 | 39,845 | 40,761 | | |
| 14 | Travel and Per Diem | Inflation | 3,745 | 3,745 | 3,842 | 3,938 | 4,033 | 4,126 | | |
| 15 | Training and Development | Inflation | 2,700 | 2,700 | 2,770 | 2,839 | 2,908 | 2,974 | | |
| 16 | Communications | Inflation | 4,050 | 3,700 | 3,796 | 3,891 | 3,984 | 4,076 | | |
| 17 | Postage and Freight | Inflation | 200 | 200 | 205 | 210 | 215 | 220 | | |
| 18 | Utility Services | Electric | 300,000 | 300,000 | 307,890 | 315,988 | 324,298 | 332,827 | | |
| 19 | Insurance and Bonds | Inflation | 145,000 | 145,000 | 148,770 | 152,489 | 156,149 | 159,740 | | |
| 20 | Repair and Maintenance - General | Repair | 150,000 | 165,000 | 171,600 | 178,464 | 185,603 | 193,027 | | |
| 21 | Repair and Maintenance - RO Cartridges | Repair | - | - | - | - | - | - | | |
| 22 | Repair and Maintenance - Vehicle | Repair | 2,000 | 2,500 | 2,600 | 2,704 | 2,812 | 2,925 | | |
| 23 | Renewal and Replacements | Repair | - | - | - | - | - | - | | |
| 24 | Other Current Charges - Licenses and Permits | Labor | 5,450 | 5,450 | 5,614 | 5,782 | 5,955 | 6,134 | | |
| 25 | Administrative Charges | Inflation | 327,870 | 325,000 | 333,450 | 341,786 | 349,989 | 358,039 | | |
| 26 | Operating Supplies | Inflation | 230,000 | 230,000 | 235,980 | 241,880 | 247,685 | 253,381 | | |
| 27 | Uniforms | Labor | 7,000 | 7,000 | 7,210 | 7,426 | 7,649 | 7,879 | | |
| 28 | Operating Supplies - Safety | Inflation | 3,500 | 3,500 | 3,591 | 3,681 | 3,769 | 3,856 | | |
| 29 | Operating Supplies - Gasoline | Inflation | 4,250 | 4,250 | 4,361 | 4,470 | 4,577 | 4,682 | | |
| 30 | Books, Dues, Education, and Subscriptions | Labor | 1,610 | 3,110 | 3,203 | 3,299 | 3,398 | 3,500 | | |
| 31 | Depreciation | Inflation | - | - | - | - | - | - | | |
| Capital Outlay | | | | | | | | | | |
| 32 | Buildings | Inflation | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| 33 | Improvements Other Than Buildings | Inflation | - | - | - | - | - | - | | |
| 33 | Machinery and Equipment | Inflation | - | - | - | - | - | - | | |
| 34 | Reclass Expenditures from CIP | Calculated | 108,000 | 51,425 | - | - | 335,690 | - | | |
| Other Uses | | | | | | | | | | |
| 35 | Reserve for Contingency | Calculated | 64,800 | 68,700 | \$ 71,609 | \$ 73,757 | \$ 75,949 | \$ 78,183 | | |
| 36 | Bad Debt Expense | Calculated | 3,125 | 3,594 | 4,025 | 4,508 | 4,779 | 4,898 | | |
| Total Wastewater System Operations | | | | | | | | | | |
| Operating Expenses | | | | | | | | | | |
| 37 | Other Contractual Services | Inflation | \$ 60,000 | \$ 105,000 | \$ 60,000 | \$ 61,500 | \$ 62,976 | \$ 64,424 | | |
| 38 | Other Contractual Services | Inflation | 19,000 | 19,000 | 19,494 | 19,981 | 20,461 | 20,932 | | |
| 39 | Utility Services | Electric | 40,000 | 40,000 | 41,052 | 42,132 | 43,240 | 44,377 | | |
| 40 | Sewage Treatment - City of Delray Beach | Calculated | 959,755 | 988,052 | 909,542 | 936,816 | 964,924 | 993,866 | | |
| 41 | Insurance and Bonds | Ins-Property | 7,000 | 9,000 | 9,360 | 9,734 | 10,124 | 10,529 | | |
| 42 | Repair and Maintenance - General | Repair | 57,000 | 80,000 | 83,200 | 86,528 | 89,989 | 93,589 | | |
| 43 | Renewal and Replacements | Repair | - | - | - | - | - | - | | |
| 44 | Other Current Charges - General | Inflation | - | - | - | - | - | - | | |
| 45 | Administrative Charges | Inflation | 147,000 | 154,350 | 158,363 | 162,322 | 166,218 | 170,041 | | |
| 46 | Operating Supplies | Inflation | - | 1,000 | 1,026 | 1,052 | 1,077 | 1,102 | | |
| 47 | Depreciation | Inflation | - | - | - | - | - | - | | |
| Capital Outlay | | | | | | | | | | |
| 48 | Buildings | Calculated | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| 49 | Improvements Other Than Buildings | Calculated | - | - | - | - | - | - | | |
| 50 | Machinery and Equipment | Calculated | - | - | - | - | - | - | | |
| 51 | Reclass Expenditures from CIP | Calculated | - | - | - | - | - | - | | |
| Other Uses | | | | | | | | | | |
| 52 | Reserve for Contingency | Calculated | \$ 38,693 | \$ 41,892 | \$ 38,461 | \$ 39,602 | \$ 40,770 | \$ 41,966 | | |
| 53 | Bad Debt Expense | Calculated | 1,739 | 2,174 | 2,456 | 2,775 | 2,942 | 3,015 | | |
| 54 | TOTAL BUDGETED O&M | | \$ 3,663,217 | \$ 3,853,342 | \$ 3,785,567 | \$ 3,899,285 | \$ 4,350,756 | \$ 4,133,037 | | |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Projection and Allocation of Operating and Maintenance Expenditures to Water and Wastewater Systems

| Line No. | Description | Allocation Factor | Water Percentage | Water System Allocated Operating Expenditures | | | | | | | | | | |
|--|--|-------------------|------------------|---|---------------------|---------------------|---------------------|---------------------|---------------------|--|--|--|--|--|
| | | | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | | | | | |
| Allocated Water System Operating Expenses | | | | | | | | | | | | | | |
| Personal Services | | | | | | | | | | | | | | |
| 1 | Regular Salaries and Wages | Revenue | 64.02% | \$ 310,439 | \$ 321,302 | \$ 330,941 | \$ 340,870 | \$ 351,096 | \$ 361,629 | | | | | |
| 2 | Additional Personnel - Water | Water | 100.00% | - | - | 107,601 | 110,788 | 114,118 | 117,594 | | | | | |
| 3 | Additional Personnel - Wastewater | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 4 | Overtime | Revenue | 64.02% | 23,046 | 23,046 | 23,738 | 24,450 | 25,183 | 25,939 | | | | | |
| 5 | Shift Differential Pay | Revenue | 64.02% | 4,456 | 4,481 | 4,616 | 4,754 | 4,897 | 5,044 | | | | | |
| 6 | Education Incentive Pay | Revenue | 64.02% | 3,841 | 3,841 | 3,956 | 4,075 | 4,197 | 4,323 | | | | | |
| 7 | FICA Taxes | Revenue | 64.02% | 31,509 | 32,009 | 32,969 | 33,958 | 34,977 | 36,026 | | | | | |
| 8 | Retirement Contributions | Revenue | 64.02% | 50,510 | 51,214 | 52,750 | 54,333 | 55,963 | 57,642 | | | | | |
| 9 | Health Insurance / Allowance | Revenue | 64.02% | 101,915 | 112,094 | 117,699 | 123,584 | 129,763 | 136,251 | | | | | |
| 10 | Workers Compensation | Revenue | 64.02% | 26,887 | 28,808 | 29,672 | 30,562 | 31,479 | 32,423 | | | | | |
| 11 | Compensated Absences | Revenue | 64.02% | - | - | - | - | - | - | | | | | |
| Operating Expenses | | | | | | | | | | | | | | |
| 12 | Professional Fees | Water | 100.00% | \$ 60,000 | \$ 150,000 | \$ 75,000 | \$ 76,875 | \$ 78,720 | \$ 80,531 | | | | | |
| 13 | Other Contractual Services | Water | 100.00% | 46,520 | 37,000 | 37,962 | 38,911 | 39,845 | 40,761 | | | | | |
| 14 | Travel and Per Diem | Water | 100.00% | 3,745 | 3,745 | 3,842 | 3,938 | 4,033 | 4,126 | | | | | |
| 15 | Training and Development | Water | 100.00% | 2,700 | 2,700 | 2,770 | 2,839 | 2,908 | 2,974 | | | | | |
| 16 | Communications | Water | 100.00% | 4,050 | 3,700 | 3,796 | 3,891 | 3,984 | 4,076 | | | | | |
| 17 | Postage and Freight | Water | 100.00% | 200 | 200 | 205 | 210 | 215 | 220 | | | | | |
| 18 | Utility Services | Water | 100.00% | 300,000 | 300,000 | 307,890 | 315,988 | 324,298 | 332,827 | | | | | |
| 19 | Insurance and Bonds | Water | 100.00% | 145,000 | 145,000 | 148,770 | 152,489 | 156,149 | 159,740 | | | | | |
| 20 | Repair and Maintenance - General | Water | 100.00% | 150,000 | 165,000 | 171,600 | 178,464 | 185,603 | 193,027 | | | | | |
| 21 | Repair and Maintenance - RO Cartridges | Water | 100.00% | - | - | - | - | - | - | | | | | |
| 22 | Repair and Maintenance - Vehicle | Water | 100.00% | 2,000 | 2,500 | 2,600 | 2,704 | 2,812 | 2,925 | | | | | |
| 23 | Renewal and Replacements | Water | 100.00% | - | - | - | - | - | - | | | | | |
| 24 | Other Current Charges - Licenses and Permits | Water | 100.00% | 5,450 | 5,450 | 5,614 | 5,782 | 5,955 | 6,134 | | | | | |
| 25 | Administrative Charges | Water | 100.00% | 327,870 | 325,000 | 333,450 | 341,786 | 349,989 | 358,039 | | | | | |
| 26 | Operating Supplies | Water | 100.00% | 230,000 | 230,000 | 235,980 | 241,880 | 247,685 | 253,381 | | | | | |
| 27 | Uniforms | Water | 100.00% | 7,000 | 7,000 | 7,210 | 7,426 | 7,649 | 7,879 | | | | | |
| 28 | Operating Supplies - Safety | Water | 100.00% | 3,500 | 3,500 | 3,591 | 3,681 | 3,769 | 3,856 | | | | | |
| 29 | Operating Supplies - Gasoline | Water | 100.00% | 4,250 | 4,250 | 4,361 | 4,470 | 4,577 | 4,682 | | | | | |
| 30 | Books, Dues, Education, and Subscriptions | Water | 100.00% | 1,610 | 3,110 | 3,203 | 3,299 | 3,398 | 3,500 | | | | | |
| 31 | Depreciation | Water | 100.00% | - | - | - | - | - | - | | | | | |
| Capital Outlay | | | | | | | | | | | | | | |
| 32 | Buildings | Water | 100.00% | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | | | | |
| 33 | Improvements Other Than Buildings | Water | 100.00% | - | - | - | - | - | - | | | | | |
| 33 | Machinery and Equipment | Water | 100.00% | - | - | - | - | - | - | | | | | |
| 34 | Reclass Expenditures from CIP | Water | 100.00% | 108,000 | 51,425 | - | - | 335,690 | - | | | | | |
| Other Uses | | | | | | | | | | | | | | |
| 35 | Reserve for Contingency | Water | 100.00% | \$ 64,800 | \$ 68,700 | \$ 71,609 | \$ 73,757 | \$ 75,949 | \$ 78,183 | | | | | |
| 36 | Bad Debt Expense | Water | 100.00% | 3,125 | 3,594 | 4,025 | 4,508 | 4,779 | 4,898 | | | | | |
| Allocated Water System Operating Expenses | | | | | | | | | | | | | | |
| Operating Expenses | | | | | | | | | | | | | | |
| 37 | Other Contractual Services | Wastewater | 0.00% | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | | | | |
| 38 | Other Contractual Services | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 39 | Utility Services | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 40 | Sewage Treatment - City of Delray Beach | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 41 | Insurance and Bonds | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 42 | Repair and Maintenance - General | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 43 | Renewal and Replacements | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 44 | Other Current Charges - General | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 45 | Administrative Charges | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 46 | Operating Supplies | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 47 | Depreciation | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| Capital Outlay | | | | | | | | | | | | | | |
| 48 | Buildings | Wastewater | 0.00% | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | | | | |
| 49 | Improvements Other Than Buildings | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 50 | Machinery and Equipment | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 51 | Reclass Expenditures from CIP | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| Other Uses | | | | | | | | | | | | | | |
| 52 | Reserve for Contingency | Wastewater | 0.00% | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | | | | |
| 53 | Bad Debt Expense | Wastewater | 0.00% | - | - | - | - | - | - | | | | | |
| 54 | TOTAL ALLOCATED WATER SYSTEM BUDGETED O&M | | | \$ 2,022,423 | \$ 2,088,669 | \$ 2,127,421 | \$ 2,190,272 | \$ 2,589,679 | \$ 2,318,630 | | | | | |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Projection and Allocation of Operating and Maintenance Expenditures to Water and Wastewater Systems

| Line No. | Description | Allocation Factor | Wastewater Percentage | Wastewater System Allocated Operating Expenditures | | | | | | | | |
|--|--|-------------------|-----------------------|--|--------------|--------------|--------------|--------------|--------------|--|--|--|
| | | | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | | | |
| Allocated Wastewater System Operating Expenses | | | | | | | | | | | | |
| Personal Services | | | | | | | | | | | | |
| 1 | Regular Salaries and Wages | Revenue | 35.98% | \$ 174,491 | \$ 180,598 | \$ 186,016 | \$ 191,596 | \$ 197,344 | \$ 203,264 | | | |
| 2 | Additional Personnel - Water | Water | 0.00% | - | - | - | - | - | - | | | |
| 3 | Additional Personnel - Wastewater | Wastewater | 100.00% | - | - | - | - | - | - | | | |
| 4 | Overtime | Revenue | 35.98% | 12,954 | 12,954 | 13,342 | 13,743 | 14,155 | 14,580 | | | |
| 5 | Shift Differential Pay | Revenue | 35.98% | 2,504 | 2,519 | 2,594 | 2,672 | 2,752 | 2,835 | | | |
| 6 | Education Incentive Pay | Revenue | 35.98% | 2,159 | 2,159 | 2,224 | 2,290 | 2,359 | 2,430 | | | |
| 7 | FICA Taxes | Revenue | 35.98% | 17,711 | 17,991 | 18,531 | 19,087 | 19,660 | 20,249 | | | |
| 8 | Retirement Contributions | Revenue | 35.98% | 28,390 | 28,786 | 29,650 | 30,539 | 31,455 | 32,399 | | | |
| 9 | Health Insurance / Allowance | Revenue | 35.98% | 57,285 | 63,006 | 66,156 | 69,464 | 72,937 | 76,584 | | | |
| 10 | Workers Compensation | Revenue | 35.98% | 15,113 | 16,192 | 16,678 | 17,178 | 17,694 | 18,225 | | | |
| 11 | Compensated Absences | Revenue | 35.98% | - | - | - | - | - | - | | | |
| Operating Expenses | | | | | | | | | | | | |
| 12 | Professional Fees | Water | 0.00% | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | | |
| 13 | Other Contractual Services | Water | 0.00% | - | - | - | - | - | - | | | |
| 14 | Travel and Per Diem | Water | 0.00% | - | - | - | - | - | - | | | |
| 15 | Training and Development | Water | 0.00% | - | - | - | - | - | - | | | |
| 16 | Communications | Water | 0.00% | - | - | - | - | - | - | | | |
| 17 | Postage and Freight | Water | 0.00% | - | - | - | - | - | - | | | |
| 18 | Utility Services | Water | 0.00% | - | - | - | - | - | - | | | |
| 19 | Insurance and Bonds | Water | 0.00% | - | - | - | - | - | - | | | |
| 20 | Repair and Maintenance - General | Water | 0.00% | - | - | - | - | - | - | | | |
| 21 | Repair and Maintenance - RO Cartridges | Water | 0.00% | - | - | - | - | - | - | | | |
| 22 | Repair and Maintenance - Vehicle | Water | 0.00% | - | - | - | - | - | - | | | |
| 23 | Renewal and Replacements | Water | 0.00% | - | - | - | - | - | - | | | |
| 24 | Other Current Charges - Licenses and Permits | Water | 0.00% | - | - | - | - | - | - | | | |
| 25 | Administrative Charges | Water | 0.00% | - | - | - | - | - | - | | | |
| 26 | Operating Supplies | Water | 0.00% | - | - | - | - | - | - | | | |
| 27 | Uniforms | Water | 0.00% | - | - | - | - | - | - | | | |
| 28 | Operating Supplies - Safety | Water | 0.00% | - | - | - | - | - | - | | | |
| 29 | Operating Supplies - Gasoline | Water | 0.00% | - | - | - | - | - | - | | | |
| 30 | Books, Dues, Education, and Subscriptions | Water | 0.00% | - | - | - | - | - | - | | | |
| 31 | Depreciation | Water | 0.00% | - | - | - | - | - | - | | | |
| Capital Outlay | | | | | | | | | | | | |
| 32 | Buildings | Eliminate | 0.00% | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | | |
| 33 | Improvements Other Than Buildings | Eliminate | 0.00% | - | - | - | - | - | - | | | |
| 33 | Machinery and Equipment | Eliminate | 0.00% | - | - | - | - | - | - | | | |
| 34 | Reclass Expenditures from CIP | Water | 0.00% | - | - | - | - | - | - | | | |
| Other Uses | | | | | | | | | | | | |
| 35 | Reserve for Contingency | Water | 0.00% | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | | |
| 36 | Bad Debt Expense | Water | 0.00% | - | - | - | - | - | - | | | |
| Allocated Wastewater System Operating Expenses | | | | | | | | | | | | |
| Operating Expenses | | | | | | | | | | | | |
| 37 | Other Contractual Services | Wastewater | 100.00% | \$ 60,000 | \$ 105,000 | \$ 60,000 | \$ 61,500 | \$ 62,976 | \$ 64,424 | | | |
| 38 | Other Contractual Services | Wastewater | 100.00% | 19,000 | 19,000 | 19,494 | 19,981 | 20,461 | 20,932 | | | |
| 39 | Utility Services | Wastewater | 100.00% | 40,000 | 40,000 | 41,052 | 42,132 | 43,240 | 44,377 | | | |
| 40 | Sewage Treatment - City of Delray Beach | Wastewater | 100.00% | 959,755 | 988,052 | 909,542 | 936,816 | 964,924 | 993,866 | | | |
| 41 | Insurance and Bonds | Wastewater | 100.00% | 7,000 | 9,000 | 9,360 | 9,734 | 10,124 | 10,529 | | | |
| 42 | Repair and Maintenance - General | Wastewater | 100.00% | 57,000 | 80,000 | 83,200 | 86,528 | 89,989 | 93,589 | | | |
| 43 | Renewal and Replacements | Wastewater | 100.00% | - | - | - | - | - | - | | | |
| 44 | Other Current Charges - General | Wastewater | 100.00% | - | - | - | - | - | - | | | |
| 45 | Administrative Charges | Wastewater | 100.00% | 147,000 | 154,350 | 158,363 | 162,322 | 166,218 | 170,041 | | | |
| 46 | Operating Supplies | Wastewater | 100.00% | - | 1,000 | 1,026 | 1,052 | 1,077 | 1,102 | | | |
| 47 | Depreciation | Wastewater | 100.00% | - | - | - | - | - | - | | | |
| Capital Outlay | | | | | | | | | | | | |
| 48 | Buildings | Wastewater | 100.00% | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | | |
| 49 | Improvements Other Than Buildings | Wastewater | 100.00% | - | - | - | - | - | - | | | |
| 50 | Machinery and Equipment | Wastewater | 100.00% | - | - | - | - | - | - | | | |
| 51 | Reclass Expenditures from CIP | Wastewater | 100.00% | - | - | - | - | - | - | | | |
| Other Uses | | | | | | | | | | | | |
| 52 | Reserve for Contingency | Wastewater | 100.00% | \$ 38,693 | \$ 41,892 | \$ 38,461 | \$ 39,602 | \$ 40,770 | \$ 41,966 | | | |
| 53 | Bad Debt Expense | Wastewater | 100.00% | 1,739 | 2,174 | 2,456 | 2,775 | 2,942 | 3,015 | | | |
| 54 TOTAL ALLOCATED WASTEWATER SYSTEM BUDGETED O&M | | | | \$ 1,640,793 | \$ 1,764,672 | \$ 1,658,146 | \$ 1,709,013 | \$ 1,761,077 | \$ 1,814,406 | | | |

Table 11

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Calculation of Wastewater Treatment Expenditures

| Line No. | Description | Fiscal Year Ending September 30, | | | | | | |
|---|--|----------------------------------|------------|------------|------------|------------|------------|------------|
| | | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| <u>Wastewater Treatment Cost From City</u> | | | | | | | | |
| 1 | Implemented Increase | | | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| 2 | Disposal Charge | \$ 3.3694 | \$ 3.3917 | \$ 3.4935 | \$ 3.5983 | \$ 3.7062 | \$ 3.8174 | \$ 3.9319 |
| 3 | Total Rate Per 1,000 Gallons | \$ 3.3694 | \$ 3.3917 | \$ 3.4935 | \$ 3.5983 | \$ 3.7062 | \$ 3.8174 | \$ 3.9319 |
| 4 | Wastewater Treated by Delray Beach (000's) | 245,793 | 252,014 | 252,770 | 252,770 | 252,770 | 252,770 | 252,770 |
| 5 | Average Daily Flow - MGD | 0.673 | 0.690 | 0.693 | 0.693 | 0.693 | 0.693 | 0.693 |
| 6 | Wastewater System Units | 4,396 | 4,396 | 4,396 | 4,396 | 4,396 | 4,396 | 4,396 |
| 7 | Estimated Annual Wastewater Treated Per Unit | 55,913 | 57,328 | 57,500 | 57,500 | 57,500 | 57,500 | 57,500 |
| 8 | Purchased Wastewater Expense | \$ 828,185 | \$ 854,755 | \$ 883,052 | \$ 909,542 | \$ 936,816 | \$ 964,924 | \$ 993,866 |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Calculation of Annual Deposit to the Capital Renewal and Replacement Account

| Line No. | Description | Fiscal Year Ending September 30, | | | | | |
|----------------------------|---|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| 1 | Prior Year Used in Calculation | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Deposit Calculation | | | | | | | |
| Prior Fiscal Year Revenues | | | | | | | |
| 2 | Water Rate Revenues | \$ 2,014,193 | \$ 2,083,498 | \$ 2,396,023 | \$ 2,683,546 | \$ 3,005,571 | \$ 3,185,906 |
| 3 | Wastewater Rate Revenues | \$ 1,128,148 | 1,159,222 | 1,449,027 | 1,637,401 | 1,850,263 | 1,961,279 |
| 4 | Other Revenues - Water | 143,254 | 149,000 | 250,217 | 255,540 | 262,897 | 266,710 |
| 5 | Other Revenues - Wastewater | - | - | - | - | - | - |
| 6 | Total Prior Fiscal Year Revenues | \$ 3,285,595 | \$ 3,391,720 | \$ 4,095,268 | \$ 4,576,487 | \$ 5,118,731 | \$ 5,413,894 |
| Annual Deposit | | | | | | | |
| 7 | Percent of Gross Revenues | 0.00% | 10.00% | 10.50% | 11.00% | 11.00% | 11.00% |
| 8 | Amount | \$ - | \$ 339,172 | \$ 430,003 | \$ 503,414 | \$ 563,060 | \$ 595,528 |
| 9 | Additional | - | - | - | - | - | - |
| 10 | Capital Renewal and Replacement Account Deposit | \$ - | \$ 339,172 | \$ 430,003 | \$ 503,414 | \$ 563,060 | \$ 595,528 |
| Allocation | | | | | | | |
| 11 | Water Allocation | 89.24% | 89.24% | 89.24% | 89.24% | 89.24% | 89.24% |
| 12 | Wastewater Allocation | 10.76% | 10.76% | 10.76% | 10.76% | 10.76% | 10.76% |
| 13 | Water Deposit | \$ - | \$ 302,690 | \$ 383,752 | \$ 449,267 | \$ 502,497 | \$ 531,473 |
| 14 | Wastewater Deposit | - | 36,482 | 46,251 | 54,147 | 60,563 | 64,055 |

Table 13

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Capital Improvement Plan (CIP)

| Line No. | Description | 2020 | Adjustments | Fiscal Year Ending September 30, | | | | | 2025 | Total | |
|--------------------------|--|-------------------|-------------|----------------------------------|---------------------|---------------------|-------------------|-------------------|-------------------|---------------------|--|
| | | | | 2020 | 2021 | 2022 | 2023 | 2024 | | | |
| WATER SYSTEM | | | | | | | | | | | |
| | Water CIP Projects | | | | | | | | | | |
| 1 | Replace 2 of 4 WTP Air Handlers | \$ 100,000 | - | \$ 100,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 100,000 | |
| 2 | Replace 1 of 2 WTP Chillers | 80,000 | - | 80,000 | - | - | - | - | - | 80,000 | |
| 3 | Paint Elevated Tank Outer Bowl & Logo | 80,000 | - | 80,000 | - | - | - | - | - | 80,000 | |
| 4 | Paint the WTP Membrane Floors & GST | 28,000 | - | 28,000 | - | - | - | - | - | 28,000 | |
| 5 | Replace 2013 Ford F150 Pickup Truck | 30,000 | - | 30,000 | - | - | - | - | - | 30,000 | |
| 6 | Replace Inhibitor & CL2 Pumps & Piping | 60,000 | - | 60,000 | - | - | - | - | - | 60,000 | |
| 7 | Replace East Chiller at Water Plant | - | - | - | 80,000 | - | - | - | - | 80,000 | |
| 8 | Replace 3,400 Sodium Hypochlorite Day | - | - | - | 100,000 | - | - | - | - | 100,000 | |
| 9 | Replace Building and Public Works Carpeting | - | - | - | 50,000 | - | - | - | - | 50,000 | |
| 10 | Rehabilitation of Both Shallow Injection | - | - | - | 100,000 | - | - | - | - | 100,000 | |
| 11 | Rehabilitation of Well Number 6 | - | - | - | - | 80,000 | - | - | - | 80,000 | |
| 12 | VFD Replacements | - | - | - | - | 250,000 | - | - | - | 250,000 | |
| 13 | Replace 2014 Ford Escape SUV | - | - | - | - | - | 30,000 | - | - | 30,000 | |
| 14 | Well Number 8 Rehabilitation | - | - | - | - | - | 80,000 | - | - | 80,000 | |
| 15 | Upgrade WTP SCADA System Software | - | - | - | - | - | 25,000 | - | - | 25,000 | |
| 16 | Replace Membrane Train Turbos | - | - | - | - | - | 120,000 | - | - | 120,000 | |
| 17 | Replace Water Plant Roof | - | - | - | - | - | 250,000 | - | - | 250,000 | |
| 18 | Paint the Elevated Storage Tank interior | - | - | - | - | - | - | 300,000 | - | 300,000 | |
| 19 | Replace Cartridge Filter Vessels | - | - | - | - | - | - | 100,000 | - | 100,000 | |
| 20 | Replace Water Plant Blowers | - | - | - | - | - | - | 50,000 | - | 50,000 | |
| 21 | WTP De-Gasifier and Scrubber System | - | - | - | - | - | - | - | 30,000 | 30,000 | |
| 22 | Replace the West Chiller at the WTP | - | - | - | - | - | - | - | 90,000 | 90,000 | |
| 23 | Departmental Capital - Operating Budget Reclassification | - | - | - | - | - | - | - | - | - | |
| 24 | Total Water CIP Projects | \$ 378,000 | \$ - | \$ 378,000 | \$ 330,000 | \$ 330,000 | \$ 505,000 | \$ 450,000 | \$ 120,000 | \$ 2,113,000 | |
| WASTEWATER SYSTEM | | | | | | | | | | | |
| | Wastewater CIP Items | | | | | | | | | | |
| 25 | Lift Station #4 Rehabilitation | \$ 100,000 | \$ - | \$ 100,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 100,000 | |
| 26 | Lift Station # 1 Electrical Panel Replacement | 25,000 | - | 25,000 | - | - | - | - | - | 25,000 | |
| 27 | Lift Station #1 Rehabilitation | - | - | - | 150,000 | - | - | - | - | 150,000 | |
| 28 | Wastewater Collection System Piping Rehabilitation (Phase 1) | - | - | - | 500,000 | - | - | - | - | 500,000 | |
| 29 | Storm Water Tide Flex Check Valves | - | - | - | 25,000 | - | - | - | - | 25,000 | |
| 30 | Lift Station #2 Rehabilitation | - | - | - | - | 100,000 | - | - | - | 100,000 | |
| 31 | Wastewater Collection System Piping Rehabilitation (Phase 2) | - | - | - | - | 250,000 | - | - | - | 250,000 | |
| 32 | Raise Lift Station #3 | - | - | - | - | 150,000 | - | - | - | 150,000 | |
| 33 | Raise Lift Station #2 | - | - | - | - | - | 150,000 | - | - | 150,000 | |
| 34 | Replace Emergency Generator at Lift Station #1 (Master) | - | - | - | - | - | - | 150,000 | - | 150,000 | |
| 35 | Raise Lift Station #4 | - | - | - | - | - | - | - | 150,000 | 150,000 | |
| 36 | Wastewater Collection System Rehabilitation | - | - | - | - | 2,500,000 | - | - | - | 2,500,000 | |
| 37 | Departmental Capital - Operating Budget Reclassification | - | - | - | - | - | - | - | - | - | |
| 38 | Total Wastewater CIP Items | \$ 125,000 | \$ - | \$ 125,000 | \$ 675,000 | \$ 3,000,000 | \$ 150,000 | \$ 150,000 | \$ 150,000 | \$ 4,250,000 | |
| 39 | TOTAL CAPITAL IMPROVEMENT PLAN | \$ 503,000 | \$ - | \$ 503,000 | \$ 1,005,000 | \$ 3,330,000 | \$ 655,000 | \$ 600,000 | \$ 270,000 | \$ 6,363,000 | |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Capital Improvement Plan Adjusted for Inflation and Funding Plan (CIP)

| Line No. | Description | Escalation Factor | Purpose | Funding Source | Fiscal Year Ending September 30, | | | | | | Total | |
|--|--|-------------------|---------------|----------------|----------------------------------|--------------|--------------|------------|------------|------------|--------------|-----------|
| | | | | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | | |
| CIP Inflation Indices - Annual | | | | | | | | | | | | |
| 1 | Low Inflation | | | | 0.00% | 1.00% | 1.00% | 1.00% | 1.00% | 1.00% | 1.00% | |
| 2 | Average Inflation | | | | 0.00% | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% | |
| 3 | High Inflation | | | | 0.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | |
| 4 | ENR Index | | | | 0.00% | 2.85% | 2.85% | 2.85% | 2.85% | 2.85% | 2.85% | |
| 5 | No Inflation | | | | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| CIP Inflation Indices - Cumulative Factor | | | | | | | | | | | | |
| 6 | Low Inflation | Low | | | 1.0000 | 1.0100 | 1.0201 | 1.0303 | 1.0406 | 1.0510 | | |
| 7 | Average Inflation | Avg | | | 1.0000 | 1.0250 | 1.0506 | 1.0769 | 1.1038 | 1.1314 | | |
| 8 | High Inflation | High | | | 1.0000 | 1.0500 | 1.1025 | 1.1576 | 1.2155 | 1.2763 | | |
| 9 | ENR Index | ENR | | | 1.0000 | 1.0285 | 1.0578 | 1.0880 | 1.1190 | 1.1509 | | |
| 10 | No Inflation | None | | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | | |
| WATER SYSTEM | | | | | | | | | | | | |
| 11 | Replace 2 of 4 WTP Air Handlers | None | Non-Expansion | R&R | \$ 100,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 12 | Replace 1 of 2 WTP Chillers | None | Non-Expansion | Op. Reserves | 80,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 13 | Paint Elevated Tank Outer Bowl & Logo | None | Non-Expansion | WOpX | 80,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 14 | Paint the WTP Membrane Floors & GST | None | Non-Expansion | WOpX | 28,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 15 | Replace 2013 Ford F150 Pickup Truck | None | Non-Expansion | Op. Reserves | 30,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 16 | Replace Inhibitor & CL2 Pumps & Piping | None | Non-Expansion | Op. Reserves | 60,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 17 | Replace East Chiller at Water Plant | ENR | Non-Expansion | R&R | - | 82,280 | \$ - | \$ - | \$ - | \$ - | \$ - | 82,280 |
| 18 | Replace 3,400 Sodium Hypochlorite Day | ENR | Non-Expansion | R&R | - | 102,850 | \$ - | \$ - | \$ - | \$ - | \$ - | 102,850 |
| 19 | Replace Building and Public Works Carpeting | ENR | Non-Expansion | WOpX | - | 51,425 | \$ - | \$ - | \$ - | \$ - | \$ - | 51,425 |
| 20 | Rehabilitation of Both Shallow Injection | ENR | Non-Expansion | R&R | - | 102,850 | \$ - | \$ - | \$ - | \$ - | \$ - | 102,850 |
| 21 | Rehabilitation of Well Number 6 | ENR | Non-Expansion | Debt1 | - | - | 84,625 | \$ - | \$ - | \$ - | \$ - | 84,625 |
| 22 | VFD Replacements | ENR | Non-Expansion | Debt1 | - | - | 264,453 | \$ - | \$ - | \$ - | \$ - | 264,453 |
| 23 | Replace 2014 Ford Escape SUV | ENR | Non-Expansion | W-Rates | - | - | - | 32,639 | \$ - | \$ - | \$ - | 32,639 |
| 24 | Well Number 8 Rehabilitation | ENR | Non-Expansion | Debt1 | - | - | - | 87,037 | \$ - | \$ - | \$ - | 87,037 |
| 25 | Upgrade WTP SCADA System Software | ENR | Non-Expansion | R&R | - | - | - | 27,199 | \$ - | \$ - | \$ - | 27,199 |
| 26 | Replace Membrane Train Turbos | ENR | Non-Expansion | Debt1 | - | - | - | 130,555 | \$ - | \$ - | \$ - | 130,555 |
| 27 | Replace Water Plant Roof | ENR | Non-Expansion | Debt1 | - | - | - | 271,990 | \$ - | \$ - | \$ - | 271,990 |
| 28 | Paint the Elevated Storage Tank interior | ENR | Non-Expansion | WOpX | - | - | - | - | 335,690 | \$ - | \$ - | 335,690 |
| 29 | Replace Cartridge Filter Vessels | ENR | Non-Expansion | R&R | - | - | - | - | 111,897 | \$ - | \$ - | 111,897 |
| 30 | Replace Water Plant Blowers | ENR | Non-Expansion | R&R | - | - | - | - | 55,948 | \$ - | \$ - | 55,948 |
| 31 | WTP De-Gasifier and Scrubber System | ENR | Non-Expansion | R&R | - | - | - | - | - | 34,526 | \$ - | 34,526 |
| 32 | Replace the West Chiller at the WTP | ENR | Non-Expansion | R&R | - | - | - | - | - | 103,577 | \$ - | 103,577 |
| 33 | Departmental Capital - Operating Budget Reclassification | ENR | Non-Expansion | Op. Reserves | - | - | - | - | - | - | \$ - | |
| 34 | Departmental Capital - Operating Budget Reclassification | ENR | Non-Expansion | R&R | - | - | - | - | - | - | \$ - | |
| 35 | TOTAL WATER SYSTEM | | | | \$ 378,000 | \$ 339,405 | \$ 349,078 | \$ 549,420 | \$ 503,535 | \$ 138,103 | \$ 1,879,541 | |
| WASTEWATER SYSTEM | | | | | | | | | | | | |
| 36 | Lift Station #4 Rehabilitation | None | Non-Expansion | Op. Reserves | \$ 100,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 37 | Lift Station # 1 Electrical Panel Replacement | None | Non-Expansion | Op. Reserves | 25,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 38 | Lift Station #1 Rehabilitation | ENR | Non-Expansion | Op. Reserves | - | 154,275 | \$ - | \$ - | \$ - | \$ - | \$ - | 154,275 |
| 39 | Wastewater Collection System Piping Rehabilitation (Phase 1) | ENR | Non-Expansion | Op. Reserves | - | 514,250 | \$ - | \$ - | \$ - | \$ - | \$ - | 514,250 |
| 40 | Storm Water Tlde Flex Check Valves | ENR | Non-Expansion | R&R | - | 25,713 | \$ - | \$ - | \$ - | \$ - | \$ - | 25,713 |
| 41 | Lift Station #2 Rehabilitation | ENR | Non-Expansion | Debt1 | - | - | 105,781 | \$ - | \$ - | \$ - | \$ - | 105,781 |
| 42 | Wastewater Collection System Piping Rehabilitation (Phase 2) | ENR | Non-Expansion | Debt1 | - | - | 264,453 | \$ - | \$ - | \$ - | \$ - | 264,453 |
| 43 | Raise Lift Station #3 | ENR | Non-Expansion | Debt1 | - | - | 158,672 | \$ - | \$ - | \$ - | \$ - | 158,672 |
| 44 | Raise Lift Station #2 | ENR | Non-Expansion | Debt1 | - | - | - | 163,194 | \$ - | \$ - | \$ - | 163,194 |
| 45 | Replace Emergency Generator at Lift Station #1 (Master) | ENR | Non-Expansion | R&R | - | - | - | - | 167,845 | \$ - | \$ - | 167,845 |
| 46 | Raise Lift Station #4 | ENR | Non-Expansion | R&R | - | - | - | - | - | 172,629 | \$ - | 172,629 |
| 47 | Wastewater Collection System Rehabilitation | ENR | Non-Expansion | Debt1 | - | - | 2,644,531 | \$ - | \$ - | \$ - | \$ - | 2,644,531 |
| 48 | Departmental Capital - Operating Budget Reclassification | ENR | Non-Expansion | Op. Reserves | - | - | - | - | - | - | \$ - | |
| 49 | Departmental Capital - Operating Budget Reclassification | ENR | Non-Expansion | R&R | - | - | - | - | - | - | \$ - | |
| 50 | TOTAL WASTEWATER SYSTEM | | | | \$ 125,000 | \$ 694,238 | \$ 3,173,437 | \$ 163,194 | \$ 167,845 | \$ 172,629 | \$ 4,371,342 | |
| 51 | TOTAL CAPITAL IMPROVEMENT PLAN | | | | \$ 503,000 | \$ 1,033,643 | \$ 3,522,515 | \$ 712,614 | \$ 671,380 | \$ 310,731 | \$ 6,250,883 | |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Capital Improvement Plan Adjusted for Inflation and Funding Plan (CIP)

| Line No. | Description | Escalation Factor | Purpose | Funding Source | Fiscal Year Ending September 30, | | | | | | Total | |
|---|---|----------------------|---------|-------------------|----------------------------------|--------------|--------------|------------|------------|------------|--------------|--|
| | | | | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | | |
| CAPITAL IMPROVEMENT FUND - FUNDING SOURCES | | | | | | | | | | | | |
| 52 | Capital Funded From Water Rate Revenues | | | W-Rates | \$ - | \$ - | \$ - | \$ 32,639 | \$ - | \$ - | \$ 32,639 | |
| 53 | Capital Funded From Wastewater Rate Revenues | | | WW-Rates | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 54 | Operating Reserves Fund | | | Op. Reserves | \$ 295,000 | \$ 668,525 | \$ - | \$ - | \$ - | \$ - | \$ 668,525 | |
| 55 | Capital Renewal and Replacement Account | | | R&R | 100,000 | 313,693 | - | 27,199 | 335,690 | 310,731 | 987,313 | |
| 57 | Water Impact Fees | | | W-Impact Fee | - | - | - | - | - | - | - | |
| 58 | Wastewater Impact Fees | | | WW-Impact Fee | - | - | - | - | - | - | - | |
| 61 | Proposed Debt 1 | | | Debt1 | - | - | 3,522,515 | 652,776 | - | - | 4,175,291 | |
| 62 | Proposed Debt 2 | | | Debt2 | - | - | - | - | - | - | - | |
| 63 | Proposed Debt 3 | | | Debt3 | - | - | - | - | - | - | - | |
| 64 | Proposed Debt 4 | | | Debt4 | - | - | - | - | - | - | - | |
| 65 | Proposed Debt 5 | | | Debt5 | - | - | - | - | - | - | - | |
| 66 | Reclass to Operating Expenses - Water | | | WOpx | 108,000 | 51,425 | - | - | 335,690 | - | 387,115 | |
| 67 | Reclass to Operating Expenses - Wastewater | | | WWOpx | - | - | - | - | - | - | - | |
| 68 | TOTAL CAPITAL IMPROVEMENT FUND - FUNDING SOURCES | | | | \$ 503,000 | \$ 1,033,643 | \$ 3,522,515 | \$ 712,614 | \$ 671,380 | \$ 310,731 | \$ 6,250,883 | |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Revenue Requirements - Water System

| Line No. | Description | Fiscal Year Ending September 30, | | | | | |
|-------------|--|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| | Operating and Maintenance Expenses | | | | | | |
| 1 | Total Operating Expenses | \$ 2,022,423 | \$ 2,088,669 | \$ 2,127,421 | \$ 2,190,272 | \$ 2,589,679 | \$ 2,318,630 |
| 2 | Total Operating and Maintenance Expenses | \$ 2,022,423 | \$ 2,088,669 | \$ 2,127,421 | \$ 2,190,272 | \$ 2,589,679 | \$ 2,318,630 |
| | Debt Service | | | | | | |
| 3 | Existing Debt | \$ 1,549,224 | \$ 1,549,224 | \$ 1,549,224 | \$ 1,549,224 | \$ 1,180,012 | \$ 810,800 |
| 4 | Proposed Debt | - | - | 12,775 | 25,550 | 25,550 | 25,550 |
| 5 | Less Connection Charges to Pay Debt Service | - | (226,353) | (234,202) | (242,323) | (250,726) | (259,420) |
| 6 | Total Debt Service | \$ 1,549,224 | \$ 1,322,871 | \$ 1,327,797 | \$ 1,332,451 | \$ 954,836 | \$ 576,930 |
| | Other Revenue Requirements | | | | | | |
| 7 | Capital Funded From Rate Revenues | \$ - | \$ - | \$ - | \$ 32,639 | \$ - | \$ - |
| 8 | Transfers to Operating Reserves | - | - | - | - | - | - |
| 9 | Transfers to Capital Renewal and Replacement Account | - | 302,690 | 383,752 | 449,267 | 502,497 | 531,473 |
| 10 | Total Other Revenue Requirements | \$ - | \$ 302,690 | \$ 383,752 | \$ 481,906 | \$ 502,497 | \$ 531,473 |
| 11 | Gross Revenue Requirements | \$ 3,571,647 | \$ 3,714,230 | \$ 3,838,970 | \$ 4,004,629 | \$ 4,047,012 | \$ 3,427,033 |
| | Less Income and Funds From Other Sources | | | | | | |
| 12 | Other Revenues | \$ 179,720 | \$ 187,070 | \$ 191,083 | \$ 195,042 | \$ 198,938 | \$ 202,761 |
| 13 | Unrestricted Interest Income | 42,528 | 40,425 | 41,264 | 43,439 | 43,386 | 43,820 |
| 14 | Transfer - General Fund for Debt Service | 1,430,000 | 1,058,297 | 796,691 | 533,004 | 184,823 | - |
| 15 | Transfers From Operating Reserves | 119,224 | - | - | - | - | - |
| 16 | Transfers from Capital Renewal and Replacement Account | - | - | - | - | 335,690 | - |
| 17 | Net Revenue Requirements | \$ 1,800,176 | \$ 2,428,438 | \$ 2,809,932 | \$ 3,233,144 | \$ 3,284,176 | \$ 3,180,452 |
| | Existing Revenues | | | | | | |
| 18 | Water System | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 |
| 19 | Total Existing Revenues | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 |
| | Revenues From Prior Period Adjustments | | | | | | |
| 20 | Water System | N/A | \$ - | \$ 312,525 | \$ 600,048 | \$ 922,073 | \$ 1,102,407 |
| 21 | Total Current Revenues | \$ 2,083,498 | \$ 2,083,498 | \$ 2,396,023 | \$ 2,683,546 | \$ 3,005,571 | \$ 3,185,906 |
| 22 | Existing Surplus / (Deficiency) | \$ 283,323 | \$ (344,940) | \$ (413,909) | \$ (549,598) | \$ (278,604) | \$ 5,453 |
| 23 | Percent of Rate Revenues | 13.60% | (16.56%) | (17.27%) | (20.48%) | (9.27%) | 0.17% |
| | Rate Adjustments | | | | | | |
| 24 | Water System | 0.00% | 15.00% | 12.00% | 12.00% | 6.00% | 2.50% |
| | Additional Revenue From Current Year Adjustment | | | | | | |
| 25 | Water System | \$ - | \$ 312,525 | \$ 287,523 | \$ 322,026 | \$ 180,334 | \$ 79,648 |
| 26 | Total Additional Revenue From Current Year Adjustment | \$ - | \$ 312,525 | \$ 287,523 | \$ 322,026 | \$ 180,334 | \$ 79,648 |
| 27 | Total Revenue With Rate Adjustments | \$ 2,083,498 | \$ 2,396,023 | \$ 2,683,546 | \$ 3,005,571 | \$ 3,185,906 | \$ 3,265,553 |
| 28 | Net Surplus / (Deficiency) After Rate Adj. | \$ 283,323 | \$ (32,415) | \$ (126,386) | \$ (227,573) | \$ (98,270) | \$ 85,101 |
| 29 | As Percent of Total Rate Revenues | 13.60% | (1.35%) | (4.71%) | (7.57%) | (3.08%) | 2.61% |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Revenue Requirements - Wastewater System

| Line No. | Description | Fiscal Year Ending September 30, | | | | | |
|----------|--|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| | Operating and Maintenance Expenses | | | | | | |
| 1 | Total Operating Expenses | \$ 1,640,793 | \$ 1,764,672 | \$ 1,658,146 | \$ 1,709,013 | \$ 1,761,077 | \$ 1,814,406 |
| 2 | Total Operating and Maintenance Expenses | \$ 1,640,793 | \$ 1,764,672 | \$ 1,658,146 | \$ 1,709,013 | \$ 1,761,077 | \$ 1,814,406 |
| | Debt Service | | | | | | |
| 3 | Existing Debt | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 4 | Proposed Debt | - | - | 50,825 | 101,650 | 101,650 | 101,650 |
| 5 | Less Connection Charges to Pay Debt Service | - | - | - | - | - | - |
| 6 | Total Debt Service | \$ - | \$ - | \$ 50,825 | \$ 101,650 | \$ 101,650 | \$ 101,650 |
| | Other Revenue Requirements | | | | | | |
| 7 | Capital Funded From Rate Revenues | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 8 | Transfers to Operating Reserves | - | - | - | - | - | - |
| 9 | Transfers to Capital Renewal and Replacement Account | - | 36,482 | 46,251 | 54,147 | 60,563 | 64,055 |
| 10 | Total Other Revenue Requirements | \$ - | \$ 36,482 | \$ 46,251 | \$ 54,147 | \$ 60,563 | \$ 64,055 |
| 11 | Gross Revenue Requirements | \$ 1,640,793 | \$ 1,801,154 | \$ 1,755,222 | \$ 1,864,810 | \$ 1,923,290 | \$ 1,980,112 |
| | Less Income and Funds From Other Sources | | | | | | |
| 12 | Other Revenues | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 13 | Unrestricted Interest Income | 23,904 | 22,722 | 23,193 | 24,416 | 24,386 | 24,630 |
| 14 | Transfer - General Fund for Debt Service | - | - | 30,482 | 40,637 | 20,321 | - |
| 15 | Transfers from Operating Reserves | 105,000 | 105,000 | - | - | - | - |
| 16 | Transfers from Capital Renewal and Replacement Account | - | - | - | - | - | - |
| 17 | Net Revenue Requirements | \$ 1,511,890 | \$ 1,673,432 | \$ 1,701,546 | \$ 1,799,758 | \$ 1,878,583 | \$ 1,955,481 |
| | Existing Revenues | | | | | | |
| 18 | Wastewater System | \$ 1,159,222 | \$ 1,159,222 | \$ 1,159,222 | \$ 1,159,222 | \$ 1,159,222 | \$ 1,159,222 |
| 19 | Total Existing Revenues | \$ 1,159,222 | \$ 1,159,222 | \$ 1,159,222 | \$ 1,159,222 | \$ 1,159,222 | \$ 1,159,222 |
| | Revenues From Prior Period Adjustments | | | | | | |
| 20 | Wastewater System | N/A | \$ - | \$ 289,805 | \$ 478,179 | \$ 691,041 | \$ 802,057 |
| 21 | Total Current Revenues | \$ 1,159,222 | \$ 1,159,222 | \$ 1,449,027 | \$ 1,637,401 | \$ 1,850,263 | \$ 1,961,279 |
| 22 | Existing Surplus / (Deficiency) | \$ (352,668) | \$ (514,211) | \$ (252,519) | \$ (162,357) | \$ (28,320) | \$ 5,798 |
| 23 | Percent of Rate Revenues | (30.42%) | (44.36%) | (17.43%) | (9.92%) | (1.53%) | 0.30% |
| | Rate Adjustments | | | | | | |
| 24 | Wastewater System | 0.00% | 25.00% | 13.00% | 13.00% | 6.00% | 2.50% |
| | Additional Revenue From Current Year Adjustment | | | | | | |
| 25 | Wastewater System | \$ - | \$ 289,805 | \$ 188,374 | \$ 212,862 | \$ 111,016 | \$ 49,032 |
| 26 | Total Additional Revenue From Current Year Adjustment | \$ - | \$ 289,805 | \$ 188,374 | \$ 212,862 | \$ 111,016 | \$ 49,032 |
| 27 | Total Revenue With Rate Adjustments | \$ 1,159,222 | \$ 1,449,027 | \$ 1,637,401 | \$ 1,850,263 | \$ 1,961,279 | \$ 2,010,311 |
| 28 | Net Surplus / (Deficiency) After Rate Adj. | \$ (352,668) | \$ (224,405) | \$ (64,145) | \$ 50,505 | \$ 82,696 | \$ 54,830 |
| 29 | As Percent of Total Rate Revenues | (30.42%) | (15.49%) | (3.92%) | 2.73% | 4.22% | 2.73% |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Revenue Requirements - Combined Water and Wastewater Systems

| Line No. | Description | Fiscal Year Ending September 30, | | | | | |
|-------------|---|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| | Operating and Maintenance Expenses | | | | | | |
| 1 | Total Combined Operating Expenses | \$ 3,663,217 | \$ 3,853,342 | \$ 3,785,567 | \$ 3,899,285 | \$ 4,350,756 | \$ 4,133,037 |
| 2 | Total Operating and Maintenance Expenses Annual Percent Change | \$ 3,663,217 | \$ 3,853,342 | \$ 3,785,567 | \$ 3,899,285 | \$ 4,350,756 | \$ 4,133,037 |
| | Debt Service | | | | | | |
| 3 | Existing Debt | \$ 1,549,224 | \$ 1,549,224 | \$ 1,549,224 | \$ 1,549,224 | \$ 1,180,012 | \$ 810,800 |
| 4 | Proposed Debt | - | - | 63,600 | 127,200 | 127,200 | 127,200 |
| 5 | Less Connection Charges to Pay Debt Service | - | (226,353) | (234,202) | (242,323) | (250,726) | (259,420) |
| 6 | Total Debt Service | \$ 1,549,224 | \$ 1,322,871 | \$ 1,378,622 | \$ 1,434,101 | \$ 1,056,486 | \$ 678,580 |
| | Other Revenue Requirements | | | | | | |
| 7 | Capital Funded From Rate Revenues | \$ - | \$ - | \$ - | \$ 32,639 | \$ - | \$ - |
| 8 | Transfers to Operating Reserves | - | - | - | - | - | - |
| 9 | Transfers to Capital Renewal and Replacement Account | - | 339,172 | 430,003 | 503,414 | 563,060 | 595,528 |
| 10 | Total Other Revenue Requirements | \$ - | \$ 339,172 | \$ 430,003 | \$ 536,053 | \$ 563,060 | \$ 595,528 |
| 11 | Gross Revenue Requirements | \$ 5,212,441 | \$ 5,515,384 | \$ 5,594,191 | \$ 5,869,439 | \$ 5,970,302 | \$ 5,407,145 |
| | Less Income and Funds From Other Sources | | | | | | |
| 12 | Other Revenues | \$ 179,720 | \$ 187,070 | \$ 191,083 | \$ 195,042 | \$ 198,938 | \$ 202,761 |
| 13 | Unrestricted Interest Income | 66,431 | 63,147 | 64,457 | 67,854 | 67,772 | 68,451 |
| 14 | Transfer - General Fund for Debt Service | 1,430,000 | 1,058,297 | 827,173 | 573,640 | 205,144 | - |
| 15 | Transfers from Operating Reserves | 224,224 | 105,000 | - | - | - | - |
| 16 | Transfers from Capital Renewal and Replacement Account | - | - | - | - | 335,690 | - |
| 17 | Net Revenue Requirements | \$ 3,312,065 | \$ 4,101,871 | \$ 4,511,478 | \$ 5,032,902 | \$ 5,162,759 | \$ 5,135,933 |
| | Existing Revenues | | | | | | |
| 18 | Water System | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 | \$ 2,083,498 |
| 19 | Wastewater System | 1,159,222 | 1,159,222 | 1,159,222 | 1,159,222 | 1,159,222 | 1,159,222 |
| 20 | Total Existing Revenues | \$ 3,242,720 | \$ 3,242,720 | \$ 3,242,720 | \$ 3,242,720 | \$ 3,242,720 | \$ 3,242,720 |
| | Revenues From Prior Period Adjustments | | | | | | |
| 21 | Water System | N/A | \$ - | \$ 312,525 | \$ 600,048 | \$ 922,073 | \$ 1,102,407 |
| 22 | Wastewater System | N/A | - | 289,805 | 478,179 | 691,041 | 802,057 |
| 23 | Total Current Revenues | \$ 3,242,720 | \$ 3,242,720 | \$ 3,845,050 | \$ 4,320,947 | \$ 4,855,834 | \$ 5,147,184 |
| 24 | Existing Surplus / (Deficiency) | \$ (69,345) | \$ (859,150) | \$ (666,428) | \$ (711,955) | \$ (306,925) | \$ 11,251 |
| 25 | Percent of Rate Revenues | (2.14%) | (26.49%) | (17.33%) | (16.48%) | (6.32%) | 0.22% |
| | Rate Adjustments | | | | | | |
| 26 | Water System | 0.00% | 15.00% | 12.00% | 12.00% | 6.00% | 2.50% |
| 27 | Wastewater System | 0.00% | 25.00% | 13.00% | 13.00% | 6.00% | 2.50% |
| | Additional Revenue From Current Year Adjustment | | | | | | |
| 28 | Water System | \$ - | \$ 312,525 | \$ 287,523 | \$ 322,026 | \$ 180,334 | \$ 79,648 |
| 29 | Wastewater System | - | 289,805 | 188,374 | 212,862 | 111,016 | 49,032 |
| 30 | Total Additional Revenue From Current Year Adjustment | \$ - | \$ 602,330 | \$ 475,896 | \$ 534,888 | \$ 291,350 | \$ 128,680 |
| 31 | Total Revenue With Rate Adjustments | \$ 3,242,720 | \$ 3,845,050 | \$ 4,320,947 | \$ 4,855,834 | \$ 5,147,184 | \$ 5,275,864 |
| 32 | Net Surplus / (Deficiency) After Rate Adj. | \$ (69,345) | \$ (256,820) | \$ (190,531) | \$ (177,068) | \$ (15,575) | \$ 139,931 |
| 33 | As Percent of Total Rate Revenues | (2.14%) | (6.68%) | (4.41%) | (3.65%) | (0.30%) | 2.65% |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Projected Fund Balances and Calculation of Interest Income

| Line No. | Description | Interest Earnings Restricted | Fiscal Year Ending September 30, | | | | | | | | | | | |
|---------------------------------------|--|---|----------------------------------|--|--------------|--|--------------|--|-----------|--|-----------|--|-----------|--|
| | | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | | | | | | |
| Projected Ending Cash Balances | | | | | | | | | | | | | | |
| 1 | Operating Reserves Fund | \$ 5,847,631 | \$ 4,817,286 | \$ 4,626,755 | \$ 4,449,687 | \$ 4,434,113 | \$ 4,574,043 | | | | | | | |
| 2 | Customer Deposits | 2,020 | 2,040 | 2,060 | 2,080 | 2,100 | 2,130 | | | | | | | |
| 3 | Capital Renewal and Replacement Account | 64,280 | 89,760 | 519,763 | 995,978 | 887,657 | 1,172,454 | | | | | | | |
| 4 | Debt Service Sinking Fund | 387,306 | 330,718 | 344,655 | 358,525 | 264,122 | 169,645 | | | | | | | |
| 5 | Debt Service Reserve | - | - | - | - | - | - | | | | | | | |
| 6 | Water Plant Connection Charge (Impact Fee) Fund | 2,311,083 | 2,108,910 | 1,898,608 | 1,677,615 | 1,445,519 | 1,201,890 | | | | | | | |
| 7 | Wastewater Plant Connection Charge (Impact Fee) Fund | 730,229 | 738,259 | 747,119 | 756,089 | 765,159 | 774,339 | | | | | | | |
| 8 | Construction Fund | - | - | 652,776 | - | - | - | | | | | | | |
| 9 | Total Projected Ending Cash Balances | \$ 9,342,549 | \$ 8,086,972 | \$ 8,791,736 | \$ 8,239,974 | \$ 7,798,670 | \$ 7,894,501 | | | | | | | |
| Operating Reserves Fund | | | | | | | | | | | | | | |
| 10 | Beginning Year Balance | \$ 6,336,847 | | | | | | | | | | | | |
| 11 | Adjustments to Cash - Receivables / Payables | 263,633 | | | | | | | | | | | | |
| 12 | Adjusted Beginning Year Balance | \$ 6,600,480 | \$ 5,847,631 | \$ 4,817,286 | \$ 4,626,755 | \$ 4,449,687 | \$ 4,434,113 | | | | | | | |
| Transfers In - | | | | | | | | | | | | | | |
| 13 | Year End Surplus | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 139,931 | | | | | | |
| 14 | From Renewal & Replacement Account | - | - | - | - | - | - | - | | | | | | |
| 15 | From Debt Service Reserve Fund | - | - | - | - | - | - | - | | | | | | |
| 16 | From Revenue Requirements | - | - | - | - | - | - | - | | | | | | |
| Transfers Out - | | | | | | | | | | | | | | |
| 17 | Year End Deficiencies | \$ 69,345 | \$ 256,820 | \$ 190,531 | \$ 177,068 | \$ 15,575 | \$ - | \$ - | | | | | | |
| 18 | To Customer Deposits | - | - | - | - | - | - | - | | | | | | |
| 19 | To Debt Service Reserve | - | - | - | - | - | - | - | | | | | | |
| 20 | To Renewal & Replacement Account | 164,280 | - | - | - | - | - | - | | | | | | |
| 21 | To Fund Operations | 224,224 | 105,000 | - | - | - | - | - | | | | | | |
| 22 | Additional Customer Deposit | - | - | - | - | - | - | - | | | | | | |
| 23 | To Fund Capital Improvements | 295,000 | 668,525 | - | - | - | - | - | | | | | | |
| Interest Income Calculation | | | | | | | | | | | | | | |
| 24 | Average Annual Balance | \$ 6,224,056 | \$ 5,332,459 | \$ 4,722,021 | \$ 4,538,221 | \$ 4,441,900 | \$ 4,504,078 | | | | | | | |
| 25 | Interest Rate Assumed | 1.00% | 1.10% | 1.20% | 1.20% | 1.20% | 1.20% | 1.20% | | | | | | |
| 26 | Interest Income Restricted | <table border="1" style="display: inline-table;"><tr><td>No</td></tr></table> \$ 62,240 | No | \$ 58,660 | \$ 56,660 | \$ 54,460 | \$ 53,300 | \$ 54,050 | | | | | | |
| No | | | | | | | | | | | | | | |
| 27 | End of Year Balance | \$ 5,847,631 | \$ 4,817,286 | \$ 4,626,755 | \$ 4,449,687 | \$ 4,434,113 | \$ 4,574,043 | | | | | | | |
| Minimum Targeted | | | | | | | | | | | | | | |
| 28 | Days of O&M Expense | 150 | 150 | 150 | 150 | 150 | 150 | | | | | | | |
| 29 | Amount | <table border="1" style="display: inline-table;"><tr><td>1,505,432</td></tr></table> | 1,505,432 | <table border="1" style="display: inline-table;"><tr><td>1,583,565</td></tr></table> | 1,583,565 | <table border="1" style="display: inline-table;"><tr><td>1,555,712</td></tr></table> | 1,555,712 | <table border="1" style="display: inline-table;"><tr><td>1,602,446</td></tr></table> | 1,602,446 | <table border="1" style="display: inline-table;"><tr><td>1,787,982</td></tr></table> | 1,787,982 | <table border="1" style="display: inline-table;"><tr><td>1,698,508</td></tr></table> | 1,698,508 | |
| 1,505,432 | | | | | | | | | | | | | | |
| 1,583,565 | | | | | | | | | | | | | | |
| 1,555,712 | | | | | | | | | | | | | | |
| 1,602,446 | | | | | | | | | | | | | | |
| 1,787,982 | | | | | | | | | | | | | | |
| 1,698,508 | | | | | | | | | | | | | | |
| | Minimum target Met? | <table border="1" style="display: inline-table;"><tr><td>Yes</td></tr></table> | Yes | <table border="1" style="display: inline-table;"><tr><td>Yes</td></tr></table> | Yes | <table border="1" style="display: inline-table;"><tr><td>Yes</td></tr></table> | Yes | <table border="1" style="display: inline-table;"><tr><td>Yes</td></tr></table> | Yes | <table border="1" style="display: inline-table;"><tr><td>Yes</td></tr></table> | Yes | <table border="1" style="display: inline-table;"><tr><td>Yes</td></tr></table> | Yes | |
| Yes | | | | | | | | | | | | | | |
| Yes | | | | | | | | | | | | | | |
| Yes | | | | | | | | | | | | | | |
| Yes | | | | | | | | | | | | | | |
| Yes | | | | | | | | | | | | | | |
| Yes | | | | | | | | | | | | | | |
| Customer Deposits | | | | | | | | | | | | | | |
| 30 | Beginning Year Balance | \$ 2,000 | \$ 2,020 | \$ 2,040 | \$ 2,060 | \$ 2,080 | \$ 2,100 | | | | | | | |
| Transfers In - | | | | | | | | | | | | | | |
| 31 | From Operating Fund | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | | | | | | |
| 32 | Additional From Operating Fund | - | - | - | - | - | - | | | | | | | |
| Transfers Out - | | | | | | | | | | | | | | |
| 33 | To Renewal & Extension Fund | - | - | - | - | - | - | | | | | | | |
| Interest Income Calculation | | | | | | | | | | | | | | |
| 35 | Average Annual Balance | \$ 2,000 | \$ 2,020 | \$ 2,040 | \$ 2,060 | \$ 2,080 | \$ 2,100 | | | | | | | |
| 36 | Interest Rate Assumed | 1.00% | 1.10% | 1.20% | 1.20% | 1.20% | 1.20% | | | | | | | |
| 37 | Interest Income Restricted | <table border="1" style="display: inline-table;"><tr><td>Yes</td></tr></table> \$ 20 | Yes | \$ 20 | \$ 20 | \$ 20 | \$ 20 | \$ 30 | | | | | | |
| Yes | | | | | | | | | | | | | | |
| 38 | End of Year Balance | \$ 2,020 | \$ 2,040 | \$ 2,060 | \$ 2,080 | \$ 2,100 | \$ 2,130 | | | | | | | |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Projected Fund Balances and Calculation of Interest Income

| Line No. | Description | Interest Earnings Restricted | Fiscal Year Ending September 30, | | | | | |
|--|---|---|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| | | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Capital Renewal and Replacement Account | | | | | | | | |
| 39 | Beginning Year Balance | | \$ - | \$ 64,280 | \$ 89,760 | \$ 519,763 | \$ 995,978 | \$ 887,657 |
| Transfers In - | | | | | | | | |
| 40 | From Operating Fund | | \$ 164,280 | \$ - | \$ - | \$ - | \$ - | \$ - |
| 41 | From Reserve Fund | | - | - | - | - | - | - |
| 42 | From System Revenues | | - | 339,172 | 430,003 | 503,414 | 563,060 | 595,528 |
| Transfers Out - | | | | | | | | |
| 43 | To Operating Fund | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 43 | To Fund Major Operating Repairs and Maintenance Expenses - Water | | - | - | - | - | 335,690 | - |
| 44 | To Fund Major Operating Repairs and Maintenance Expenses - Wastewater | | - | - | - | - | - | - |
| 44 | To Capital Improvement Plan | | 100,000 | 313,693 | - | 27,199 | 335,690 | 310,731 |
| Interest Income Calculation | | | | | | | | |
| 48 | Average Annual Balance | | \$ 32,140 | \$ 77,020 | \$ 304,761 | \$ 757,870 | \$ 941,817 | \$ 1,030,056 |
| 49 | Interest Rate Assumed | | 1.00% | 1.10% | 1.20% | 1.20% | 1.20% | 1.20% |
| 50 | Interest Income Restricted | No | \$ 321 | \$ 847 | \$ 3,657 | \$ 9,094 | \$ 11,302 | \$ 12,361 |
| 51 | End of Year Balance | | \$ 64,280 | \$ 89,760 | \$ 519,763 | \$ 995,978 | \$ 887,657 | \$ 1,172,454 |
| Debt Service Sinking Fund | | | | | | | | |
| Interest Income Calculation | | | | | | | | |
| 52 | Average Annual Balance (Quarter of Annual PMT) | | \$ 387,306 | \$ 330,718 | \$ 344,655 | \$ 358,525 | \$ 264,122 | \$ 169,645 |
| 53 | Interest Rate Assumed | | 1.00% | 1.10% | 1.20% | 1.20% | 1.20% | 1.20% |
| 54 | Interest Income Restricted | No | \$ 3,870 | \$ 3,640 | \$ 4,140 | \$ 4,300 | \$ 3,170 | \$ 2,040 |
| Debt Service Reserve | | | | | | | | |
| 55 | Beginning Year Balance | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Transfers In - | | | | | | | | |
| 56 | From Operating Fund | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Transfers Out - | | | | | | | | |
| 59 | To Operating Fund | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Interest Income Calculation | | | | | | | | |
| 64 | Average Annual Balance | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 65 | Interest Rate Assumed | | 1.00% | 1.10% | 1.20% | 1.20% | 1.20% | 1.20% |
| 66 | Interest Income Restricted | No | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 67 | End of Year Balance | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Water Plant Connection Charge (Impact Fee) Fund | | | | | | | | |
| 68 | Beginning Year Balance | | \$ 2,288,203 | \$ 2,311,083 | \$ 2,108,910 | \$ 1,898,608 | \$ 1,677,615 | \$ 1,445,519 |
| Transfers In - | | | | | | | | |
| 69 | Water Connection Charge Revenue | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Transfers Out - | | | | | | | | |
| 72 | To Capital Improvement Plan | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 73 | To Pay General Fund to Debt Service | | - | 226,353 | 234,202 | 242,323 | 250,726 | 259,420 |
| Interest Income Calculation | | | | | | | | |
| 76 | Average Annual Balance | | \$ 2,288,203 | \$ 2,197,907 | \$ 1,991,809 | \$ 1,777,446 | \$ 1,552,252 | \$ 1,315,809 |
| 77 | Interest Rate Assumed | | 1.00% | 1.10% | 1.20% | 1.20% | 1.20% | 1.20% |
| 78 | Interest Income Restricted | Yes | \$ 22,880 | \$ 24,180 | \$ 23,900 | \$ 21,330 | \$ 18,630 | \$ 15,790 |
| 79 | End of Year Balance | | \$ 2,311,083 | \$ 2,108,910 | \$ 1,898,608 | \$ 1,677,615 | \$ 1,445,519 | \$ 1,201,890 |

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Projected Fund Balances and Calculation of Interest Income

| Line No. | Description | Interest Earnings Restricted | Fiscal Year Ending September 30, | | | | | |
|--|--------------------------------------|---------------------------------|----------------------------------|--------------|--------------|------------|------------|------------|
| | | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Wastewater Plant Connection Charge (Impact Fee) Fund | | | | | | | | |
| 80 | Beginning Year Balance | | \$ 722,999 | \$ 730,229 | \$ 738,259 | \$ 747,119 | \$ 756,089 | \$ 765,159 |
| Transfers In - | | | | | | | | |
| 81 | Wastewater Connection Charge Revenue | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Transfers Out - | | | | | | | | |
| 84 | To Capital Improvement Plan | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 85 | To Pay General Fund to Debt Service | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Interest Income Calculation | | | | | | | | |
| 88 | Average Annual Balance | | \$ 722,999 | \$ 730,229 | \$ 738,259 | \$ 747,119 | \$ 756,089 | \$ 765,159 |
| 89 | Interest Rate Assumed | | 1.00% | 1.10% | 1.20% | 1.20% | 1.20% | 1.20% |
| 90 | Interest Income Restricted | Yes | \$ 7,230 | \$ 8,030 | \$ 8,860 | \$ 8,970 | \$ 9,070 | \$ 9,180 |
| 91 | End of Year Balance | | \$ 730,229 | \$ 738,259 | \$ 747,119 | \$ 756,089 | \$ 765,159 | \$ 774,339 |
| Construction Fund | | | | | | | | |
| 92 | Beginning Year Balance | | \$ - | \$ - | \$ - | \$ 652,776 | \$ - | \$ - |
| Transfers In - | | | | | | | | |
| 93 | Proposed Debt 1 | | \$ - | \$ - | \$ 4,175,291 | \$ - | \$ - | \$ - |
| 94 | Proposed Debt 2 | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 95 | Proposed Debt 3 | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 96 | Proposed Debt 4 | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 97 | Proposed Debt 5 | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Transfers Out - | | | | | | | | |
| 98 | Proposed Debt 1 CIP Projects | | \$ - | \$ 3,522,515 | \$ 652,776 | \$ - | \$ - | \$ - |
| 99 | Proposed Debt 2 CIP Projects | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 100 | Proposed Debt 3 CIP Projects | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 101 | Proposed Debt 4 CIP Projects | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 102 | Proposed Debt 5 CIP Projects | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Interest Income Calculation | | | | | | | | |
| 103 | Average Annual Balance | | \$ - | \$ - | \$ 326,388 | \$ 326,388 | \$ - | \$ - |
| 104 | Interest Rate Assumed | | 1.00% | 1.10% | 1.20% | 1.20% | 1.20% | 1.20% |
| 105 | Interest Income Restricted | Yes | \$ - | \$ - | \$ 3,920 | \$ 3,920 | \$ - | \$ - |
| 106 | End of Year Balance | | \$ - | \$ - | \$ 652,776 | \$ - | \$ - | \$ - |
| Interest Income | | | | | | | | |
| 107 | Unrestricted | No | \$ 66,431 | \$ 63,147 | \$ 64,457 | \$ 67,854 | \$ 67,772 | \$ 68,451 |
| 108 | Restricted | Yes | \$ 30,130 | \$ 32,230 | \$ 36,700 | \$ 34,240 | \$ 27,720 | \$ 25,000 |
| 109 | Total Interest Income | | \$ 96,561 | \$ 95,377 | \$ 101,157 | \$ 102,094 | \$ 95,492 | \$ 93,451 |
| System Allocated Unrestricted Interest Income (Based on Revenue) | | | | | | | | |
| 110 | Water System | 64.02% | \$ 42,528 | \$ 40,425 | \$ 41,264 | \$ 43,439 | \$ 43,386 | \$ 43,820 |
| 111 | Wastewater System | 35.98% | \$ 23,904 | \$ 22,722 | \$ 23,193 | \$ 24,416 | \$ 24,386 | \$ 24,630 |

Table 19

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Summary of Proposed Rates - for the Projection Period

| Line No. | Description | Fiscal Year Ending September 30, | | | | |
|--|--|----------------------------------|----------|----------|----------|----------|
| | | 2021 | 2022 | 2023 | 2024 | 2025 |
| Water Rates | | | | | | |
| 1 | Identified Rate Adjustment | | | 12.00% | 12.00% | 6.00% |
| Bi-monthly Water Rates | | | | | | |
| All residential and Commercial Classes | | | | | | |
| 2 | Readiness-to-Serve Charge - All Units [1] | \$ 38.63 | \$ 43.27 | \$ 48.46 | \$ 51.37 | \$ 52.65 |
| Water Use per Unit | | | | | | |
| Bi-monthly Usage Charges (per Unit) | | | | | | |
| 3 | 0 - 20,000 gallons | \$ 2.60 | \$ 2.91 | \$ 3.26 | \$ 3.46 | \$ 3.55 |
| 4 | 21,000 - 40,000 Gallons | 4.53 | 5.07 | 5.68 | 6.02 | 6.17 |
| 5 | 41,000 - 60,000 Gallons | 5.81 | 6.51 | 7.29 | 7.73 | 7.92 |
| 6 | 61,000 Gallons or more | 7.09 | 7.94 | 8.89 | 9.42 | 9.66 |
| Irrigation Classe | | | | | | |
| 7 | Readiness-to-Serve Charge - All Accounts [2] | \$ 38.63 | \$ 43.27 | \$ 48.46 | \$ 51.37 | \$ 52.65 |
| Water Use per Unit | | | | | | |
| Bi-monthly Usage Charges (per Unit) | | | | | | |
| 8 | 0 - 40,000 Gallons | \$ 4.53 | \$ 5.07 | \$ 5.68 | \$ 6.02 | \$ 6.17 |
| 9 | 41,000 - 60,000 Gallons | 5.81 | 6.51 | 7.29 | 7.73 | 7.92 |
| 10 | 61,000 Gallons or more | 7.09 | 7.94 | 8.89 | 9.42 | 9.66 |
| Wastewater Rates | | | | | | |
| 11 | Identified Rate Adjustment | | | 13.00% | 13.00% | 6.00% |
| Bi-monthly Wastewater Rates | | | | | | |
| All residential and Commercial Classes | | | | | | |
| 12 | Readiness-to-Serve Charge - All Units | \$ 28.50 | \$ 32.21 | \$ 36.40 | \$ 38.58 | \$ 39.54 |
| Wastewater Use Per Unit (Based on Metered Water Use) | | | | | | |
| Bi-monthly Usage Charges (per Unit) | | | | | | |
| 13 | All Residential Classes(up to 20,000 gallons per unit) [3] | \$ 2.56 | \$ 2.89 | \$ 3.27 | \$ 3.47 | \$ 3.56 |
| 14 | Commercial Class (All Metered Water Use) | 2.56 | 2.89 | 3.27 | 3.47 | 3.56 |

[1] Rate applicable to all dwelling units assigned to an account as determined by the City with single family residential being considered as one (1) unit (Equivalent Dwelling Unit).

[2] All individually-metered irrigation water meters are classified as one (1) unit (equivalent dwelling unit)

[3] Rates based on metered water usage at customer premise. Bi-monthly wastewater usage charges shall be based on the water meter readings for all meters serving the applicant's property with a maximum billed bi-monthly flow equal to 20,000 gallons multiplied by the number of units.

Table 20

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Comparison of Typical Monthly Residential Bills for Water Service [1]

| Line No. | Description | Residential Service for a 5/8" or 3/4" Meter | | | | | | | |
|---------------------------------|----------------------------------|--|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| | | 0 Gallons | 2,000 Gallons | 4,000 Gallons | 6,000 Gallons | 8,000 Gallons | 10,000 Gallons | 15,000 Gallons | 30,000 Gallons |
| Town of Highland Beach | | | | | | | | | |
| 1 | Existing Rates - FY2020 | \$16.80 | \$21.62 | \$26.44 | \$31.26 | \$36.08 | \$41.78 | \$62.68 | \$130.72 |
| 2 | Proposed - FY2021 | 19.31 | 24.51 | 29.71 | 34.91 | 40.11 | 45.31 | 67.96 | 148.71 |
| Other Florida Utilities: | | | | | | | | | |
| 3 | City of Boca Raton [2] | 14.69 | 16.41 | 18.13 | 19.85 | 21.57 | 23.29 | 30.61 | 64.61 |
| 4 | Broward County | 17.13 | 20.37 | 24.90 | 30.72 | 44.36 | 58.00 | 96.39 | 220.14 |
| 5 | City of Boynton Beach | 12.90 | 16.34 | 19.78 | 23.23 | 26.67 | 31.48 | 46.93 | 93.28 |
| 6 | City of Cooper City [2] | 12.79 | 19.13 | 25.47 | 32.31 | 39.65 | 46.99 | 70.24 | 154.49 |
| 7 | City of Coral Springs | 13.95 | 17.43 | 20.91 | 26.29 | 31.67 | 39.73 | 65.91 | 186.81 |
| 8 | City of Dania Beach | 14.55 | 22.73 | 30.91 | 41.54 | 54.62 | 67.70 | 102.03 | 224.58 |
| 9 | City of Delray Beach | 15.72 | 15.72 | 16.97 | 19.47 | 21.97 | 24.47 | 32.97 | 70.47 |
| 10 | Village of Golf [2] | 32.20 | 32.20 | 32.20 | 32.20 | 32.20 | 32.20 | 38.93 | 71.91 |
| 11 | Town of Hillsboro Beach | 24.00 | 24.00 | 30.94 | 37.88 | 44.82 | 52.56 | 73.91 | 147.06 |
| 12 | Town of Jupiter | 22.21 | 24.83 | 27.45 | 30.07 | 33.63 | 37.19 | 47.45 | 94.55 |
| 13 | City of Lake Worth | 21.14 | 27.96 | 34.78 | 45.28 | 55.78 | 70.00 | 121.54 | 339.84 |
| 14 | Town of Lantana | 21.14 | 23.78 | 26.42 | 29.74 | 33.74 | 37.74 | 51.94 | 100.34 |
| 15 | Town of Manalapan [2] | 21.43 | 26.11 | 30.79 | 35.47 | 40.15 | 44.83 | 56.53 | 91.63 |
| 16 | Martin County [2] | 17.61 | 22.13 | 26.65 | 31.17 | 35.69 | 40.21 | 56.21 | 122.06 |
| 17 | Palm Beach County | 16.05 | 19.03 | 22.01 | 28.61 | 35.21 | 41.81 | 83.36 | 218.16 |
| 18 | Village of Palm Springs [2] | 12.27 | 18.37 | 24.47 | 30.57 | 38.53 | 46.49 | 66.39 | 135.29 |
| 19 | City of West Palm Beach [2] | 23.08 | 30.22 | 37.36 | 44.51 | 53.47 | 62.43 | 87.21 | 168.97 |
| 20 | Seacoast Utility Authority | 21.75 | 23.95 | 26.15 | 28.35 | 37.03 | 45.71 | 67.41 | 132.51 |
| 21 | City of Tamarac | 11.77 | 15.31 | 19.44 | 24.16 | 31.28 | 38.40 | 64.21 | 157.66 |
| 22 | Village of Tequesta [2] | 19.67 | 25.91 | 32.15 | 38.39 | 44.63 | 50.87 | 72.86 | 161.01 |
| 23 | Village of Wellington [2] | 20.01 | 24.53 | 29.05 | 33.57 | 40.31 | 47.05 | 63.90 | 146.20 |
| 24 | Other Florida Utilities' Average | \$18.38 | \$22.21 | \$26.52 | \$31.59 | \$37.95 | \$44.72 | \$66.52 | \$147.69 |

Footnotes:

[1] Unless otherwise noted, amounts shown reflect residential rates in effect July, 2020 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] Utility is currently involved in a rate study, is planning to conduct a rate study, or will implement a rate revision within the next twelve months.

Table 21

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Comparison of Typical Monthly Residential Bills for Wastewater Service [1]

| Line No. | Description | Residential Service for a 5/8" or 3/4" Meter | | | | | | | |
|---------------------------------|----------------------------------|--|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| | | 0 Gallons | 2,000 Gallons | 4,000 Gallons | 6,000 Gallons | 8,000 Gallons | 10,000 Gallons | 15,000 Gallons | 30,000 Gallons |
| Town of Highland Beach | | | | | | | | | |
| 1 | Existing Rates - FY2020 | \$22.02 | \$22.02 | \$22.02 | \$22.02 | \$22.02 | \$22.02 | \$22.02 | \$22.02 |
| 2 | Proposed - FY2021 | 14.25 | 19.37 | 24.49 | 29.61 | 34.73 | 39.85 | 39.85 | 39.85 |
| Other Florida Utilities: | | | | | | | | | |
| 3 | City of Boca Raton [2] | 18.58 | 26.62 | 34.66 | 42.70 | 50.74 | 58.78 | 78.88 | 139.18 |
| 4 | Broward County | 20.54 | 29.06 | 37.58 | 46.10 | 54.62 | 63.14 | 84.44 | 84.44 |
| 5 | City of Boynton Beach | 18.95 | 23.31 | 27.67 | 32.03 | 34.21 | 34.21 | 34.21 | 34.21 |
| 6 | City of Cooper City [2] | 26.67 | 32.71 | 38.75 | 44.79 | 50.83 | 56.87 | 56.87 | 56.87 |
| 7 | City of Coral Springs | 23.04 | 31.80 | 40.56 | 49.32 | 58.08 | 66.84 | 88.74 | 154.44 |
| 8 | City of Dania Beach | 21.52 | 36.44 | 51.36 | 66.28 | 81.20 | 96.12 | 133.42 | 245.32 |
| 9 | City of Delray Beach | 18.04 | 24.82 | 31.61 | 38.39 | 45.17 | 51.96 | 58.74 | 58.74 |
| 10 | Village of Golf [2] | 28.79 | 28.79 | 28.79 | 28.79 | 28.79 | 28.79 | 39.94 | 73.39 |
| 11 | Town of Hillsboro Beach | 20.54 | 29.06 | 37.58 | 46.10 | 54.62 | 63.14 | 84.44 | 84.44 |
| 12 | Town of Jupiter | 22.75 | 22.75 | 22.75 | 22.75 | 22.75 | 22.75 | 22.75 | 22.75 |
| 13 | City of Lake Worth | 15.66 | 25.14 | 34.62 | 44.10 | 53.58 | 63.06 | 72.54 | 72.54 |
| 14 | Town of Lantana | 14.01 | 23.71 | 33.41 | 43.11 | 52.81 | 62.51 | 62.51 | 62.51 |
| 15 | Town of Manalapan [2] | 27.03 | 39.17 | 51.31 | 63.45 | 75.59 | 87.73 | 118.08 | 209.13 |
| 15 | Martin County [2] | 18.27 | 27.19 | 36.11 | 45.03 | 53.95 | 62.87 | 62.87 | 62.87 |
| 16 | Palm Beach County | 17.85 | 21.89 | 25.93 | 35.41 | 44.89 | 54.37 | 54.37 | 54.37 |
| 17 | Village of Palm Springs [2] | 11.09 | 25.47 | 39.85 | 54.23 | 68.61 | 68.61 | 68.61 | 68.61 |
| 18 | City of West Palm Beach [2] | 13.77 | 24.63 | 35.48 | 46.34 | 57.19 | 68.05 | 95.19 | 129.87 |
| 19 | Seacoast Utility Authority | 31.77 | 33.23 | 34.69 | 36.15 | 37.61 | 39.07 | 39.07 | 39.07 |
| 20 | City of Tamarac | 18.75 | 28.35 | 37.95 | 47.55 | 57.15 | 66.75 | 76.35 | 76.35 |
| 21 | Village of Tequesta [2] | 22.75 | 22.75 | 22.75 | 22.75 | 22.75 | 22.75 | 22.75 | 22.75 |
| 22 | Village of Wellington [2] | 19.08 | 23.28 | 27.48 | 31.68 | 35.88 | 40.08 | 50.58 | 50.58 |
| 23 | Other Florida Utilities' Average | \$20.45 | \$27.63 | \$34.80 | \$42.24 | \$49.57 | \$56.12 | \$66.92 | \$85.83 |

Footnotes:

[1] Unless otherwise noted, amounts shown reflect residential rates in effect July, 2020 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] Utility is currently involved in a rate study, is planning to conduct a rate study, or will implement a rate revision within the next twelve months.

Table 22

Town of Highland Beach, Florida
Revenue Sufficiency and Rate Study - Water and Wastewater Systems

Comparison of Typical Monthly Residential Bills for Combined Service [1]

| Line No. | Description | Residential Service for a 5/8" or 3/4" Meter | | | | | | | |
|---------------------------------|----------------------------------|--|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| | | 0 Gallons | 2,000 Gallons | 4,000 Gallons | 6,000 Gallons | 8,000 Gallons | 10,000 Gallons | 15,000 Gallons | 30,000 Gallons |
| Town of Highland Beach | | | | | | | | | |
| 1 | Existing Rates - FY2020 | \$38.81 | \$43.63 | \$48.45 | \$53.27 | \$58.09 | \$63.80 | \$84.70 | \$152.73 |
| 2 | Proposed - FY2021 | 33.56 | 43.88 | 54.20 | 64.52 | 74.84 | 85.16 | 107.81 | 188.56 |
| Other Florida Utilities: | | | | | | | | | |
| 3 | City of Boca Raton [2] | 33.27 | 43.03 | 52.79 | 62.55 | 72.31 | 82.07 | 109.49 | 203.79 |
| 4 | City of Boynton Beach | 31.85 | 39.65 | 47.45 | 55.26 | 60.88 | 65.69 | 81.14 | 127.49 |
| 5 | City of Cooper City [2] | 39.46 | 51.84 | 64.22 | 77.10 | 90.48 | 103.86 | 127.11 | 211.36 |
| 6 | City of Coral Springs | 36.99 | 49.23 | 61.47 | 75.61 | 89.75 | 106.57 | 154.65 | 341.25 |
| 7 | City of Dania Beach | 36.07 | 59.17 | 82.27 | 107.82 | 135.82 | 163.82 | 235.45 | 469.90 |
| 8 | City of Delray Beach | 33.76 | 40.54 | 48.58 | 57.86 | 67.14 | 76.43 | 91.71 | 129.21 |
| 9 | Village of Golf [2] | 41.06 | 47.16 | 53.26 | 59.36 | 67.32 | 75.28 | 106.33 | 208.68 |
| 10 | Town of Hillsboro Beach | 43.62 | 59.28 | 74.94 | 90.61 | 108.09 | 125.57 | 171.65 | 253.41 |
| 11 | Town of Jupiter | 44.96 | 47.58 | 50.20 | 52.82 | 56.38 | 59.94 | 70.20 | 117.30 |
| 12 | City of Lake Worth | 36.80 | 53.10 | 69.40 | 89.38 | 109.36 | 133.06 | 194.08 | 412.38 |
| 13 | Town of Lantana | 35.15 | 47.49 | 59.83 | 72.85 | 86.55 | 100.25 | 114.45 | 162.85 |
| 14 | Town of Manalapan [2] | 48.46 | 65.28 | 82.10 | 98.92 | 115.74 | 132.56 | 174.61 | 300.76 |
| 15 | Martin County [2] | 35.88 | 49.32 | 62.76 | 76.20 | 89.64 | 103.08 | 119.08 | 184.93 |
| 16 | Palm Beach County | 33.90 | 40.92 | 47.94 | 64.02 | 80.10 | 96.18 | 137.73 | 272.53 |
| 17 | Village of Palm Springs [2] | 34.17 | 55.69 | 77.21 | 98.74 | 122.08 | 131.04 | 155.82 | 237.58 |
| 18 | City of West Palm Beach [2] | 25.54 | 39.94 | 54.92 | 70.50 | 88.47 | 106.45 | 159.40 | 287.53 |
| 19 | Seacoast Utility Authority | 51.44 | 59.14 | 66.84 | 74.54 | 82.24 | 89.94 | 111.93 | 200.08 |
| 20 | City of Tamarac | 38.76 | 52.88 | 67.00 | 81.12 | 97.46 | 113.80 | 140.25 | 222.55 |
| 21 | Other Florida Utilities' Average | \$37.84 | \$50.07 | \$62.40 | \$75.85 | \$89.99 | \$103.64 | \$136.39 | \$241.31 |

Footnotes:

[1] Unless otherwise noted, amounts shown reflect residential rates in effect July, 2020 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] Utility is currently involved in a rate study, is planning to conduct a rate study, or will implement a rate revision within the next twelve months.